

MAISM/ NAAC 2019/ Metrics Level Deviations/Cr1-3

Date:- 16/01/2020

Criteria 1.2.2:	Percentage of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented. (current year data)
DVV Findings:	Please submit Structure of the program clearly indicating courses, credits/Electives as approved by the competent board.
Response/ Clarification	1) List of the programs implementing Choice Based Credit System (CBCS)/ Elective Course System is attached (Appendix-I) 2) Letter from the University stating implementation of CBCS programs is attached. (Appendix-II) 3) Syllabus Scheme/ Course Structure for all programs along with credit details is attached. (Appendix-III)


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Appendix-I

1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/elective course system has been implemented (Current Year data) (10)

Name of all programs	whether adopting CBCS course system (yes/No)	Whether adopting elective course system (yes/No)	Programme Code	Year of implemetation of CBCS / elective course system
B.Com	No	Yes	B.Com	CBCS is offered by the RTU since 2018. Electives course offered since inception of the Institute
BBA	No	Yes	BBA	
BCA	No	Yes	BCA	
MBA	Yes	Yes	MBA	
MCA	Yes	Yes	MCA	

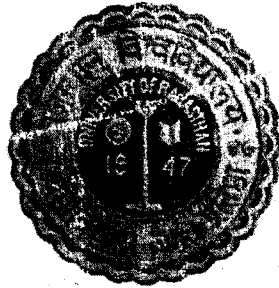

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Appendix-II



University of Rajasthan Jaipur

SYLLABUS

B.Com. (Hons.) Part-I

EXAMINATION - 2019

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B.COM (HONS.) Part - I

Examination

2019

Scheme of Examination

For a pass at each examination, a candidate shall be required to obtain a minimum of 36% marks in each subsidiary subject and 40% marks in the Honours subject passing separately in the practicals, wherever prescribed, shall be necessary.

Successful candidates will be classified as under :

Ist Division 60%	Of the aggregate marks prescribed in Honours and subsidiary subject of Part-I, Part-II and Part-III Examinations taken together
IInd Division 50%	

All the rest will be declared to have passed Examination. No. division shall be awarded at the Honours Part I Part II examinations. The number of papers and practical, wherever prescribed the duration of examination, maximum marks and minimum pass marks are shown below:

There will be five questions in all. The candidates are required to attempt all the question. There will be one question from each unit with an internal choice (either/or)

The number of papers and practicals, wherever prescribed the duration of examination, maximum marks and minimum pass marks are shown below:

B.com. Hons. Part I Examination

Distribution of Marks

S. No.	Name of the Subject/Paper	Duration Hours	Max. Marks	Min. Pass Marks
	Compulsory Subjects (Four)	3 hrs.	100	36
1.	General Hindi (One Paper)	3 hrs.	100	36
2.	General English (One Paper)	3 hrs.	100	36
3.	Environment Studies (One Paper)	3 hrs.	100	36
4.	Elementary Computer Studies	3 hrs.	100	36
5.	Elementary Hindi (For Foreign Students or student from non - Hindi speaking area)			
1.	Accountancy & Business Statistic Honours Subjects			
	Paper-I Corporate and Financial Accounting	3 hrs.	100	40
	Paper- II Business Statistics	3 hrs.	100	40
	Paper- III Advanced Accountancy	3 hrs.	100	40
	Paper-IV Advanced Business Statistics and Mathematics	3 hrs.	100	40
	Subsidiary Subject			
	Paper - I Business Law	3 hrs.		
	Paper - II BUSINESS ECONOMICS	3 hrs.		

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**Business Administration
Honours Subjects**

Paper I Business Laws	3 hrs.	100	40
Paper II Business Organization	3 hrs.	100	40
Paper III Labour Policy and Labour Relations	3 hrs.	100	40
Paper IV Business Environment	3 hrs.	100	40

Subsidiary Subjects

Paper I Corporate and Financial Accounting	3 hrs.	100	36
Paper II Business Economics	3 hrs.	100	36

3. **Economic Administration & Financial Management**

Honours Subjects

Paper - I Business Economics	3 hrs.	100	40
Paper - II Indian Banking and Financial System	3 hrs.	100	40
Paper - III Elements of Financial Management	3 hrs.	100	40
Paper - IV Business Budgeting	3 hrs.	100	40

Subsidiary Papers

Paper I Corporate and Financial Accounting	3 hrs.	100	36
Paper - II Business Laws	3 hrs.	100	36

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पूर्णांक 100

न्यूनतम उत्तीर्णांक 36

नोट : 36 से कम अंक लाने पर छात्रों को उत्तीर्ण नहीं किया जायेगा। इस प्रश्न-पत्र में प्राप्त अंकों को श्रेणी निर्धारण हेतु नहीं जोड़ा जायेगा।

अंक विभाजन - प्रश्न पत्र में दो भाग होंगे - 1. साहित्य खण्ड एवं 2. व्याकरण खण्ड। साहित्य खण्ड में दो भाग होंगे - गद्य भाग एवं पद्य भाग। प्रत्येक खण्ड के लिए 50 अंक निर्धारित हैं।

50 अंक

क	दो व्याख्या पद्य से (प्रत्येक में विकल्प देना है)	$5 \times 2 =$	10 अंक
ख	दो व्याख्या गद्य से (प्रत्येक में विकल्प देना है)	$5 \times 2 =$	10 अंक
ग	आलोचनात्मक प्रश्न पद्य से (विकल्प देना है)	$7\frac{1}{2} \times 2 =$	15 अंक
घ	आलोचनात्मक प्रश्न गद्य से (विकल्प देना है)	$7\frac{1}{2} \times 2 =$	15 अंक

साहित्य खण्ड - 'क' :- गद्य-पद्य की निर्धारित रचनाएँ

गद्य भाग -

- कहानी - प्रेमचन्द - बड़े भाई साहब
विजयदान देथा - सिकंदर और कौआ
- संस्मरण - कन्हैयालाल मिश्र 'प्रभाकर' - बयालिस के ज्वार की उन लहरों में
- रेखाचित्र - रामवृक्ष बेनीपुरी- रजिया
- विज्ञान - गुणाकर मुले - शनि सबसे सुन्दर ग्रह
- निबंध - अगरचन्द नाहटा - राजस्थान की सांस्कृतिक धरोहर
- व्यंग्य - शरद जोशी - जीप पर सवार इल्लियाँ
- पर्यावरण - अनुपम मिश्र - आज भी खरे हैं तालाब

पद्य भाग :- (कबीर ग्रंथावली से सं. - श्यामसुंदर दास)

- कबीर - साखी सं. - गुरुदेव को अंग - 7,12,26,30
सुमरन को अंग - 10,17,24,26
विरह को अंग - 2,8,10,18
- सूरदास सूरसागर सार - सं. डॉ. श्रीरन्द्र वर्मा
विनय भक्ति पद सं. - 21,33
गोकुल लीला पद सं. - 55,58
वृंदावन लीला पद सं. - 10,28
उद्धव संदेश पद सं. - 77,79
- तुलसीदास - विनय पत्रिका, गीताप्रेस, गोरखपुर पद सं. - 87,88,90,156,158
- मीरा - पदावली सं. - नरोत्तम स्वामी पद सं. - 1,3,4,5,10
- रहीम - रहीम ग्रंथावली संपादक विद्यानिवास मिश्र, गोविन्द रजनीश
(दस दोहे) 186,191,211,212,214,218,219,220,223,224
- मैथिलीशरण गुप्त - मनुष्यता, हम राज्य लिए मरते हैं (गीत-संकेत के नवम सर्ग से)
- सुमित्रानंदन पंत - नौका विहार
- सूर्यकान्त त्रिपाठी निराला - वह तोड़ती पत्थर
- सच्चिदानंद हीरानंद वाजपायन 'अज्ञेय' - हिरोशिमा
- सुधाश्री सिंह दिनकर - नन्तर प्रेम

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खण्ड - 'ख'

व्याकरण/व्यावहारिक हिन्दी खण्ड

1. निबन्ध लेखन	—	शब्द सीमा 300 शब्द	50 अंक
2. कार्यालयी लेख	—	शासकीय — अर्द्धशासकीय पत्र, कार्यालय ज्ञापन, विज्ञप्ति एवं कार्यालय आदेश, अधिसूचना, पृष्ठांकन 4 x 2 =	8 अंक
3. संक्षेपण	—		8 अंक
4. पल्लवन	—		4 अंक
5. शब्द निर्माण प्रविधि	—	उपसर्ग, प्रत्यय, संधि, समास	5 अंक
6. शब्द शुद्धि एवं वाक्य शुद्धि	—		5 अंक
7. मुहावरे एवं लोकोक्ति	—		5 अंक
8. पारिभाषिक शब्दावली	—		5 अंक
9. शब्द के प्रकार	—	संज्ञा, सर्वनाम, विशेषण, क्रिया एवं क्रिया विशेषण	5 अंक

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2.

GENERAL ENGLISH

Duration: 3 hrs.

Max. Marks: 100

Minimum Pass Marks: 36

The syllabus aims at achieving the following objectives:

1. Introducing students to phonetics and enabling them to consult dictionaries for correct pronunciation (sounds and word stress)
2. Reinforcing selected components of grammar and usage
3. Strengthening comprehension of poetry, prose and short-stories
4. Strengthening compositional skills in English for paragraph writing, CVs and job applications.

The Pattern of the Question Paper will be as follows:

Unit A: Phonetics and Translation
(10 periods)

(20 marks)

- | | |
|---|---------------------|
| I Phonetic Symbols and Transcription of Words | (05) |
| III Translation of 5 Simple sentences from Hindi to English | (05) |
| from English to Hindi | (05) |
| IV Translation of 05 Words from Hindi to English | (2 ^{1/2}) |
| from English to Hindi | (2 ^{1/2}) |

Unit B: Grammar and Usage
(10 periods)

(25 marks)

- | | |
|--------------------------------|------|
| I Elements of a Sentence | (05) |
| II Transformation of Sentences | (05) |

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(a) Direct and Indirect Narration

(b) Active and Passive Voice

II Modals (05)

III Tense (05)

IV Punctuation of a Short Passage with 10 Punctuation Marks
(05)

(As discussed in Quirk and Greenbaum)

Unit C: Comprehension

(25 marks)

Following Essays and Stories in *Essential Language Skills* revised edition compiled by Macmillan for University of Rajasthan General English B. A. /B. Com./B. Sc.

Candidates will be required to answer 5 questions of two lines each to be answered out of 10 questions. There would be two questions from the prescribed text. (10)

Sujata Bhatt

Voice of the Unwanted Girl

Ruskin Bond

Night Train for Deoli

M.K. Gandhi

The Birth of Khadi

J.L. Nehru

A Tryst with Destiny

A.P.J. Abdul Kalam

Vision for 2020

The candidates will be required to answer 5 questions from the given unseen passage. (10)

One vocabulary question of 10 words from the given passage. (5)

Unit D: Compositional Skills

(30 marks)

(15 periods)

I Letters-Formal and Informal

(10)

II CV's Resume and Job Applications and Report

(10)

III Paragraph Writing

(10)

Recommended Reading:

Sasikumar, V., Dutta and Rajeevan, A Course in Listening and Speaking-I Foundation Books. 2005.

Sawhney, Panja and Verma eds. English At the Workplace, Macmillan 2003.

Singh, R.P. Professional Communication. OUP. 2004

Judith Leigh. CVs and Job Applications. OUP. 2004

Arthur Waldhorn and Arthur Zeiger, English Made Simple. Upa and Co.

Gunashekar ed. A Foundation English Course for Undergraduates.

Book I, CIEFL, Hyderabad.

Quirk and Greenbaum: A University Grammar of English

Longman, 1973

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3. COMPULSORY PAPER OF ENVIRONMENTAL STUDIES

Compulsory in I Year for all streams at undergraduate level

Scheme of examination

Time	Min Marks	Max. Marks
3 hrs	36	100

This paper will contain 100 multiple choice questions. Each question will carry 1 mark.

Students should be encouraged to visit places of Environmental Importance including Natural and Manmade Habitat.

Note:

1. The marks secured in this paper shall not be counted in awarding the division to a candidate.
2. The candidates will have to clear this compulsory paper in three chances.
3. Non-appearing or absence in the examination of compulsory paper will be counted as a chance.

Unit.1: The Multidisciplinary nature of environmental studies

Definition, scope and importance- Relationship between Environmental Studies and other branches of science and social sciences.

Need for Environmental awareness, Environmental education in present day context.

Unit.2: Natural Resources and Challenges

Natural resources and associated problems, Classification of resources: renewable resources, non renewable resources, classes of earth resources, resources regions: Definition and criteria, resource conservation.

Forest resources: Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forest and tribal people.

Water resources: Use and over-utilization of surface and groundwater, floods, drought conflicts over water, dams-benefits and problems.

Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies.

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- e. **Used resources:** World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticides problems, water logging, salinity, case studies.
- f. **Energy resources:** Growing energy need, renewable and nonrenewable energy sources, use of alternate energy sources. Case studies.
- g. **Land resources:** Land as a resource, Land degradation man induced Landslides, soil erosion and desertification.
- Role of an individual in conservation of natural resources.
- Equitable use of resources for sustainable lifestyles.

Unit 3: Ecosystems, Concepts, Structure, Functions and Types

- Concept of an ecosystem
- Structure and function of an ecosystem
- Producers, consumers and decomposers
- Energy flow in the ecosystem
- Ecological succession
- Food chains, food webs and ecological pyramids
- Introduction, types characteristics features, structure and function of the following ecosystem:
 - a. Forest ecosystem, Tropical Temperate and Alpine Ecosystem
 - b. Grassland ecosystem and Their Types
 - c. Desert ecosystem with emphasis on Thar Desert
 - d. Aquatic ecosystems(ponds, streams, lakes, rivers, oceans, estuaries) and Wet Lands

Unit 4: Biodiversity and its conservation

- Introduction -Definition, genetic, species and ecosystem diversity
- Biogeographically classification of India
- Value of biodiversity :consumptive use, productive use, social ethical, aesthetic and option values
- Biodiversity at global, National and local level
- India as a mega-diversity nation
- Hot-spot of biodiversity
- Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts
- Endangered, Threatened and endemic species of India
- Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity
- Red Data Book

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Unit 5: Environmental Pollution and Control Measures

Unit 5

Causes, effects and control measures of:

- a) Air Pollution
- b) Water Pollution
- c) Soil Pollution
- d) Marine Pollution
- e) Noise Pollution
- f) Thermal Pollution
- g) Nuclear Hazards

- Solid waste management Causes, effects and control measures of urban and industrial wastes
- Role of an individual in prevention of pollution
- Pollution case studies
- Disaster management: floods earthquake, cyclone and landslides

Unit 6: Social issues, Environment, Laws and Sustainability

- From Unsustainable to Sustainable development
- Urban problems related to energy
- Water conservation, rain water harvesting, watershed management
- Resettlement and rehabilitation of people; its problems and concerns. Case studies
- Environmental ethics: Issues and possible solution.
- Climate change, global warming, acid rain ozone layer depletion, nuclear accidents and holocaust. Case studies
- Wasteland reclamation.
- Consumerism and waste product.
- Environmental Protection Act.
- Air (Prevention and Control of Pollution) Act
- Wild life protection Act
- Forest Conservation Act
- Biological Diversity Act
- Issues involved in enforcement of environmental legislation
- Public Awareness.

Unit 7: Human Population and the Environment

Population growth, variation among nations
Population explosion-Family Welfare Programme
Environment and Human health
Human Rights
Value Education
HIV/AIDS
Women and Child Welfare
Role of Information Technology in Environment and human health
Case Studies

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Suggested Readings:-

1. Chauhan, Surendra Singh. 2001. Biodiversity, Biopiracy and Biopolitics: The Global Perspectives, Kalinga Publications, New Delhi.
2. Chauhan, Surendra Singh. 2004. Environmental Protection and Management: From Stockholm to Rio and After, Kalinga Publications, New Delhi.
3. Diwan A.P. and Arora D.K.1995. Human Ecology Anmol Publication Pvt.Ltd.,New Delhi.
4. Dubey, R.M.1992. Human Ecology and Environmental Education,Chaugh Publications,Allahabad.
5. Goudie,Andrew.The Human Impact.
6. Husain Maxia.1994 Human Geography,Rawat Publication,Jaipur.
7. Johnston, R.J.Ed.1986 Dictionary of Human geography,National Publication,New Delhi.
8. Malik,S.L.and Bhattacharya D.K.1986. Aspects of Human Ecology,Northern Book Center,New Delhi.
9. Mishra,R.P and Bhooshan,B.S.1979.Human Settlements in Asia.Public,Polices and programmes Haritage publisher,New Delhi.
- 10.Nathawat, G.S.1985. Human Ecology,An Indian perspective,Indian Human Ecology Council,Jaipur.
- 11.Russel, Bartrand, 1976.Impact of Science of society Unwin,Publisher,Indian. (paper back).
- 12.Sinha Rajiv, 1996.Gloobal Biodiversity Ina.,Shri publication,Jaipur.
- 13.Sinha Rajiv K., 1994. Development without Deserttrction
- 14.Environmentalist,Jaipur. Sinha Rajiv K., 1996.Environmental Crises and Human at Risk,In A Shri Publication,Jaipur.
- 15.Smith, Dlanne, 1984.Urban Ecology,George Allen,London.
- 16.Swarnkar, R.C.1985.Indian Tribes.Printwell publisher,Jaipur.
- 17.Tivy,Joy and O'Hugegreg,1985.Human Impact on the Ecosystem Edinburgh George Allen Boyd.
- 18.United Nations Development Report, 1996.Human Development Report, 1996.Oxford University Press,Delhi.
- 19.Vannathony & Rogers Paul, 1974. Human Ecology and World Development,Flehum Press,New York.

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4. Elementary Computer Applications

Maximum Marks- 100 (Main University Examinations)

Theory : Max. Marks -60

Practical : Max. Marks- 40

Each Candidate has to pass in Theory and Practical Examinations separately.

Question paper for Elementary Computer Applications, (Compulsory paper-common for B.A. / B.Sc./ B.Com. Part-I) be so set that it has 120 multiple choice questions (Bilingual) of $\frac{1}{2}$ marks each. The question paper will be of duration of 2 hours. The examinees will have to give their answers on OMR Sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology. Further the practical examination for this paper will be of 40 marks and its duration will be of 2 hours.

Unit – I

Introduction to information technology : Evolution and generation of computers. type of computers, micro , mini , mainframe and super computer. Architecture of a computer system : CPU , ALU, Memory (Ram, Rom families) cache memory. input /output devices, pointing devices.

Concept of Operating system, need types of operating systems. batch. single user. multi – processing , distributed and timeshared operating systems, introduction of Unix. Linux. Windows, Window NT. Programming languages Low level and high level languages, generation of languages , 3 GL and 4 GL languages .Graphic User Interfaces.

Unit – II

Word Processing tool : Introduction , Creating, Saving, Copy, Move and Delete. Checking Spelling and Grammer. Page Layout. interface, toolbars, ruler, menus keyboard shortcut , editing. Text Formatting, insert headers and footers. Bullets and Numbering. Find and Replace etc. Insert Table and Picture , Macro. Mail Merge.

Power Point : Creating and viewing a presentation, managing slide shows navigating through a presentation using hyperlinks, advanced navigation with action setting and action buttons. Organizing formats with Master Slides applying and modifying designs adding graphics , multimedia and special effects.

Unit - III

Electronic Spreadsheet : Worksheet types of create and open a worksheet. Entering data text numbers and formula in a worksheet inserting and deleting cells. cell formatting, inserting rows and columns in a worksheet formatting worksheet. Using various formula and inbuilt function. Update worksheet using special cells like spell check and auto correct setup the page

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and margins of worksheets for printing, Format the data in the worksheet globally or selectively, creating charts, Enhance worksheets using charts, multiple worksheets-concepts

Unit - IV

The Internet - History and Functions of the Internet, Working with Internet, Web Browsers, World Wide Web, Uniform Resource Locator and Domain Names, Uses of Internet, Search for Information, Email, Chatting, Instant messenger services, News, Group, Teleconferencing, Video-Conferencing, E-Commerce and M-Commerce.

Manage an E-mail Account, E-mail Address, configure E-mail Account, log to an E-mail, Receive E-mail, Sending mails, sending files as attachments and Address Book, Downloading Files, online form filling, E-Services - E-Banking and E-Learning.

Unit - V

Social, Ethical and Legal Matters - Effects on the way we: Work Socialise, Operate in other areas, Cyber crime, Prevention of crime, Cyber law: Indian IT Act, Intellectual property, Software piracy, Copyright and Patent, Software licensing, Proprietary software, Free and Open source software.

Network Security - Risk assessment and security measures, Assets and types (data, applications, system and network), Security threats and attacks (passive, active); types and effects (e.g. Identity theft, denial of services, computer virus etc.), Security issues and security measures (Firewalls, encryption/decryption), Prevention.

Question Paper pattern for Main University Practical Examination

Max Marks: 40

Practical

The practical exercises will be designed to help in the understanding of concepts of computer and the utilization in the areas outlined in the theory syllabus. The emphasis should be on practical usage rather than on theoretical concepts only.

The practical examination scheme should be as follows -

- Three Practical Exercise (including Attendance & Record performance) - 30 marks
 - Operating system
 - MS Word
 - MS Excel
 - MS Power Point
 - Internet
- Viva-voce - 10 marks

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1- Accountancy & Business Statistics.
B.Com. (Hons. Course)

B.Com. (Part-I)-2019 Examinations - 2019

Paper-I CORPORATE AND FINANCIAL ACCOUNTING

Paper -II BUSINESS STATISTICS

Paper - III ADVANCED ACCOUNTANCY

Paper - IV ADVANCED BUSINESS STATISTICS AND MATHEMATICS

Paper- I BUSINESS LAW (Subsidiary paper of Bus. Admn.)

Paper- II BUSINESS ECONOMICS (Subsidiary paper of EAPM)

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B.COM. PART-I (HONS. COURSE)

2019

PAPER-I

Corporate and Financial Accounting

TIME: 3 hour

Max.Marks-100

Min. Marks 40

Note : There will be five question in all. The candidate will require to attempt all the questions selecting one question from each unit with an internal choice (either/or)

Unit-I

Accounting principles, Conventions and Concept, General Introduction of Indian Accounting Standards AS-I And AS-9 Issue of Shares Issue of Right Shares, Buy back of Shares ESOS in the present scenario. Redemption of Preference Shares.

Unit-II

Issue and Redemption of Debentures, Underwriting of Shares & Debentures. Acquisition of Business, Pre-and Post Incorporation Profit.

Unit-III

Final Accounts of Companies including Managerial Remuneration. Disposal of Profits and Issue of Bonus Shares.

Unit-IV

Valuation of Goodwill & Valuation of Share

Unit-V

Hire Purchase and Installment Sale Transaction. Valuation of Inventory (As-2) Insurance Claims

Note: The candidate shall be permitted to use battery operated pocket calculator that should not have more than 12 digits, 6 functions and 2 memories and should be noiseless and cordless.

Books Recommended

1. R.L. Gupta : Advanced Accountancy
2. S.N.Maheshwari : Advanced Accountancy
3. Sehgal and Sehgal : Advanced Accountancy

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B.Com. Part I (Hons. Course)

Paper II

Business Statistics

Time : 3 hours.

Min. Marks 40

Max. Marks. 100

Note: There will be five questions in all. The candidate will require to attempt all the questions selecting one question from each unit with an internal choice (either/or).

Unit-I

Introduction of Statistics : Growth of Statistics, Definition, Scope, Uses, Misuses and Limitation of Statistics, Collection of Primary & Secondary Data, Approximation and Accuracy, Statistical Errors.

Classification and Tabulation of Data: Meaning and Characteristics, Frequency Distribution, Simple and Manifold Tabulation, Presentation of Data: Diagrams / Graphs of Frequency Distribution Ogive and Histograms.

Unit-II

Measures of Central Tendency : Arithmetic Mean (Simple and Weighted), Median (including quartiles, deciles and percentiles), Mode, Geometric and Harmonic Mean-Simple and Weighted, Uses and Limitations of Measures of Central Tendency.

Unit-III

Measures of Dispersion : Absolute and Relative Measures of Dispersion; Range, Quartile Deviation, Mean Deviation, Standard Deviation and Co-efficient of Variation. Uses and Interpretation of Measures of dispersion. Skewness : Different measures of Skewness.

Unit-IV

Correlation : Meaning and Significance, Scatter Diagram, Karl Pearson's Coefficient of Correlation between two Variables : Grouped and Ungrouped Data, Coefficient of Correlation by Spearman's Rank Differences Method and Concurrent Deviation Method.

Simple Linear Regression.

Unit-V

Index Numbers : Meaning and Uses, Simple and Weighted Price Index Numbers, Methods of Construction, Average of Relatives and Aggregative Methods, Problems in construction of Index Numbers. Fishers Ideal Index Number, Base shifting, Splicing and Deflating.

Interpolation : Binomial, Newtons Advancing Differences Method and Lagrange's Method.

Note : The candidate shall be permitted to use battery operated pocket calculator that should not have more than 12 digits, 6 functions and 2 memories and should be noiseless and cordless.

Books Recommended :

1. Sancheti and Kapoor: Business Statistics

2. C. Gupta: Business Statistics

3. A. A. Jain, P. K. Gupta: Business Statistics

4. N. K. Choudhary: Elements of Statistics (Hindi & English)

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B.Com.Part I (HONS. Course)

2018-19

Core Paper-III

Advanced Accountancy

Time : 3 hours

Max. Marks.100

Min. Marks 40

Note: There will be five question in all. The candidate will require to attempt all the questions selecting one question from each unit with an internal choice (either/or)

UNIT-I

Departmental Accounts.

Branch Accounts including Foreign Branch.

UNIT-II

Investment Accounts.

Royalty Accounts.

UNIT-III

Accounts of Holding and Subsidiary Companies.

UNIT-IV

Amalgamation of Companies (excluding inter company holdings)

Internal Reconstruction (without scheme)

UNIT-V

Liquidation of Companies : procedure contributories, statement of affairs, deficiency Account, Liquidator and Receivers Final Statement of Account.

Double Account System (Excluding accounts of electricity supply companies)

Note: The candidate shall be permitted to use battery operated pocket calculator that should not have more than 12 digits, 6 functions and 2 memories and should be noiseless and cordless.

Books Recommended:

1 R.L. Gupta; Advance Accounting

2 Shukla Grewal : Advanced Accountancy

3 Agarwal, Sharma Advanced Accounting

4 Sehgal and sehgal : Advanced Accounting Vo.II

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B.Com. Part I (Hons. Course)

Paper IV

Advanced Business Statistics and Mathematics

Time : 3 hours.

Max. Marks. 100

Min. Marks 40

Note:- There will be five questions in all. The candidate will require to attempt all the questions selecting one question from each unit with an internal choice (either/or).

Unit-I

Analysis of time series : Meaning, components of time series, methods of measuring trend, seasonal and cyclical variations, Sampling : Theory and Methods of Sampling Distribution (Only Theoretical knowledge is required).

Unit -II

Association of Attributes and Decision theory

Unit -III

Statistical Quality Control: Introduction, Process Control and Product Control, Control Charts for Variables and Attributes, Uses and Application of S.Q.C. Vital & Health Statistics (Death, Birth, Fertility and Reproduction Rates).

Unit -IV

Permutations & Combinations. Theory of probability: Elementary problems based on permutations and combinations, additive and multiplicative rules.

Unit -V

A.P., G.P. and H.P.: Simple and direct problems, Elements of Set Theory: Definition of Set and Sub-sets, number of elements in a set, ways of specifying a set, set equality and subset universal set and null set. Basic set operations. Venn Diagrams.

Note: The candidate shall be permitted to use battery operated pocket calculator that should not have more than 12 digits, 6 functions and 2 memories and should be noiseless and cordless.

Books Recommended:

- 2) Mathur, Khandelwal, Gupta: Business Statistics
- 3) Kailash Nath Nagar: Business Statistics
- 4) S.P. Gupta - Statistical Methods
- 5) Sancheti & Kapoor - Statistical Methods

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Paper – E Business Laws

Time : 3 hours.

Min. Marks : 36

Max. Marks : 100

- Unit-I The Indian Contract Act, 1872
 Sections 1 to 75
- Unit-II Special Contracts under the Indian Contract Act viz-Indemnity,
 Guarantee, Bailment, Pledge and Agency.
- Unit-III The Consumer Protection Act, 1986.
- Unit-IV The Indian Partnership Act, 1932.
- Unit-V The sale of Goods Act, 1930.

Books Recommended:

1. M.C. Shukla : A manual of Mercantile Law
2. N.D. Kapoor : Elements of Mercantile Law
3. Daver : Mercantile Law
4. S.N. Mishra : Labour and Industrial Law
5. आर.सी. अग्रवाल : व्यापारिक एवं औद्योगिक सन्वियम
6. मनमोहन प्रसाद : व्यापारिक सन्वियम
7. डॉ. आर.एल. नौलखा : व्यापारिक सन्वियम
8. मायुर एवं सर्वशेखा : व्यापारिक सन्वियम
9. शर्मा, खण्डेलवाल, गेयल एवं कोठरी : व्यापारिक एवं औद्योगिक सन्वियम
10. जे.पी.सिंघल : वाणिज्यिक एवं औद्योगिक विधि
11. कोठरी, पितलिया, लहू : व्यावसायिक सन्वियम
12. Pitaliya, Sharma : Mercantile Law

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B.Com. Part I (Hons. Course) A, B, S.T. C.

Paper : II

Business Economics

(Subsidiary paper of EAFM)

Time : 3 hours.

Max. Marks. 100

Min. Marks 36

Note:- There will be five questions in all. The candidate will require to attempt all the questions selecting one question from each unit with an internal choice (either/or).

Unit-I

Introduction to Business Economics : Definition, Meaning, nature and scope of business economics, role of business economics in business policy formulation.

Unit-II

Demand Analysis : Utility and indifference curve approaches, law of demand and its determinants, elasticity of demand - its measurement and significance in business policy formulation.

Demand Forecasting : Objectives, steps and techniques, demand forecasting for a new product.

Unit-III

Production Function - Types of production functions, laws of returns and returns to scale, law of variable proportions, isoquant curves, expansion path.

Revenue and Cost Analysis : Revenue Analysis, total revenue, marginal revenue and average revenue, elasticity and its relationship with revenue curves. Various concepts of cost, short and long run cost curves.

Unit-IV

Market Analysis : Price and output determination under perfect competition, monopoly, discriminating monopoly, imperfect competition and oligopoly, concepts of monopsony and bilateral monopoly.

Factor Pricing : Determination of rent, wages, interest and profit. Marginal productivity theory of distribution.

Unit-V

National Income Analysis : Definition, concept, components, measurement, problems in estimation, social accounting method. National Income and economic welfare.

Books Recommended:

1. D.M. Mithani : Fundamentals of business and managerial economics, Himalaya Publishing House.
2. N.D. Mathur : Managerial Economics, Shivam Book House (P) Ltd., Jaipur.
3. N.D. Mathur : Business Economics, Shivam Book House (P) Limited, Jaipur.
4. B.P. Gupta : Vyavsayik Arthashastra (Hindi), Malik and Company, Jaipur.
5. Agarwal and Agarwal : Vyavsayik Arthashastra, (Hindi) Ramesh Book Depot., Jaipur.
6. C.M. Chaudhary : Business Economics
7. T.R. Jain, O.P. Khanna and Sharda Tiwari : Business Economics.
8. M. D. agarwal and S. D. Deo : Business Economics, Ramesh Book Depot, Jaipur.
9. Satish Munjal : Managerial Economics, Ramani Mandir, Jaipur

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B. Com. PART-I

Business Administration (Hons.)

2-

Paper I : Business Laws

Unit I

The Indian Contract Act, 1872, Sections 1 to 75.

Unit II

Special Contracts under the Indian Contract Act viz.-Indemnity, Guarantee, Bailment, Pledge and Agency.

Unit III

The Consumer Protection Act, 1986.

Unit IV

The Indian Partnership Act, 1932.

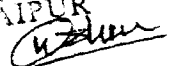
Unit V

The Sale of Goods Act, 1930.

Books Recommended

1. M.C. Shukla : A Manual of Mercantile Law
2. N.D. Kapoor : Elements of Mercantile Law
3. Daver : Mercantile Law
4. S.N. Mishra : Labour and Industrial Law
5. आर.सी. अग्रवाल : व्यापारिक एवं औद्योगिक सन्धियम (मै. कॉलेज बुक हाउस, जयपुर)
6. मनमोहन प्रसाद : व्यापारिक सन्धियम
7. डॉ. आर. एल. नौलखा : व्यापारिक सन्धियम (रमेश बुक डिपो, जयपुर)

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B. Com. PART-I

Business Administration (Hons.)

Paper II : Business Organization

Unit I

Origin and development of entrepreneurship in India : Problems and Suggestions. Role of RIICO and District Industrial Centres. Significance and establishment of a business organization – consideration and steps only. Business Environment. Business Ethics.

Unit II

Need and Importance of Finance, Sources of Finance, A brief study of Rajasthan Finance Corporation.

Unit III

Origin, development and activities of Stock Exchanges in India. A brief study of SEBI, OTCE and NSE.

Unit IV

Modern methods of Advertisement and Publicity. Significance and evils of advertisement. Economic liberalization policy and its implications. Implications of Globalization Policy on business.

Unit V

Concept of welfare state. Government assistance to Industries, Industrial Policy, 1991 and onward changes. Industrial Democracy.

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B. Com. PART-I

Business Administration (Hons.)

Paper III Labour Policy and Labour Relations

Unit I

Indian Labour – An Introduction of Indian Labour, Characteristics, social and economic condition. problems of labour working in public enterprises. Unorganized labour in India - definition, Categories, difference between organised and unorganized workers. Importance and problems of unorganised workers. Child labour in India.

Unit II

Agricultural Labour: meaning, Peculiar features, types and problems of Agriculture labour initiatives taken by government for upliftment of labour.

Unit III

Payment of wages – concept, factors affecting wage structure. Methods of wage payment. Incentive plans, fringe benefits, profit sharing and Bonus payment Essentials of sound wage payments. Collective bargaining.

Unit IV

Social Security for Indian work- meaning, scope of social security, importance of social security. Social security plans.

Unit V

Labour welfare meaning, objectives and activities. Principles of labour welfare activities. Undertaken by various agencies in India.

B. Com. PART-I

Business Administration(Hons.)

Paper IV Business Environment

Unit I

Business Environment concepts, importance, Business Environment framework (Internal, External, Micro & Macro environment)

Unit II

Economic Environment: Concept, Strategy for economic development, New Economic policy, 1991, Types of economic systems, Eleventh Five year and its salient features.

Economic aspect of Indian Constitution, Directive principles, State policies, fundamental rights, Central-State relations.

Unit III

Technological Environment: Meaning, Technology transfer, Process, Factors influencing choice of technology, Intellectual Property Rights (IPR) (Concepts of Patent, Copyright, Trademark)

Unit IV

Legal environment: Foreign Exchange Management Act, 1991 (Provisions related to contravention and penalties, adjudication and appeal), Competition Act, 2002 (Amended Act 2007), Consumer Protection Act, 1986 (Consumer rights, duties, complaint redressed procedure)

Unit V

Social & Cultural Environment: Corporate social responsibility, Business ethics, Arguments in favour and in against of business ethics, Influence of socio-cultural factors on corporate procedures and practices.

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B.COM. PART-I (HONS. COURSE)

Ex. No. Adm

Subsidiary- Paper-I

Corporate and Financial Accounting

TIME: 3 hour

Max.Marks-100

Min. Marks 36

Note : There will be five question in all. The candidate will require to attempt all the questions selecting one question from each unit with an internal choice (either/or)

Unit-I

Accounting principles, Conventions and Concept, General Introduction of Indian Accounting Standards AS-I And AS-9 Issue of Shares Issue of Right Shares, Buy back of Shares ESOS in the present scenario. Redemption of Preference Shares.

Unit-II

Issue and Redemption of Debentures, Underwriting of Shares & Debentures. Acquisition of Business, Pre-and Post Incorporation Profit.

Unit-III

Final Accounts of Companies including Managerial Remuneration. Disposal of Profits and Issue of Bonus Shares.

Unit-IV

Valuation of Goodwill & Valuation of Share

Unit-V

Hire Purchase and Installment Sale Transaction. Valuation of Inventory (As-2) Insurance Claims

Note: The candidate shall be permitted to use battery operated pocket calculator that should not have more than 12 digits, 6 functions and 2 memories and should be noiseless and cordless.

Books Recommended

1. R.L. Gupta : Advanced Accountancy
2. S.N.Maheshwari : Advanced Accountancy
3. Jain, Khandelwal, Pareek, Dave: Corporate Financial Accounting
4. Sehgal and Sehgal : Advanced Accountancy

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B. Com. PART-I

Bus. Admn.(Hons.)

II Subsidiary Paper :Business Economics

Unit I

Introduction to Business Economics : Definition, Meaning, nature and scope of business economics, role of business economics in business policy formulation.

Unit II

Demand Analysis: Utility and indifference curve approaches, law of demand and its determinants, elasticity of demand - its measurement and significance in business policy formulation.

Demand Forecasting: Objectives, steps and techniques, demand forecasting for a new product.

Unit III

Production Function: Types of production functions, laws of returns and returns to scale, law of variable proportions, isoquant curves, expansion path.

Revenue and Cost Analysis: Revenue Analysis, total revenue, marginal revenue and average revenue, elasticity and its relationship with revenue curves. Various concepts of cost, short and long run cost curves.

Unit IV:

Market Analysis: Price and output determination under perfect competition, monopoly, discriminating monopoly, imperfect competition and oligopoly, concepts of monopoly and bilateral monopoly.

Factor Pricing: Determination of rent, wages, interest and profit. Marginal productivity theory of distribution.

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Unit V

National Income Analysis: Definition, concept, components, measurement, problems in estimation, social accounting method. National Income and economic welfare.

Suggested References

1. D.M. Mithani : Fundamentals of business and managerial economics, Himalaya Publishing House.
2. Mote and Paul : Managerial Economics, TATA McGraw Hill, New Delhi.
3. N.D. Mathur : Managerial Economics, Shivam Book House (P) Ltd., Jaipur.
4. N.D. Mathur : Business Economics, Shivam Book House (P) Limited, Jaipur.
5. B.P. Gupta : Vyavsayik Arthashastra (Hindi), Malik and Company, Jaipur.
6. Agarwal and Agarwal : Vyavsayik Arthshastra, (Hindi) Ramesh Book Depot., Jaipur.
7. C.M. Chaudhary : Business Economics
8. T.R. Jain, O.P. Khanna and Sharda Tiwari : Business Economics.
9. M. D agarwal and Som Deo: Business Economics Ramesh Book Depot, Jaipur
10. Satish Munjal : Managerial Economics, RPH, Parnami Mandir, Jaipur.


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3. E. A. F. M.

PART - I

Paper-I : Business Economics

Time : 3 hours.

Min. Marks : 40

Max. Marks : 100

- Unit-I** Introduction to Business Economics : Definition, Meaning, Nature and scope of Business Economics, Business Economics and Economic Theory, Business Economics and Decision Sciences- The Nature & Process of Business Decision Making, The type of Business decision; Market Coordination V/s Business Coordination.
- Unit-II** Consumer Behaviour : Cardinal Utility Analysis- Critical evaluation of Marshall's cardinal Utility Analysis- Indifference curve approach, Marginal Rate of Substitution Relationship between MRS and Marginal Utility, Budget line and Consumer Equilibrium; Price, Income and Substitution effect; Price-Demand Relationship.
- Unit-III** Production Function – Types of production functions, laws of returns and returns to scale, law of variable proportions, isoquant curves, expansion path.
Revenue and Cost Analysis : Revenue Analysis, total revenue, marginal revenue and average revenue, elasticity and its relationship with revenue curves. Various concepts of cost, short and long run cost curves.
- Unit-IV** Market Analysis : Price and output determination under perfect competition, Monopoly, Discriminating Monopoly, Imperfect Competition and Oligopoly, Non-Price Competition : Advertising Expenditure.
- Unit-V** Factor Pricing: Determination of Rent, Wages, Interest and Profit. Marginal Productivity theory of Distribution. Business Cycles-Theories and Phases. Measures to check business cycles, Relationship between National Income and Economic welfare.

Books Recommended:

1. D.M. Mithani : Fundamentals of business and managerial economics, Himalaya Publishing House.
2. Mote and Paul and Gupta : Managerial Economics, TATA McGraw Hill, New Delhi.
3. Ahuja, H.L. : Managerial Economics, S. Chand & Company Ltd., New Delhi.
4. N.D. Mathur : Business Economics, Shivam Book House (P) Limited, Jaipur.
5. B.P. Gupta : Vyavsayik Arthashastra (Hindi), Malik and Company, Jaipur.
6. Agarwal and Agarwal : Vyavsayik Arthshastra, (Hindi) Ramesh Book Depot, Jaipur.
7. C.M. Chaudhary : Business Economics
8. M. D. Agarwal and Som Deo: Business Economics, Ramesh Book Depot, Jaipur
9. Satish Munjal : Managerial Economics, RPH, Parnami Mandir, Jaipur.

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PAPER – II

Indian Banking and Financial System

Time : 3 hours.

Min. Marks : 40

Max. Marks : 100

- Unit-I** Bank-Definition and Functions, commercial banks, a study of commercial banks public and private sector, assets and liabilities management of commercial banks. RBI and NABARD. Monetary policy and credit control by RBI.
- Unit-II** Universal banking, E-banking, mobile banking and innovations in banking sector.
Relationship between Banker and customer – General and Special.
- Unit-III** Negotiable Instruments – Cheques, Bills of Exchange and promissory notes.
A study of Banking regulations act 1949.
- Unit-IV** Financial System : Functions, major issues in Indian Financial System, Financial sector reforms in India.
- Unit-V** Financial Market – Money Market, Capital Market, Bill Market, Foreign Exchange Market and Debt Market.
Financial Instruments – Treasury Bills, Certificate of Deposits, Commercial Paper, Currency Options – Credit Card.

Books Recommended:

1. Vasant Desai: Indian Banking Nature and Problems, Himalaya Publishing House, Delhi.
2. Natarajan S, Parameshwaran R : "Indian Banking", S. Chand & Company Ltd., New Delhi.
3. Averbach, Robert D; Money, Banking and Financial Markets Macmillan, London.
4. Varshney, P.N. : Indian Financial System, Sultan Chand & Sons, New Delhi.
5. Khan, M.Y.: Indian Financial System, Tata McGraw Hill, Delhi.
6. Bhole L.M. : Financial Markets and Institutions, Tata McGraw Hill, Delhi.
7. J.K. Tandon And T.N. Mathur – Banking And Finance, Shivam Book House (P) Ltd., Jaipur (Hindi and English Version)
8. Vashitha, Swami, Gupta : Banking and Finance, Ramesh Book Depot, Jaipur.

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PAPER – III

Elements of Financial Management

Time : 3 hours.

Min. Marks : 40

Max. Marks : 100

- Unit-I Meaning, Scope, Importance and Limitations of Financial Management, Tasks and Responsibilities of a Modern Finance Manager. Financial Analysis: Financial Statements – Income Statement and Balance-sheet. Techniques of Financial Analysis.
- Unit-II Ratio Analysis, Liquidity, Activity, Profitability and Leverage Ratios. Fund Flow analysis: Changes in working capital, sources and uses of fund : Cash flow analysis: sources and uses of cash. Cash flow statement as per AS(Accounting Standard)-3.
- Unit-III An Introduction of Financial Planning and Forecasting. Break-even Analysis. Sources of Short-term and Long-term Finance. Equity v/s Debt.
- Unit-IV Working Capital Management-Concept and Significance. Determinants and Estimation of Working Capital, Adequate Working Capital, Merits and Demerits. Management of Cash and Marketable Securities.
- Unit-V Receivables and Inventory Management. Elementary Study of Capital Budgeting including Methods of Evaluating Capital Expenditure proposals under uncertainty. Dividend Policy.

Books Recommended :

1. Financial Management: M.R. Agarwal (English & Hindi Version)
2. Elements of Financial Management : M.D. Agarwal & N.P. Agarwal (English & Hindi Version)
3. वित्तीय प्रबंध के मूल तत्व : जाट, गुप्ता, मेन्दीरत्ता, मिश्रा, सेनी

Note: The candidate shall be permitted to use battery operated pocket calculator that should not have more than 12 digits, 6 functions and 2 memories and should be noiseless and cordless.

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PAPER – IV

Business Budgeting

Time : 3 hours.

Min. Marks : 40

Max. Marks : 100

- Unit-I** Business Budgets and Budgeting : Meaning, Nature, Objectives, Advantages and Limitations of Budgets and Budgeting. Budget Terminology, Preparation of Budgets. Budget Co-ordination. Essentials of an Effective Budgeting.
Types of Budgets : Fixed and Flexible Budget, Finance Budget Master Budget, Sales Budget, Production Budget, Cost of Production Budget-Direct Material Budget, Direct Labour Budget and Overhead Budget, Performance Budgeting, Zero Base Budgeting.
- Unit-II** Business Forecasting : Meaning, Theories, Importance and Limitations of Business Forecasting. Techniques and Tools of Business Forecasting. Essentials of Business Forecasting.
- Unit-III** Cash Budgeting : Meaning, Importance and Forms of Cash Budget. Preparation of Cash Budget. Methods of Preparing Cash Budget.
Budgetary Control : Meaning, Characteristics, Objects and Benefits of Budgetary Control; Budgetary Control v/s Standard Costing- Sales Variances, Material Variances, Labour Variances.
- Unit-IV** Product and Production Decision : Meaning, Product, Product Decision areas, use of alternative production facilities, determination of the profitable level of production, Utilization of full production capacity. Starting a new product in place of existing product. Determination of product mix on the basis of key factor.
- Unit-V** Project Planning and Feasibility Study : Types of projects, Analysis of projects, profitability estimates of projects, feasibility-Economic Financial and Technical.
Cost of Capital : Computation of Cost of Debt Fund, Preference Share Capital, Equity Share Capital, Retained Earnings and Weighted Average Cost of Capital.

Books Recommended:

1. Gupta S.P. : Management Accounting
2. Kulshrestha N.K. : Theory and Practice of Management Accounting.
3. Man Mohan Goyal : Principles of Management Accounting.
4. अग्रवाल, विजय एवं सुरेलिया : व्यवसायिक बजटन (Hindi and English editions)
5. अग्रवाल, एम.आर. : व्यावसायिक बजटन

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B.COM. PART-I (HONS. COURSE)

Subsidiary- Paper-I

Corporate and Financial Accounting

TIME: 3 hour

Max.Marks-100

Min. Marks 36

Note : There will be five question in all. The candidate will require to attempt all the questions selecting one question from each unit with an internal choice (either/or)

Unit-I

Accounting principles, Conventions and Concept, General Introduction of Indian Accounting Standards AS-1 And AS-9 Issue of Shares Issue of Right Shares, Buy back of Shares ESOS in the present scenario. Redemption of Preference Shares.

Unit-II

Issue and Redemption of Debentures, Underwriting of Shares & Debentures. Acquisition of Business, Pre-and Post Incorporation Profit.

Unit-III

Final Accounts of Companies including Managerial Remuneration. Disposal of Profits and Issue of Bonus Shares.

Unit-IV

Valuation of Goodwill & Valuation of Share

Unit-V

Hire Purchase and Installment Sale Transaction. Valuation of Inventory (As-2) Insurance Claims

Note: The candidate shall be permitted to use battery operated pocket calculator that should not have more than 12 digits, 6 functions and 2 memories and should be noiseless and cordless.

Books Recommended

1. R I. Gupta : Advanced Accountancy
2. S.N.Maheshwari : Advanced Accountancy
3. Jain, Khandelwal, Pareek, Dave: Corporate Financial Accounting
4. Sehgal and Sehgal : Advanced Accountancy
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Paper - II
Business Laws

Time : 3 hours.
Min. Marks : 36

Max. Marks : 100

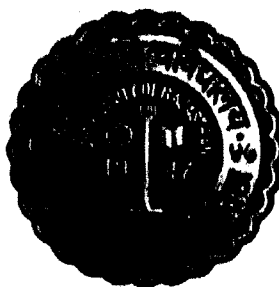
- Unit-I The Indian Contract Act, 1872
 Sections 1 to 75
- Unit-II Special Contracts under the Indian Contract Act viz-Indemnity,
 Guarantee, Bailment, Plearge and Agency.
- Unit-III The Consumer Protection Act, 1986.
- Unit-IV The Indian Partnership Act, 1932.
- Unit-V The sale of Goods Act, 1930.

Books Recommended:

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2. N.D. Kapoor : Elements of Mercantile Law
3. Daver : Mercantile Law
4. S.N. Mishra : Labour and Industrial Law
5. आर.सी. अग्रवाल: व्यापारिक एवं औद्योगिक सन्वियम
6. मनमोहन प्रसाद: व्यापारिक सन्वियम
7. डॉ. आर.एल. नौलखा : व्यापारिक सन्वियम
8. मायुर एवं सक्सेना : व्यापारिक सन्वियम
9. शर्मा, खण्डेलवाल, गोयल एवं कोठरी: व्यापारिक एवं औद्योगिक सन्वियम
10. जे.पी.सिंघल : वाणिज्यिक एवं औद्योगिक विधि
11. कोठरी, पितलिया, लहाना : व्यावसायिक सन्वियम
12. Pitaliya, Sharma : Mercantile Law

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University of Rajasthan Jaipur

SYLLABUS

B.Com. (Hons.) Part-II

EXAMINATION - 2019

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B.COM (HONS.) Part - Ind

Examination - 2019

Scheme of Examination

For a pass at each examination, a candidate shall be required to obtain a minimum of 36% marks in each subsidiary subject and 40% marks in the Honours subject passing separately in the practicals, wherever prescribed, shall be necessary.

Successful candidates will be classified as under :

1st Division 60%	Of the aggregate marks prescribed in Honours and subsidiary subject of Part-I, Part-II and Part-III Examinations taken together
2nd Division 50%	

All the rest will be declared to have passed Examination. No. division shall be awarded at the Honours Part I Part II examinations. The number of papers and practical, wherever prescribed the duration of examination, maximum marks and minimum pass marks are shown below:

There will be five questions in all. The candidates are required to attempt all the question. There will be one question from each unit with an internal choice (either/or)

The number of papers and practicals, wherever prescribed the duration of examination, maximum marks and minimum pass marks are shown below:

B.com. Hons. Part II Examination Distribution of Marks

S. No.	Name of the Subject/Paper	Duration Hours	Max. Marks	Min. Pass Marks
1.	Accountancy & Business Statistic			
	Honours Subjects			
	Paper - I Income Tax <i>Law and Practice</i>	3 hrs.	100	40
	Paper - II Cost Accounting <i>Practical</i>	3 hrs.	100	40
	Paper - III Direct Taxes	3 hrs.	100	40
	Paper - IV Advanced Cost- Accounting	3 hrs.	100	40
	Subsidiary Subject			
	Paper - I Company Law and Secretarial Practice	3 hrs.	100	36
	Paper - II Economics Environmental in <i>Rajasthan</i>	3 hrs.	100	36
2.	Business Administration			
	Honours Subjects			
	Paper V Company Law and Secretarial Practice	3 hrs.	100	40
	Paper VI Management	3 hrs.	100	40
	Paper VII Trade Unions & Industrial Relation	3 hrs.	100	40
	Paper VIII Sales Promotion and Sales Management	3 hrs.	100	40
	Subsidiary Subjects			
	Paper I Income Tax	3 hrs.	100	36
	Paper II Economic Environmental in <i>Rajasthan</i>	3 hrs.	100	36

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Economic Administration & Financial Management**Honours Subjects**

Paper - I Economic Administration and Policy	3 hrs.	100	40
Paper - II Operational Research and Risk Analysis	3 hrs.	100	40
Paper - III Project Management	3 hrs.	100	40
Paper - IV Development Banking and Investment Management	3 hrs.	100	40

Subsidiary Papers

Paper - I Income Tax	3 hrs.	100	36
Paper - II Company Law and Secretarial Practice	3 hrs.	100	36

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W.S.H.

B.COM. PART- II (Hons. Course)

PAPER - I

INCOME - TAX LAW AND PRACTICE

- UNIT - I Introduction, Residential Status and Income from Salaries.
- UNIT - II Income from House Property and Income from Business and Profession.
- UNIT - III Income from Capital Gain and Income from Other Sources.
- UNIT - IV Clubbing, Set off and Carry Forward of Losses and Deduction from Gross Total Income, Assessment of Individual.
- UNIT - V Assessement of Hindu Undivided Family and Firms, Advance Payment of Tax, TDS, Procedure of E-Filing of Return.

Books recommended:

- Singhania and singhania: Student's guide to Income tax, taxman.
- Gupta and Gupta: Student's notes to Income Tax, Taxbooks.
- Anuja and Gupta: Direct Taxes.
- Bangar and Bangar: Income Tax, Aadhya Publication, allahbad.

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W. S. Kumar

B.Com. Part II (Hons. Course)

Paper II Cost Accountancy

Time : 3 hours.

Max. Marks. 100

Min. Marks 40

Note: There will be five questions in all. The candidate will require to attempt all the questions selecting one question from each unit with an internal choice (either/or).

Unit – I

Introduction : Meaning and definition of cost, cost centre, costing, cost accounting and cost accountancy. Objectives, significance and limitations of cost accounting. Systems, methods and techniques of cost accounting. Distinction between Financial and Cost Accounting. Material purchasing and storing, valuation and issue of material. Material cost control.

Unit – II

Labour: Recording of time and wages; Methods of remuneration, incentive plans. Allocation of wages; labour turnover and treatment of idle time and overtime. Overhead : Meaning, Collection, Classification, Allocation, Apportionment, and Absorption of Overhead.

Unit – III

Unit Costing : Cost sheet, statement of cost per unit, computation of tender price by preparing statement of cost. Operating Costing : Meaning and Objectives. Preparation of statement of operating cost only related to transportation for passengers and goods only.

Unit – IV

Job Costing and Contract Costing: Cost-plus contract, escalation clause, work in progress, profit on completed, incomplete and contracts nearer to completion. Process Costing : Meaning and significance, treatment of normal and abnormal losses in process accounts. Inter process profit (Excluding Joint Product, By- product & Equivalent Production.)

Unit – V

Marginal Costing : Meaning, concept, significance and limitations of marginal costing as well as BEP analysis. CVP and BEP analysis, Break even charts. (Excluding stock valuation under marginal costing and absorption costing and advanced problems related to managerial decisions). Standard Costing: Meaning, concept, significance and limitations of standard costing. Setting standards and computation of material and labour variances only.

Note : The candidate shall be permitted to use battery operated pocket calculator that should not have more than 12 digits, 6 functions and 2 memories and should be noiseless and cordless.

Books Recommended:

1. Saxena, and Vashist :- Cost Accounting
2. B.K. Bhargava :- Cost Accounting
3. Agarwal and Chaturvedi :- Cost Accounting (Volume I & II)

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B.Com. Part II (Hons. Course) 2019

**Paper III
DIRECT TAXES**

Max. Mark.: Written Exame 100

Time : 3 hours

Min. Marks : 40

Note : There will be five questions in all. The candidate will require to attempt all the questions selecting one question from each unit with an internal choice (either/or).

Unit - I

Advance Payment of Tax, TDS, Interest on Taxes and

Tax Refund, Procedure & Filing of return

Unit - II

Assessment of Trust

Assessment of Local Authorities.

Unit - III

Assessment of Non- Residents and Representative Assessee.

Advance Ruling, Double Taxation Relief and Foreign Collaboration.

Unit - IV

Assessment of Co-operative Societies.

Penalties and Prosecutions, Appeal, Revision and Tax Authorities.

Unit - V

Assessment of Companies

Note : The candidate shall be permitted to use battery operated pocket calculator that should not have more than 12 digits, 6 functions and 2 memories and should be noiseless and cordless.

Recommended Books :

1. **Singhania V.K. :** Direct Taxes
2. **Orish Ahuja :** Direct Taxes
3. **Lal B.B. :** Income Tax Law and Practice
4. **Lakhotia R.N. :** Assessment of Companies and their Officers.
5. **Patel & Choudhary :** Wealth Tax, Corporate Tax

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B.Com.Part II (HONS. Course)

Optional Paper-IV

Advance Cost Accounting

Time : 3 hours

Max. Marks. 100

Min. Marks 40

Note: There will be five question in all. The candidate will require to attempt all the questions selecting one question from each unit with an internal choice (either/or)

Unit-I

Accounting Treatment and Control of Waste, Scrap, Spoilage, Defective and Obsolescence. Accounting Treatment and Control of Administrative, Selling and Distribution Overhead, Research and Development Costs. Learning Curve Theory

Unit-II

Integrated and non-integrated cost accounts (Cost Ledger or Cost Control Accounts), Reconciliation of cost and financial accounting.

Unit-III

Process Costing : Accounting treatment of losses during processing, inter-process profit. By Product and Joint-Product Equivalent Production, Uniform Costing and Inter-firm Comparison. Ratios useful for inter-firm Comparison.

Unit-IV

Meaning of concept of Marginal Costing : Break-even Analysis and Differential costing. Valuation of stock under marginal and absorption costing, Production decisions based on Marginal Costing (Make or Buy, Manual or Machine, Key Factor based product mix only)

Unit-V

Marketing decisions and other decision based on Marginal Costing (Own or lease, repair or replace, now or later, shut down or continue only) Standard Costing (sales & overhead)

Note: The candidate shall be permitted to use, battery operated pocket calculator that should not have more than 12 digits, 6 functions and 2 memories and should be noiseless and cordless.

Books Recommended:

1. Maheswari and Mittal : Cost Accounting, Mahaveer Book Depot, Delhi
2. Prasad N.K. : Principles and Practice of Cost Accounting
3. Saxena and Vashistha : Advanced Cost Accounts (Sultan Chand & Sons)
4. Ratanam P.V. : Costing Adviser (Kitab Mahal)
5. Ravi M. Kishor : Cost Accounting Taxmann Publication, New Delhi
6. Oswal, Mangal, Bidawat : Advanced Cost Accounting

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B.Com. Part II (Hons. Course)

Paper - I

Company Law & Secretarial Practice

(As per Companies Act 2013)

(Subsidiary paper of Bus. Admn.)

Time : 3 hours

Max. Marks. 100

Min. Marks 36

Note: There will be five questions in all. The candidate will require to attempt all the questions selecting one question from each unit with an internal choice (either/or).

Unit I

Meaning, Characteristics of a company, Liability of corporate veil, Types of Company, Privileges of a Private Company.

Unit II

Formation of a Company, Functions and Duties of Promoters, Memorandum of Association: contents and alterations, Articles of Association

Unit III

Prospectus, Share Capital, Types of Shares and Debentures, Membership, Provisions of Dividend

Unit IV

Directors- Qualifications and Disqualifications, Appointment and Removal, Powers and Duties, Managing Director, Whole time Director, Meetings of the company, Proxy, Agenda, Resolution, Minutes, Methods of Winding up.

Unit V

Company Secretary_ Qualifications, Role and Position, Secretarial Practice relating to allotment of shares, transfer and transmission of shares, payment of dividend.

Books Recommended:

1. R.C. Agrawal & S.S. Kothari: Company Law & Secretarial Practice
2. J.C. Bahl: Secretarial Practice.
3. N.D.Kapoor: Company Law
4. M.C.Kuchhal: Secretarial Practice.
5. Mathur, Saxena: Company Law & Secretarial Practice
6. Dr. R.N. Nalokha: Company Law & Secretarial Practice, R.B.D, Jaipur

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3. E.A.F.M.
B.COM PART - II (Hons)
paper-II

Economic Environment in Rajasthan

Time : 3 Hours.

Min. Marks : 30

Max. Marks : 100

- Unit-I** Economic Environment - Meaning, factors affecting Economic Environment, Basic features of Indian Economy. Rajasthan Economy an Overview : Population, Area, Agriculture, Land Reforms, Crops, Animal Husbandry, Dairy Development, Mineral Resources, occupational Structure and Human Resource Development; Current Environmental Issues.
- Unit-II** Planning in Rajasthan, Rajasthan Budget, Rural Development schemes- Evaluation & Impact of Development programmes; Human development Index; Problems of Rajasthan Economy- Poverty and Unemployment, Panchayati Raj Institutions.
- Unit-III** Agriculture - Agriculture policy of Rajasthan, Significance, new agriculture strategy. Agriculture inputs, food management, major schemes for agriculture sector. Agriculture Finance, Agriculture Insurance, Agriculture productivity, Commercialisation of Agriculture, minimum support price, demand and supply of agriculture products and their effect on general price level with reference to Rajasthan.
- Unit-IV** Infrastructure Development in Rajasthan: Road, Energy, Water Transport, social Infrastructure-Education, Health, Tourism Development in Rajasthan- Challenges and Prospects; Main Tourist places in Rajasthan, Socio-Economic Impact of Tourism.
- Unit-V** Industrial Development in Rajasthan - Industrial Policy, Role of cottage and Small industries in Rajasthan, Credit flow to Industrial Sector.
- Rural Finance- Concepts, need and importance, Main source of Rural Finance in Rajasthan, Problems and Prospects of Rural Finance.

Books Recommended:

1. रुद्रदत्त एवं सुन्दरम : भारतीय अर्थव्यवस्था
2. ए.एन. अग्रवाल : भारतीय अर्थव्यवस्था
3. लक्ष्मीनारायण माधुरामका : भारतीय अर्थव्यवस्था
4. Rudra Dutt and Sundaram : Indian Economy
5. पी.एल. ओझा : राजस्थान की अर्थव्यवस्था,
6. Mishra and Puri : Indian Economy
7. Budget Study, an overview of Rajasthan's Economy and other publication by Directorate, Economics and Statistics Rajasthan.

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2) B.COM. Part I Ind (Bus. Adm. Hons.) (2018/19)

Paper V	Company Law and Secretarial Practice
Paper VI	Management
Paper VII	Trade Unions and Industrial Relations
Paper VIII	Sales Promotion and Sales Management

Subsidiary Papers

Paper I	Income Tax
Paper II	Economic Environment in India

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2. Bus. Admin

B.COM. PART I Ind (Bus. Adm. Hons.) 2018-19

Paper V Company Law and Secretarial Practice

Unit I

Meaning, characteristics of a Company, Lifting of Corporate veil, types of Company, Privileges of a Private Company.

Unit II

Formation of a Company, Functions and Duties of Promoters, Memorandum of Association : Contents and Alterations, Articles of Association.

Unit III

Prospectus, Share Capital, Types of Shares and Debentures, Membership, Provisions of Dividend.

Unit IV

Directors- Qualifications and Disqualifications, Appointment and Removal, Power and Duties, Managing Director, Wholetime Director.

Meetings of the Company, Proxy, Agenda, Resolution, Minutes, Methods of Winding-up.

Unit V

Company Secretary- Qualifications, Role and Position, Secretarial Practice relating to allotment of shares, transfer and transmission of shares, payment of dividend.

NOTE: All provisions as per Companies Act, 2013

Books Recommended:

- 1 आर सी अग्रवाल एवं एन. एस. कोठारी : कम्पनी अधिनियम एवं सचिवीय पद्धति
- 2 एस.एम. शुक्ला एवं सहाय : कम्पनी अधिनियम एवं सचिवीय पद्धति
- 3 S.A. Sharlekar : Secretarial Practice.
- 4 J.C. Bahl : Secretarial Practice.
- 5 N.D. Kapoor : Company Law.
- 6 M.C. Kuchhal : Secretarial Practice.
- 7 Awatar Singh : Company Law
- 8 वाधु. सक्सेना : कम्पनी अधिनियम एवं सचिवीय पद्धति (रमेश बुक डिपो, जयपुर)
- 9 शमी चोपड़ा : कम्पनी अधिनियम (अजमेरा बुक कम्पनी, जयपुर)

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B.COM. Part IInd (Bus. Adm. Hons.)

Paper VI Management

Unit I-

Management: Concept, Nature, Principles, Importance and Process; Schools of Management Thought; MBO; Planning-Importance, Process and Components; Decision Making- Process, Types and Techniques.

Unit II-

Organisation-Goals, Structure, Importance, Process and Principles; Theories of Organisation; Environment and Organisation; Formal and Informal Organisation; Organisational Change and Development; Authority and Responsibility; Power and Authority; Sources of Authority; Delegation of Authority; Centralisation and Decentralisation; Span of Control.

Unit III-

Communication-Significance, Channels, Types, Process, Barriers and Remedies; Co-ordination and Co-operation; Co-ordination as an essence of management; Principles and Techniques of co-ordination; Obstacles in co-ordination; Direction-Essentials of effective co-ordination; Direction-Concept, Importance and Principles.

Unit IV-

Leadership-Functions, Qualities, Styles and Theories; Motivation-Importance, Types, Process and Techniques; Theories of Motivation (Maslow, Herzberg, McGregor); Sound Motivation System.

Unit V-

Control-Nature, Process, Techniques and Essentials of Effective Control; Business Process Re-engineering; TQM, Six Sigma.

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Recommended:

1. B. S. Mathur: Principles of Management. (1978)
2. Satya Saran Chatterjee: Introduction of Management.
3. Mritunjoy Banerjee: Business Administration.
4. Richard, Hannan Lawrence P. Hogan and John Wholipan: Modern Business Administration
5. S. Sarlekar: Business Management.
6. Koontz O' Donnell: Essentials of Management
7. ज. पी. सिंघल प्रबंध, अजमेरा बुक कम्पनी, जयपुर
8. P. Subba Rao: Management-Theory and Practice, HPH.

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B.COM. Part IInd (Bus. Adm. Hons.)

Paper VII

Trade Unions and Industrial Relations

Unit I

Functions of Trade Unions, Essentials of a sound Trade Union. Role of Trade Unions in Industrial Organisations. Theories of Trade Unions. Kind of Trade Unions. Trade Union organization in India. Central Organisations. Leadership patterns. Union functions Internal & External. Historical background and present position of trade unions, problems of Indian trade unions.

Unit II

Industrial Relations: Concept, Importance of Sound industrial relations, industrial relations in India, Industrial Disputes: Meaning, causes and consequences. Magnitude of industrial dispute

Unit III

Industrial Peace: Machinery for prevention and settlement of disputes, works Committees, Joint Management Committee (Court of Enquiry, Conciliation, Arbitration and Adjudication), Problems relating to the machinery.

Unit IV

Collective Bargaining: Concept, Preconditions, process, Negotiations, Strategies. Hurdles and collective bargaining. Suggestions to encourage collective bargaining.

Unit V

Workers participation in management. Concept, Method, Forms, Problems and Suggestions. Problems of Industrial Relations in Public sector Enterprises.

Books Recommended:

1. J.S. Mathur: Indian Working Class Movement.
2. Agnihotri: Industrial Relations in India.
3. C. Myres: Industrial Relations in India.
4. B.R. Sharma: Indian Worker.
5. R.C. Agarwal & N.C. Kothari: Audhyogik sambandh (College Book House, Jaipur).
6. Mathur & Navalakha: Audhyogik Sambandh (RBD, Jaipur).
7. Jagannath Swaroop Mathur: Baratiya Sramik Verg Andolan.
8. Industrial Disputes Act, 1947.

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Chauhan

Paper VIII Sales Promotion and Sales Management

Unit I

Sales Promotion: Nature of Sales Promotion, Distinction with advertising and Personal selling, Role and Importance. Functions of Sales Promotion Department, Limitations in a shortage economy.

Types of Sales Promotions: Internal Organisation, Dealer Promotions, Consumer Promotions, Sales Promotions, Sales Promotion of Industrial and Consumer Products, Export-Sales Promotion, Evaluation of Sales Promotion Programme.

Unit II

Sales Management: Role of Selling in a Planned Economy, Selling as a career, Qualities of a salesman. Product knowledge. Effective Speaking. Consumer Relations.

Unit III

Sales Organisation, Branch setup, Recruitment and selection of salesman, Training, Motivation, Remuneration.

Unit IV

Planned selling approach, Pre-approach, Meeting objections. Closing sale, Sales call, Sales forecasting, Sales Quotas and Territories.

Unit V

Consumer psychology, Buying, motives of Consumers, Control of Sales operations, Salesman's Reports, Meeting selling costs and sales cost control.

Books Recommended:

1. Asplay T.C.: Sales Promotion Handbook.
2. Canfield-Bertrand: Sales Administration Practices & Problems.
3. Tosdal, Herry R: Introduction to Sales Management.
4. Phelps. Dudley M.: Sales Management Policies & Procedure.
5. Cundiff, Still & Govani: Sales Management.
6. Dr. M. J. Mathew: Sales Promotion and Sales Management (R.B.S.A., Jaipur)

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B.COM PART-II (HONS. COURSE)

For Bus Adm

Subsidiary-Paper-I

INCOME TAX

TIME: 3 hour

Max.Marks-100

Min. Marks 36

Note: There will be five question in all. The candidate will require to attempt all the questions selecting one question from each unit with an internal choice (either/or)

UNIT-I

Introduction of Income Tax including Residential States.

UNIT-II

Income from salary, Income from house property.

UNIT-III

Income from Business and Profession, Income from Capital Gain and Income from Other Sources.

UNIT-IV

Clubbing, Set off and carry forward of losses and Deduction from Gross Total Income. Assessment of Individual

UNIT-V

Assessment of Hindu Undivided Family, Firms(Including Limited Liability Partnership Firms)

Advance payment of tax, TDS, Tax procedure of Assessment.

Note: The candidate shall be permitted to use battery operated pocket calculator that should not have more than 12 digits, 6 functions and 2 memories and should be noiseless and cordless.

Books Recommended:

1. Singhania V.K., A Students Guide to income Tax
2. Ahuja and Gupta: Directs Taxes.
3. S. Sundaram : Law and Practice of Income Tax in India
4. Patel & Choudhary : Income Tax

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B.COM PART - II (Hons)

SP-paper-II

Economic Environment in Rajasthan

Time : 3 hours.

Min. Marks : 36

Max. Marks : 100

Unit-I Economic Environment - Meaning, factors affecting Economic Environment, Basic features of Indian Economy, Rajasthan Economy an Overview : Population, Area, Agriculture, Land Reforms, Crops, Animal Husbandry, Dairy Development, Mineral Resources, occupational Structure and Human Resource Development; Current Environmental Issues.

Unit-II Planning in Rajasthan, Rajasthan Budget, Rural Development schemes- Evaluation & Impact of Development programmes; Human development Index; Problems of Rajasthan Economy- Poverty and Unemployment, Panchayati Raj Institutions.

Unit-III Agriculture - Agriculture policy of Rajasthan, Significance, new agriculture strategy. Agriculture inputs, food management, major schemes for agriculture sector. Agriculture Finance, Agriculture Insurance, Agriculture productivity, Commercialisation of Agriculture, minimum support price, demand and supply of agriculture products and their effect on general price level with reference to Rajasthan.

Unit-IV Infrastructure Development in Rajasthan: Road, Energy, Water Transport, social Infrastructure-Education, Health, Tourism Development in Rajasthan- Challenges and Prospects, Main Tourist places in Rajasthan, Socio-Economic Impact of Tourism.

Unit-V Industrial Development in Rajasthan - Industrial Policy, Role of cottage and Small industries in Rajasthan, Credit flow to Industrial Sector.

Rural Finance- Concepts, need and importance, Main source of Rural Finance in Rajasthan, Problems and Prospects of Rural Finance.

Books Recommended:

1. रुद्रदत्त एवं सुन्दरम : भारतीय अर्थव्यवस्था
2. ए एन अग्रवाल : भारतीय अर्थव्यवस्था
3. लक्ष्मीनारायण नाथूरामका : भारतीय अर्थव्यवस्था
4. Rudra Dutt and Sundaram : Indian Economy
5. पी एल ओझा : राजस्थान की अर्थव्यवस्था
6. Mishra and Puri : Indian Economy
7. Budget Study, an overview of Rajasthan's Economy and other publication by Directorate, Economics and Statistics Rajasthan.

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B.COM (HONS.) PART-II

Core Papers

PAPER – I

Economic Administration and Policy

Time : 3 hours.

Min. Marks : 40

Max. Marks : 100

Unit-I Economic Administration Meaning Scope, Objectives and Techniques. Constitutional Provisions in India.

Unit-II Administration of present economic policies : Fiscal Policy, Monetary Policy.

Public Sector: Autonomy and Accountability : Criteria of Efficiency, Managerial Problems, Current Issues.

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Unit-III Industrial Licensing Policy, Instruments of State Regulation of Economic System, Economic Controls, State Trading in India.

Unit-IV Public Debt : Administration of Public Debt of India-Internal and External Debt Problems of Public Debt.

Financial Administration of the Indian Union : Central, State and Local Finances, Particulars and Public Accountability. Comptroller and Auditor General of India.

Unit-V Leakages in Financial Administration. Efficiency and Economy in Financial Administration. Tax Evasion.

Central State Financial Relations. Finance Commission and their recommendations.

Books Recommended:

1. Chandra, Ashok : Indian Administration
2. Bhargava R.N. : Theory and Working of Union Finance in India
3. Report of the Administrative Reforms Commission
4. Arjun Sen Gupta : Committee Report
5. Om Prakash : Theory and Working of State Corporation with special reference to India.
6. Laxmi Narain : Theory and Practice of Public Enterprises.
7. एस.सी. शर्मा : आर्थिक प्रशासन (रमेश बुक डिपो, जयपुर)
8. माथुर एव शर्मा : आर्थिक प्रशासन
9. डिगन : विकास का अर्थशास्त्र

PAPER – II

Operational Research and Risk Analysis

Time : 3 hours.

Min. Marks : 40

Max. Marks : 100

Unit-I Meaning and Nature of Operational Research : Development of Operational Research: Phases of O.R. study; Significance and limitation of O.R.

Unit-II Linear programming : Mathematical formulation of problem, graphical and simple solution of LPP.

Game Theory : Meaning, two person zero sum game, mix strategies.

Queuing theory – Meaning, concepts and problems related with queuing theory.

Unit-III Inventory Control and Planning; the technique of Inventory control : Determination of EOQ; Treatment in case of Quantity discounts; Inventory control with reordering in case of certain demand and also in case of uncertain demand – Determination of safety stock level.

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Unit-IV Elements of decision theory : Decision models-deterministic and stochastic. Marginal analysis of risk problems, decision making under uncertainty. Maximin, Maximax, Minimax, regret Laplace and Hurwicz rules.

Net work Analysis : C.P.M. and PERT, Computation of Total, Free and Independent Floats. Difference between CPM and PERT.

Unit-V Risk Analysis – Basic risk concepts, Sensitivity analysis, Measures of risk; standard deviation and coefficient of variation. Risk Evaluation approaches – RAD approach, Certainly Equivalent approach. Probability distributions approach and Decision tree approach.

Books Recommended:

1. Kapoor, V.K., Operational Research, Sultam Chand & Sons, New Delhi.
2. Taha, Hamady A., Operational Research , An Introduction, Prentice Hall of India, New Delhi.
3. M.Y. Khan and P.K. Jain : Financial Management
4. N.P Agarwal , Quantitative Techniques, RBD Jaipur
5. M. Satyanarayana and Lailitha Raman : Operations Research.
6. Kanti Swarup et al. Operations Research.

PAPER – III

Project Management

Time : 3 hours.

Min. Marks : 40

Max. Marks : 100

Unit-I Introduction to Project Management : Definition and objectives of a project, Project identification and formulation, Types of project, steps in project management.

Unit-II Feasibility Analysis : Need and steps in feasibility analysis, market analysis, technical analysis, financial analysis and economic analysis. Guidelines of Indian Planning Commission for feasibility report.

Unit-III Project Appraisal : Aspects of appraisal, capital budgeting methods – Payback period method, Accounting rate of return method, NPV, IRR and Benefit-cost ratio.

Economic Appraisal : Social Cost Benefit Analysis (SCBA) and its rationale, steps in SCBA, UNIDO approach, Little – mirrless approach and Indian approach to SCBA, Limitation of SCBA.

Unit-IV Project Monitoring and Control : Use of network techniques – PERT and CPM. Determination of critical path, comparison between PERT and CPM, application of PERT and CPM in project management.

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Government policy and system : Project sanction, project implementation, project tracking, project management information systems (PMIS)

Unit-V Environmental appraisal of projects, environmental protection enactments

Books Recommended:

1. Prasanna Chandra : "Project, Preparation, Implementation and appraisal.
2. N.P. Agarwal and B.K. Mishra : "Project Management", Ramesh Book Depot, Jaipur.
3. Goel : "Project Management", Vikas Publishing House, Delhi.
4. P.K. Mattoo : Project Formulation in Developing Countries.
5. United Nations : "Evaluation of Industrial Projects"
6. United Nation : "Guidelines for project evaluation.
7. Dennis, A. Caliness : Complete Guide of Project Management.

PAPER – IV

Development Banking and Investment Management

Time : 3 hours.

Min. Marks : 40

Max. Marks : 100

Unit-I The concept of Development Banking. Objectives and Functions of Development Banks. Sources and Uses of Funds in Development Banks.

Merchant Banking Business and Development Banks.

Unit-II Procedure and documentation for their lending operations.

Unit-III Promotional Role of Development Banks

Development Banking in India-Retrospect and Prospect.

Unit-IV A detailed study of IFCI, ICICI, SFC's, IDBI.

Investment Function Concept, importance and relationship with other areas. Investment Channels and Policies.

Unit-V Problems of Development Banks in India. Development v/s Investment Banking

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Books Recommended

1. William Diamond : Development Banks
 2. Shirley Boskey : Problems and Practice of Development Banks.
 3. Basu, S.K. : Theory and Practice of Development Banks.
 4. Gupta, L.C. : Changing Structure of Industrial Finance in India.
 5. Vasant Desai : Development Banking in India.
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B.COM PART -II (HONS. COURSE)

For E.A.F.M.

Subsidiary-Paper-I

INCOME TAX

Time : 3 hour

Max.Marks-100

Min. Marks : 6

Note : There will be five question in all. The candidate will require to attempt all the questions selecting one question from each unit with an internal choice (either/or)

UNIT-I

Introduction of Income Tax including Residential States.

UNIT-II

Income from salary, Income from house property.

UNIT-III

Income from Business and Profession, Income from Capital Gain and Income from Other Sources.

UNIT-IV

Clubbing ,Set off and carry forward of losses and Deduction from Gross Total Income. Assessment of Individual.

UNIT-V

Assessment of Hindu Undivided Family ,Firms(Including Limited Liability Partnership Firms)

Advance payment of tax, TDS, Tax procedure of Assessment.

Note: The candidate shall be permitted to use battery operated pocket calculator that should not have more than 12 digits, 6functions and 2 memories and should be noiseless and cordless.

Books Recommended:

1. **Singhania V,k, : A Students Guide to income Tax**
2. **Anhuja and Gupta: Directs Taxes.**
3. **S.Sundaram : Law and Practlce of Income Tax in India**
4. **Patel & Choudhary : Income Tax**

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Paper-II
Company Law and Secretarial Practice

Time : 3 hours.
Min. Marks : 36

Max. Marks : 100

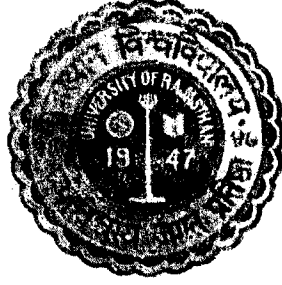
- Unit-I** Meaning, Characteristics of a Company, Lifting of Corporate Veil, Types of Company, Privileges of a Private Company.
- Unit-II** Formation of a Company, Functions and Duties of Promoters, Memorandum of Association : Contents and Alterations, Articles of Association.
- Unit-III** Prospectus, Share Capital, Types of Shares and Debentures, Membership, Provisions of Dividends.
- Unit-IV** Directors-Qualifications and Disqualifications, Appointment and Removal, Power and Duties, Managing Director, Whole time Director,
Meetings of the Company, Proxy, Agenda, Resolution, Minutes, Methods of Winding up.
- Unit-V** Company Secretary-Qualifications, Role, Position, Secretarial Practice relating to allotment of shares, transfer and transmission of shares, payment of dividend.

Books Recommended:

1. आर.सी. अग्रवाल एवं एन.एस. कोठरी : कम्पनी अधिनियम एवं सचिवीय पद्धति
2. एस.एम. शुक्ल एवं सहाय : कम्पनी अधिनियम एवं सचिवीय पद्धति
3. S.A. Sharlekar : Secretarial Practice.
4. J.C. Bahl : Secretarial Practice.
5. N.D. Kapoor : Company Law.
6. M.C. Kuchhal : Secretarial Practice.
7. Awatar Singh : Company Law.
8. माथुर, सक्सेना : कम्पनी अधिनियम एवं सचिवीय पद्धति
9. चूण्डावत, खाचा, जीशी, जन : कम्पनी अधिनियम
10. डॉ. आर.एल. नौलखा, कम्पनी अधिनियम एवं सचिवीय पद्धति

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SYLLABUS

B.Com. (Hons.) Part-III

EXAMINATION - 2019

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(Part-I, Part-II and Part-III)
EXAMINATION-2019

Scheme of Examination:

The number of papers and the maximum marks for each paper together with the minimum marks required for a pass are shown against each subject separately. It will be necessary for a candidate to pass in the theory part as well as practical part of a subject/paper, wherever prescribed, separately, classification of successful candidates shall be as follows:

First Division	60%	of the aggregate marks prescribed at (a) Part I Examination, (b) Part II Examination, (c) Part III Examination taken together
Second Division	48%	

All the rest will be declared to have passed the examination if they obtain the minimum pass mark in each subject viz. 36%. No division shall be awarded at the Part I and the Part II Examination.

There will be five questions in all. The candidate will require to attempt all the questions selecting one question from each unit with an internal choice (either/or).

B.Com. (Part-III), 2019 Examinations
(Theory)

A. B. S. T

Paper-I THEORY AND PRACTICE OF AUDITING

Paper-II MANAGEMENT ACCOUNTING

Optional Papers: Paper-III and Paper IV (Select any two out of the following OPT-1 to OPT 6)

OPT Paper-1: TAX PLANNING

OPT Paper-2: ~~INDIRECT TAXES~~ G. S. T.

OPT Paper-3: COST AND MANAGEMENT AUDIT

OPT Paper-4: OPERATIONS RESEARCH AND QUANTITATIVE TECHNIQUES

OPT Paper-5: COST ANALYSIS AND COST CONTROL

OPT Paper-6: COMPUTERIZED ACCOUNTING (Theory-50 Marks and Practical- 50 Marks)
(Only for Regular Students)

Paper-V FUNCTIONAL MANAGEMENT (Subsidiary paper of Bus. Admn.)

Paper-VI RURAL DEVELOPMENT AND COOPERATION (Subsidiary paper of EAFM)

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B.Com. Part III (Hons. Course)

Paper I

Theory & Practice of Auditing

Unit - I

Auditing: Meaning, Objects, Fraud and Errors, Relationship between Book-Keeping, Accounting and Auditing, Elementary Knowledge Standards on Auditing Practices, Types of Audit, Internal Control Measures, Audit Programme.

Unit - II

Vouching, Verification and Valuation of Assets and Liabilities (including Practical Verification), Company Auditor: Appointment, Removal and Remuneration.

Unit - III

Company Auditor: Audit and Auditors (brief knowledge of Sections 139 to 148 of Companies Act, 2013), Rights, Duties and Liabilities of Company Audit, Audit Report and Certificates.

Unit - IV

Investigation: Meaning, Nature, Importance, Objectives and Investigation on behalf of an Intending Purchaser, Special Points regarding Different Audits: Educational Institutions, Club and Charitable Investigations.

Unit - V

Audit of Accounts of Private Concerns and Partnership Firms, Cost Audit: Aspects, Objects, Advantages, Cost Audit in Practice and Cost Audit under Indian Companies Act, 2013, EDP Audit: Meaning, Scope, Importance, Types and various activities of Data Processing and Approaches to EDP Systems of Audit.

B.Com. Part III (Hons. Course)

Paper II

Management Accounting

Unit-I

Introduction: Meaning and concept of management accounting, organization of management accounting, relationship of management accounting to cost accounting and financial accounting. Scope of management accounting, functions/objectives of management accounting. Tools and Techniques of management accounting. Responsibilities and qualities of Management Accountant. Management Accounting vs Traditional Accounting. Limitations of management accounting.

Unit-II

Capital Structure and Leverage: Meaning and Concept of capital structure, Determinants of Capital Structure, Optimum Capital Structure. Capital Structure Theories, EBIT-EPS Analysis, Point of Indifference, Meaning and Concept of Leverage- Financial, Operating and Combined Leverage. Financing Decisions based on Capital structure and leverage.

Unit-III

Working Capital Management: Meaning and Concept of Working Capital, Types of Working Capital. Factors affecting working capital requirement. Significance of working capital, consequences of excess/inadequate working capital. Estimation of working capital requirement, salient features of Tandon Committee and Chore Committee Reports, Activity Based Costing.

Unit-IV

Ratio Analysis as a Technique of Analysis of Financial Statements- Liquidity Ratios, Activity Ratios. Leverage Ratios. Profitability Ratios and Market Value Ratios. Statement of Changes of Financial Position-Fund Flow Statement, Cash Flow Statement.

Unit-V

Investment of Capital, Capital Expenditure Decisions, - DCF and Non-DCF techniques

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B.Com. Part III (Hons. Course)

Optional Paper 1

Tax Planning

Unit-I

Tax Planning and Tax Management, Concept of Income and Problems of Tax Planning. Tax Planning & Residential Status and Tax Planning for Employees Remuneration.

Unit-II

Capital Gain & Tax Planning, Set off and Carry Forward of Losses and Tax Planning with Investments.

Unit-III

Tax Planning and Form of Organizations.; Diversion of Income and Tax Planning.

Unit-IV

Tax Planning for Industrial Development and Financial Management.

Unit-V

Tax Planning and Managerial Decisions.

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B.COM. PART- III (Hons. Course)

OPTIONAL PAPER - 02

GOODS AND SERVICES TAX

UNIT - I

Introduction of GST, IGST Act, 2017. Definition, Benefits, Constitutional Aspects and Legal Framework of GST Including CGST, IGST, SGST and UTGST.

UNIT - II

Identification of Nature of Supply- Inter State and Intra State Supply, Composite and Mixed Supply, Continuous Supply and Zero Rated Supply. Taxable and Non-taxable Supply, Exemptions, Composite Scheme of GST, Applicable Rates of GST.

UNIT- III

Concept Relating to Input Tax Credit and Computation of Input Tax Credit.

UNIT - IV

Procedure of Registration Under GST, Maintenance of Books and Records. Filing of Returns, Computation of GST, Payment of Tax, Reverse Charge, Refund of Tax.

UNIT - V

Administration of GST Regime, Assessment, Demand and Recovery, Inspection, Search, Seizure, Provisions with Respect to Offences and Penalties.

Books recommended:

- Nitya tax associates: Basics of GST, Taxman, Delhi.
- Dr. Harsh Vardhan: Goods & service Tax, Bharat Publication, Delhi.
- Shah and Mangal: Goods and service tax, RBD, Jaipur.
- Goods and Service Tax: P.C. Publications, Jaipur.
- Bangar and Bangar: Beginner's guide to GST, Aadhya Publication, Allahabad.

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**B.Com. Part-III (Hons. Course)
Optional Paper 3**

Cost and Management Audit

Unit - I

Cost Audit: Meaning, Evolution, Scope, Aspects, Objects, Nature, Advantages, Difference between Statutory Audit and Cost Audit, Application of Cost Accounting Standards, Cost Auditor and Professional Ethics.

Unit - II

Cost Audit Programme, Cost Accounting Records Rules, Verification of Cost Records and Reports.

Unit - III

Cost Audit Report and its Review, Cost Audit leading to other services: Productivity, Energy, Inventory, Environmental Pollution Control and Corporate Service, Peer Review.

Unit - IV

Management Audit: Meaning, Need, Difference between Statutory Audit and Management Audit, Purpose/Objects, Scope, Aspects, Techniques and Procedures of Management Audit, Review of Management Functions: Production, Distribution, Development, Personnel and Industrial Relations, Research and Development, Cost Accounting and Finance and General Management Functions.

Unit - V

Review of Purchasing Operations, Review of Manufacturing Operations, Appraisal of Management Decisions, Corporate Social Audit.

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**B.Com. Part III (Hons. Course)
Optional Paper 4**

OPERATIONS RESEARCH AND QUANTITATIVE TECHNIQUES

Unit-I

Linear Programming: Graphic and Simplex Methods, Concept of Dual.

Unit-II

Transportation and Assignment Models

Unit-III

Games Theory- Two persons zero-sum game: Pure and Mixed Strategy, Rule of Dominance and Queuing theory: Single Channel Queuing problems

Unit-IV

Decision Theory: Risk and uncertainty conditions, The Bayesian decision theory, Decision tree analysis. Simulation Techniques.

Unit-V

Network Analysis- PERT and CPM, Crashing.

**B.Com. Part III (Hons. Course)
Optional Paper 5**

COST ANALYSIS AND COST CONTROL

Unit - I

Objectives of cost accountancy. Techniques of cost accounting, cost control and decision making. Preparation of cost reports. Productivity accounting : Ratio analysis to measure overall as well as factorial productivity.

Unit - II

Employees Cost Analysis : Payment of salaries compensation and bonus to managerial personal including directors; profit sharing plans for executives, cost analysis for labour and executives, turnover, recruitment, training and development, employees, welfare and Fringe benefits cost reduction and cost control. Value analysis.

Unit - III

Statistical and OR Application for cost control in certainty, uncertainty and risk. Expected value of perfect information. BEP under risk and uncertainty. Model for inventory stock and Responsibility accounting and profit centre Transfer pricing :

Unit - IV

Budgetary control : Meaning and concept of budget and budgeting. Classification of budgets. Advanced budgetary control, zero base budgeting, New cost concepts : Activity Based Costing, On-line Costing, Life Cycle Costing, Target Costing and Balance Score Card and Value Chain Analysis.

Unit - V

Standard costing: Variance analysis related to material, labour, overhead, sales and profit variances.

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B.COM. PART- III (HONS. COURSE)

Optional Paper - 6

Computerized Accounting

(For regular students only)

UNIT - I

Basics of Accounting: Introduction, Double entry system of Book-Keeping, types of Accounts, Mode of Accounting, Financial Statements, Manual Accounting v/s Computerized Accounting. Accounting with Tally: Introduction, company creation, company features and configurations.

UNIT - II

Creating Accounting masters in Tally: List and charts of Accounts, Creation of groups and ledgers. Display and Alter of Groups and Ledgers, Accounting Vouchers, Accounting Voucher entry. Use of excel in Accounting.

UNIT- III

Creating Inventory masters in Tally: Creation of stock group, Stock categories, Units of Measures. Godowns, Stock Items, Inventory Vouchers, Inventory Voucher Entry of Invoicing, GST Tax Calculations, Input Tax Credits, GST Returns.

UNIT - IV

Financial Report Generation through Tally, Accounting through DBMS (Data Base Management System)

UNIT - V

Technological Advantages of Tally: Security Controls, Backup and Restore, Export and Import of Data & Printing Reports.

Practical

Syllabus will cover above topics. Practical will be conducted by Internal as well as external examiner. External Examiner will be Oppointed by the University.

Books recommended:

- Tally. Shridharan, Narmadha Publications.
- Tally. ERP 9 with GST, Tally education Pvt. Ltd.

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**B.Com. Part III (Hons. Course)
Paper- V**

**Functional Management
(Subsidiary paper of Bus. Admn.)**

Unit-I

Meaning, Scope, Role and functions of Human Resource Management; Organisation of Personnel Department; Human Resource Planning; Recruitment, Selection, Placement and Induction.

Unit-II

Training and Development; Job Analysis, Job Description, Job Enlargement and Job Enrichment; Performance Appraisal and Merit Rating

Unit-III

Meaning, Evolution, Modern Concept, Scope and Importance of Marketing; Product Planning and Development, Marketing Research; Channels of Distribution, Pricing Policies and Strategies.

Unit-IV

Finance Functions; Scope and importance of Financial Management; Functions and Role of Financial Manager; Financial Planning and Capital Structure; Sources of Finance; Working Capital and its Sources.

Unit-V

Meaning, Nature, Scope and Importance of Production Management; Production Process, Production Planning and Control; quality Control; Product Design and Product Research; Meaning, Scope and Functions of Materials Management; Inventory Planning and Control.

**B.Com. Part III (Hons. Course)
Paper- VI
RURAL DEVELOPMENT AND COOPERATION
(Subsidiary paper of EAFM)**

Unit-I

Concept and significance of Rural Development, Strategy of Rural Development; Current issues.

Rural Development Administration – Rural Development Agencies. Village level. Block level and District level Administration for Rural Development. District Rural Development Agencies.

Unit-II

Constitutional Provisions regarding Panchayati Raj, 73rd Constitutional Amendment. Salient Features of Rajasthan Panchayati Raj Act

Infrastructure Development : Rural Roads, Rural Markets, Electrifications, Water Supply, Education and health.

Unit-III

Rural Development Programmes: From Antyodaya to IRDP. Critical study of Rural Development Schemes : Swarnajayanti Gram Swarajgar Yojana (SGSY), Jawahar Gram Samridhi Yojana (JGSY), Sampurna Gramin Rojgar Yojana (SGRY), Pradhan Mantri Gram Sadak Yojana (PMGSY), Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), Main features and achievement of these schemes.

Unit-IV

Programmes related to Tribal Welfare, Drought Prone Area Development, Desert Development, Nature and forest conservation, Woman and child development.

Unit-V

Concept of Co-operation, Principles of Co-operation, An evaluation of co-operative principles and modifications therein from time to time; Comparison v/s Capitalism and Socialism.

Co-operative credit, marketing, consumers housing and industrial cooperatives. State and Co-operation. A study of Rajasthan State Co-operative Bank. (Apex Co-op. Bank) and RAJFED.

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B.COM. Part III(Bus. Adm. Hons.) 2018-19

Paper IX	Functional Management
Paper X	E-Commerce
Paper XI	Insurance
Paper XII	Organizational Behaviour

Subsidiary Papers

Paper I	Auditing and Management Accounting
Paper II	Rural Development and Cooperation

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Paper IX Functional Management

Unit I

Meaning, Scope, Role and Functions of Human Resource Management, Organisation of Human Resources Department, Human Resource Planning, Recruitment, Selection, Placement and Induction.

Unit II

Job Analysis, Job Enlargement and Job Enrichment, Training and Development, Performance Appraisal and Merit Rating.

Unit III

Marketing-Meaning, Evolution, Modern Concept, Scope and Importance, Product Planning and Development; Marketing Research; Channels of Distribution; Pricing Policies and Strategies.

Unit IV

Finance Functions; Importance and Scope of Financial Management; Functions and Role of Finance Manager; Financial Planning and Capital Structure; Sources of Finance; Working Capital and its Sources.

Unit V

Meaning, Nature, Scope and Importance of Production Management; Production Process, Production Planning and Control; Quality Control; Product Design and Product Research; Meaning, Scope and Functions of Materials Management; Inventory Planning and Control.



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Books Recommended:

1. Gupta, C.B. : Human Resource Management, Sultan Chand and Sons, New Delhi
2. P. Subba Rao: Essentials of HRM and Industrial Relations
(Himalaya Publishing House)
3. Butta, E.S. : Modern Production Management
4. Dutta, S. K. : Materials Management
5. Gopal Krishanan and Sonderiam : Integrated Material Management
6. Kotler, Keller, Koshy, Jha: Marketing Management (Pearson)
7. शर्मा, शर्मा, सुराणा : मानव संसाधन प्रबन्ध (रमेश बुक डिपो)
8. जी.एस. सुधा : क्रियात्मक प्रबन्ध (रमेश बुक डिपो)
9. भदादा, पोरवाल : विपणन प्रबन्ध के सिद्धान्त एवं व्यवहार (रमेश बुक डिपो)
10. अग्रवाल, अग्रवाल : वित्तीय प्रबन्ध (रमेश बुक डिपो)
11. पोरवाल, सुथार : उत्पादन प्रबन्ध (रमेश बुक डिपो)
12. पोरवाल, सुथार : सामग्री प्रबन्ध के सिद्धान्त एवं व्यवहार (रमेश बुक डिपो)

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Paper X

E-Commerce

Unit I :

Meaning, Characteristics, Origin, Process, Key Drivers of E-Commerce, Elements, Traditional Commerce Vs E-Commerce, Benefits, Standards, Technologies, E-Commerce Models, Mobile Commerce, Barriers to E-Commerce.

Unit II :

Internet and E-Commerce, Networking-LAN, WAN, Business Uses of Internet, www, Protocols, Intranet and Internet, Multimedia Application, Hardware and Software.

Unit III :

Electronic Payment Systems-Methods, Security Issues, Electronic Banking, Electronic Stock Trading.

Unit IV :

Data Warehousing, Client-Server Computing, Data Mining, Website Management - Steps.

Unit V :

ERP - Meaning, Functions, SAP Applications, Business Intelligences, Ethics, Security and E-Governance.

Books Recommended:

1. C.S. Rayudu: E-Commerce and E-Business, Himalaya Publishing House.
2. V.D. Dudeja: Information Technology E-Commerce & E-Business, Commonwealth Publisher, New Delhi.
3. B. Bhasker: Electronic Consumer Framework- Technologies and Applications, Tata McGraw-Hill.
4. Parag Diwan and Sunil Sharma: Electronic Commerce : A Managers Guide to E-Business, Vanity Books International, New Delhi.

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Paper XI

Insurance

Unit I :

Insurance: An Introduction, Risk Management and Insurance, Principles of Insurance Contract, Types of Insurance Contract.

Unit II :

Fire Insurance, Marine Insurance, Life Insurance, Development of Life Insurance in India.

Unit III :

Life Insurance Corporation of India, Life Insurance Agents, Life Insurance Plans, Life Insurance Selling and Underwriting.

Unit IV :

Premium Calculation in Life Insurance, settlement of Claims in Life Insurance, General Insurance, The General Insurance Corporation of India.

Unit V :

Liberalisation and Insurance, The Insurance Act, 1938; The Insurance Regulatory and Development Authority (IRDA), Prospects and Challenges in Insurance Sector.

Books Recommended :

1. Mishra, M.N.: Principles & Practice of Insurance, S.Chand & Company, New Delhi.

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paper XII
Organizational Behaviour

Unit I :

Meaning and Concept of Organization Behaviour, Role of OB in Today's Business organization, Challenges and Opportunities, Theories of Organization Behaviour, Scope of Organisational Behaviour.

Unit II :

Perception, Nature, Importance, Difference between Sensation and Perception; Personality: Meaning, Determinants of Personality, Personality Traits and Types, Values, Attitudes and Job Satisfaction.

Unit III :

Interpersonal Behaviour, Group Dynamics- Meaning, Norms and Role, Types of Groups, Cohesiveness, Dynamics of Informal Group, *Team and Team building.*

Unit IV :

Conflict: Meaning, types process of conflict, approaches to conflict, conflict stimulation and resolution strategies. Stress - causes, effects, management of stress.

Unit V :

Meaning, Nature and factors of Organizational Change, Planned Change, Resistance to Change, Change Agent, Concept of Organizational Development, Organizational Development Interventions.

Books Recommended :

1. Prasad, L.M.: Organizational Behaviour, S. Chand, New Delhi
2. Robbins, Stephen P.: Organizational Behaviour: Concept, Controversies, Applications, Prentice Hall of India, Pvt. Ltd. New Delhi
3. Luthans, Fred: Organizational Behaviour, McGraw-Hill
4. P. S. Kumar, Anukriti Sharma and K. S. Krishna: Organizational Behaviour, Jahnavi Publications.
5. Mehta, Anil & Chouhan, Bhumiya: Organizational Behaviour, RSD, Jaipur.

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Subsidiary Paper I

Auditing and Management Accounting

Time : 3 hours.

Max. Mark.: ~~100~~ 100

Min. Marks 36

Note : There will be five questions in all. The candidate will require to attempt all the questions selecting one question from each unit with an internal choice (either/or).

Unit - I

Auditing: Meaning, Objects, Fraud and Errors, Relationship in between Book Keeping, Accounting and Auditing, Elementary Knowledge of Standards on Auditing Practices, Types of Audit.
Internal Control Measures.
Audit Programme.

Unit - II

Accounting, Verification and Valuation of Assets and Liabilities (including Practical Verification).
Company Auditor: Appointment, Removal and Remuneration.

Unit - III

Company Auditor: Audit and Auditors (brief knowledge of Sections 139 to 148 of Companies Act, 2013),
Rights, Duties and Liabilities.
Company Audit, Audit Report and Certificates.

Unit - IV

Management Accounting: Meaning, Nature, Objectives, Scope and Functions.
Capital Structure: Determinants and Theories.
Budgets: Operating, Financial and Combined.

Unit - V

Financial Statement Analysis: Meaning, nature, importance and techniques of financial analysis: Comparative Statements, Common Size Statements and Trend Analysis.
Ratio Analysis: Preparation of Income Statement and Balance Sheet on the basis of Ratio.
Cash Flow Statement (AS-3).

Note : The candidate shall be permitted to use battery operated pocket calculator that should not have more than 12 digits, 6 functions and 2 memories and should be noiseless and cordless.

Recommended Books :

1. Auditing (Hindi and English) RBD Publication
2. H.S. Khandelwal: Auditing.
3. T.R. Sharma: Auditing
4. Betty J.: Management Accountancy.
5. Manmohan & Goyal: Principles of Management Accounting.
6. Auditing and Management Accounting.
7. Maheshwari S.N.: Management Accounting and Financial Control.
8. M. R. Agarwal: Management Accounting.

9. B.L. Dave: Management Accounting.

10. C.P. Jain & H.S. Khandelwal: Auditing & Management Accounting.

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B. COM (Business Admn Hons) PART - III

Subsidiary Paper – II

Rural Development and Cooperation

Time : 3 hours.

Min. Marks : 36

Max. Marks : 100

- Unit-I** Concept and significance of Rural Development, Strategy of Rural Development; Current issues.
Rural Development Administration – Rural Development Agencies. Village level. Block level and District level Administration for Rural Development. District Rural Development Agencies.
- Unit-II** Constitutional Provisions regarding Panchayati Raj, 73rd Constitutional Amendment. Salient Features of Rajasthan Panchayati Raj Act., 1994.
Rural Infrastructure Development : Rural Roads, Rural Markets, Electrifications, Water Supply, Education and health.
- Unit-III** Rural Development Programmes: Critical study of Rural Development Schemes : Swarnajayanti Gram Swarojgar Yojana (SGSY), Jawahar Gram Samridhi Yojana (JGSY), Sampurna Gramin Rojgar Yojana (SGRY), Pradhan Mantri Gram Sadak Yojana (PGSY), Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), *Main features and achievement of these schemes.*
- Unit-IV** Programmes related to Tribal Welfare, Drought Prone Area Development, Desert Development, Nature and forest conservation, Woman and child development.
- Unit-V** Concept of Co-operation, Principles of Co-operation, An evaluation of co-operative principles and modifications therein from time to time. Co-operation v/s Capitalism and Socialism.
Co-operative credit, marketing, consumers, housing and industrial cooperatives. State and Co-operation. A study of Rajasthan State Co-operative Bank. (Apex Co-op. Bank) and RAJFED.

Books Recommended:

1. B.S. Mathur : Co-operation in India
2. R.D. Bedi : Theory History and Practice of Cooperation
3. F.R. Fay : Co-operation at Home and Abroad.
4. बी.एस. माथुर : सहकारिता
5. बी.डी. गुप्ता : सहकारिता के सिद्धांत एवं व्यवहार
6. V. Sharda : The Theory of Co-operation.

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B.Com. (Hons) Part-III					
Core Papers					
1.	Economic Environment in Rajasthan	Paper-I	3 Hrs.	100	40
2.	Rural Development and Corporation	Paper-II	3 Hrs.	100	40
3.	International Finance	Paper-III	3 Hrs.	100	40
4.	Public Economics	Paper-IV	3 Hrs.	100	40
Subsidiary Papers					
1.	Auditing and Management Accounting	Paper-I	3 Hrs.	100	36
2.	Functional Management	Paper-II	3 Hrs.	100	36

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B.COM (HONS) PART - III

Core Papers

PAPER - I

Economic Environment in Rajasthan

Time : 3 hours.

Min. Marks : 40

Max. Marks : 100

- Unit-I** Economic Environment – Meaning, factors affecting Economic Environment, Basic features of Indian Economy. Rajasthan Economy an Overview : Population, Area, Agriculture, Land Reforms, Crops, Animal Husbandry, Dairy Development, Mineral Resources, occupational Structure and Human Resource Development; Current Environmental Issues.
- Unit-II** Planning in Rajasthan, Rajasthan Budget, Rural Development schemes- Evaluation & Impact of Development programmes; Human development Index; Problems of Rajasthan Economy- Poverty and Unemployment, Panchayati Raj Institutions.
- Unit-III** Agriculture – Agriculture policy of Rajasthan, Significance, new agriculture strategy. Agriculture inputs, food management, major schemes for agriculture sector. Agriculture Finance, Agriculture Insurance, Agriculture productivity, Commercialisation of Agriculture, minimum support price, demand and supply of agriculture products and their effect on general price level with reference to Rajasthan.
- Unit-IV** Infrastructure Development in Rajasthan: Road, Energy, Water Transport, social Infrastructure-Education, Health, Tourism Development in Rajasthan- Challenges and Prospects, Main Tourist places in Rajasthan, Socio-Economic Impact of Tourism.
- Unit-V** Industrial Development in Rajasthan – Industrial Policy, Role of cottage and Small industries in Rajasthan, Credit flow to Industrial Sector.
Rural Finance- Concepts, need and importance, Main source of Rural Finance in Rajasthan, Problems and Prospects of Rural Finance.

Books Recommended:

1. रुद्रदत्त एवं सुन्दरम : भारतीय अर्थव्यवस्था
2. ए.एन. अग्रवाल : भारतीय अर्थव्यवस्था
3. लक्ष्मीनारायण नाथूरामका : भारतीय अर्थव्यवस्था
4. Rudra Dutt and Sundaram : Indian Economy
5. बी.एल. ओझा : राजस्थान की अर्थव्यवस्था
6. Mishra and Puri : Indian Economy
7. Budget Study, an overview of Rajasthan's Economy and other publication by Directorate, Economics and Statistics Rajasthan.

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PAPER - H

Rural Development and Cooperation

Time : 3 hours.

Min. Marks : 40

Max. Marks : 100

- Unit-I** Concept and significance of Rural Development, Strategy of Rural Development; Current issues.
Rural Development Administration - Rural Development Agencies. Village level. Block level and District level Administration for Rural Development. District Rural Development Agencies.
- Unit-II** Constitutional Provisions regarding Panchayati Raj, 73rd Constitutional Amendment. Salient Features of Rajasthan Panchayati Raj Act., 1994.
Rural Infrastructure Development : Rural Roads, Rural Markets, Electrifications, Water Supply, Education and health.
- Unit-III** Rural Development Programmes: Critical study of Rural Development Schemes : Swarnajayanti Gram Swarojgar Yojana (SGSY), Jawahar Gram Samridhi Yojana (JGSY), Sampurna Gramin Rojgar Yojana (SGRY), Pradhan Mantri Gram Sadak Yojana (PGSY), Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), Main features and achievement of these schemes.
- Unit-IV** Programmes related to Tribal Welfare, Drought Prone Area Development, Desert Development, Nature and forest conservation, Woman and child development.
- Unit-V** Concept of Co-operation, Principles of Co-operation, An evaluation of co-operative principles and modifications therein from time to time. Co-operation v/s Capitalism and Socialism.
Co-operative credit, marketing, consumers, housing and industrial cooperatives. State and Co-operation. A study of Rajasthan State Co-operative Bank. (Apex Co-op. Bank) and RAJFED.

Books Recommended:

1. B.S. Mathur : Co-operation in India
2. R.D. Bedi : Theory History and Practice of Cooperation
3. F.R. Fay : Co-operation at Home and Abroad.
4. बी.एस. माथुर : सहकारिता
5. बी.पी. गुप्ता : सहकारिता के सिद्धांत एवं व्यवहार
6. V. Sharda : The Theory of Co-operation.

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PAPER – III

International Finance

Time : 3 hours.

Min. Marks : 40

Max. Marks : 100

- Unit-I** International Finance Meaning, importance need, scope, methods of payment, letter of credit – types, parties, procedure.
- Unit-II** International Financial Market : Meaning and functions of Financial market : Difference between Domestic and Foreign Financial Market, International debt instruments – Euro notes, Euro commercial papers, Euro bonds.
International Monetary System : Gold Standard, Gold Bullion Standard, Bretton Woods System, Post Bretton Wood agreements.
- Unit-III** IMF & World Bank, IFC & IDA, ADB – Objectives, Recent Developments, Progress and Criticism.
- Unit-IV** Determination of exchange rates – Equilibrium Rate of exchange – Mint Parity Theory – PPP Theory and Balance of Payment Theory. Causes of fluctuations in exchange rates. Fixed and flexible exchange rates.
Foreign Exchange Transaction : Spot, Forward Exchange, Futures, Options, and Arbitrage.
- Unit-V** Exchange Control : Meaning, Features, Objectives, Methods, Merits and Demerits. FEMA.
Foreign Aid to India : Role, Impact of Foreign Aid on India's Economic Development and Problems of Foreign Aid. WTO-Introduction, Objectives, Functions. India & WTO.

Books Recommended:

1. Mithani D.M. : Introduction to International Economics, Himalaya Publishing House, Mumbai.
2. Seth M.L. : Money, Banking, International Trade and Public Finance – Lakshmi Narain Agarwal Educational Publisher, Agra.
3. S.K. Vargheese : Finance of Foreign Trade And Foreign Exchange.
4. M.C. Vaish : International Economics.
5. S.K. Mathur : International Trade and Finance, Shivam Book House (P) Ltd., Jaipur.
6. Cherunilam Francis : International Economics, Tata McGraw Hill Publishing Company Ltd., New Delhi.
7. Avadhani V.A. : International Finance Theory and Practice, Himalaya Publishing Company, New Delhi.

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PAPER – IV Public Economics

Time : 3 hours.

Min. Marks : 40

Max. Marks : 100

- Unit-I** Nature and scope of Public Economics. Role in augmenting allocative efficiency, distributive justice and economic stability in the economy. Meaning and importance of fiscal policy, current fiscal policy of India.
- Unit-II** The Principle of Maximum Social Advantage. Public Expenditure, canons and effects on production, distribution and consumption recent trends in public expenditure.
- Unit-III** Sources of Public Revenue, Taxation – meaning, classification, canons and effects of taxation, Social justice.
Taxable capacity : Meaning, concept and classification.
- Unit-IV** Public Debt : Loan v/s Tax, Debt as a source of development, internal and external debts.
Deficit Financing, Non Tax Revenues, Profits from Public Enterprises. Recent Trends in Fiscal Deficit.
- Unit-V** Theory of Federal Finance. Centre-State Financial Relations. Role of Finance Commission, Study of Current Finance Commission.
Financial Administration – Centre and States : Budgets-Tax Evasion and parallel Economy. Concept and implications of VAT and GST

Books Recommended:

1. L.N. Nathuramka – कराधान एक सैद्धान्तिक विवेचन
2. R.N. Bhargava – Theory and Working of Union finances in India (Chaitanya, Allahabad)
3. Dalton – Public Finance
4. Findlay Shirras – Public Finance
5. पी.एन. शर्मा : लोक वित्त
6. एण्डले एवं सुन्दरम : लोक वित्त
7. Philip E. Taylor – The Economics of Public Finance
8. R.A. Musgrave – Theory of Public Finance
9. R.C. Agarwal – Public Finance – Theory and Practice

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6 Com. pt II Hons

Subsidiary Papers

Paper – I

EAFM & BWS, Admin

Auditing and Management Accounting

Time : 3 hours.

Min. Marks : 36

Max. Marks : 100

- UNIT – I Auditing: Meaning, Objects, Fraud and Errors, Relationship in between Book-Keeping, Accounting and Auditing, Elementary Knowledge of Standards on Auditing Practices, Types of Audit. Internal Control Measures. Audit Programme.
- UNIT – II Vouching, Verification and Valuation of Assets and Liabilities (including Practical Verification). Company Auditor: Appointment, Removal and Remuneration.
- UNIT – III Company Auditor: Audit and Auditors (brief knowledge of Sections 139 to 148 of Companies Act, 2013), Rights, Duties and Liabilities. Company Audit: Share Capital and Debentures. Audit Report and Certificates.
- UNIT – IV Management Accounting: Meaning, Nature, Objectives, Scope and Functions. Capital Structure: Determinants and Theories. Leverages: Operating, Financial and Combined.
- UNIT – V Financial Statement Analysis: Meaning, nature, importance and techniques of financial analysis: Comparative Statements, Common Size Statements and Trend Analysis. Ratio Analysis: Preparation of Income Statement and Balance Sheet on the basis of Ratio. Cash Flow Statement (AS-3).

Books Recommended:

1. Jain, Khandelwal, Pareek: Auditing (Hindi and English)
2. H.S. Khandelwal: Auditing.
3. T.R.Sharma: Auditing
4. Bany J.: Management Accountancy.
5. Manmohan & Goyal: Principles of Management Accounting.
6. Hingorani N.L. & Ramnath A.R.: Management Accountancy.
7. Maheshwari S.N.: Management Accounting and Financial Control.
8. M. R. Agarwal: Management Accounting.

● B.L. Dave: Management Accounting.

Note : The candidate shall be permitted to use battery operated pocket calculator that should not have more than 12 digits, 6 functions and 2 memories and should be noiseless and cordless.

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Paper - II

Functional Management

Time : 3 hours.

Min. Marks : 36

Max. Marks : 100

- Unit-I** Meaning, Scope, Role and Functions of Human Resource Management; Organization of Personnel Department, Human Resource Planning, Recruitment, Selection, Placement and Inductions.
- Unit-II** Training and Development, Job Analysis, Job Description, Job Enlargement and Job Enrichments, Performance Appraisal and Merit Rating.
- Unit-III** Meaning, Evolution, Modern Concept, Scope and Importance of Marketing, Product Planning and Development, Marketing Research, Channels of Distribution, Pricing Policies and Strategies.
- Unit-IV** Finance Functions, Scope and Importance of Financial Management, Functions and Role of Financial Manager, Financial Planning and Capital Structure, Sources of Finance, Working Capital and its Sources.
- Unit-V** Meaning, Nature, Scope and Importance of Production Management, Production Process, Production Planning and Control, Quality Control, Product design and Product research, Meaning, Scope and Functions and Materials Management, Inventory planning and Control.

Books Recommended :

1. Flipoo : Personnel Management.
2. Yioder Dale : Personnel Management & Industrial Relations.
3. अग्रवाल, पोरवाल : सेवीवर्गीय प्रबंध
4. शर्मा, शर्मा, सुराणा : मानव संसाधन प्रबंध
5. जी.एस.सुधा : क्रियात्मक प्रबंध
6. Sheriekar, S.A. : Market Management
7. अग्रवाल, अग्रवाल : वित्तीय प्रबंध
8. Dutta, S.K. : Material Management.
9. Gopal Krishanan and Sonderiam: Integrated Material Manager
10. कृष्णमट, उपाध्याय : सामग्री प्रबंध

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UNIVERSITY OF RAJASTHAN JAIPUR

SYLLABUS

Bachelor of Business Administration

Annual Scheme

B.B.A. Part-I Examination	2019
B.B.A. Part-II Examination	2020
B.B.A. Part-III Examination	2021

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SCHEME OF EXAMINATION

BACHELOR OF BUSINESS ADMINISTRATION (BBA PART-I) 2019 (10+2+3 Pattern)

Eligibility:- Candidates must have passed Senior Secondary Examination or equivalent with 48% marks.

The medium of instruction as well as examination (new batch BBA Part I) shall be in English from the session 2018-19.

For pass at each examination, a candidate shall be required to obtain a minimum of 36% marks in each paper and 48% marks in the aggregate.

Successful candidate will be qualified as under :

- | | |
|---|-----------------------------|
| (a) 48% and above but less than 60% marks | II Division |
| (b) 60% and above but less than 75% marks | I Division |
| (c) 75% marks and above | I Division with distinction |

The number of papers and practicals, wherever prescribed, the duration of examination, maximum marks and minimum pass marks are shown separately against each paper.

A student will be required to pass BBA Course within five years from the date of his/her admission.

Distribution of Marks

S.No.	Name of the Subject/Paper	No. of papers to be offered	Duration	Max. Marks	Min. Marks
1.	Paper-I: Business & Management	One	3 hrs.	100	36
2.	Paper-II: Business Communication	One	3 hrs.	100	36
3.	Paper-III: Legal Aspects of Indian Business	One	3 hrs.	100	36
4.	Paper-IV: Business Economics	One	3 hrs.	100	36
5.	Paper-V: <i>Financial Accounting</i>	One	3 hrs.	100	36
6.	Paper-VI: Computer Fundamentals	One			
	Theory		2 hrs	40	14
	Practicals		2 hrs.	60	22

50% Papers (i.e. Three papers) can be carried forward from BBA Part-I examination to BBA Part-II examination and from BBA Part-II examination to Part-III examination. Further for BBA Part-III Examination, 50% of the papers (i.e., three papers) carried forward as due papers may be either from BBA Part-I or BBA Part-II or a mix from both years (BBA-I & BBA Part II).

The Pattern of question papers shall be as under :-

There will be five questions in all. The candidate will be required to attempt all the questions selecting one question from each Unit with an internal choice (either/or).

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University of ...
Date: ...

BACHELOR OF BUSINESS ADMINISTRATION

PART-1

Paper-1 Business and Management

3 Hours duration

Scheme: Maximum Marks: 100

Minimum Pass Marks: 36

Unit-I

Business & Management: Features and scope of Business. Elementary knowledge of Trade, Industry and Commerce, Types of Industries, Forms of ownership- Sole trading, Partnership, Company, Cooperatives, Joint sector, Public Enterprises.

Unit-II

Concept of management, Nature and scope of management. Management Functions, Functional areas of Management (elementary knowledge only), Principles of Management, Schools of Management Thought.

Unit-III

Planning: Nature and components of planning. Types of plans, Process of planning, Effective planning, MBO.

Decision-making: Process and Techniques of decision-making.

Unit-IV

Organisation: Definition, Principles of organisation, Forms of structure, Formal and informal Organisation, Delegation of authority.

Leadership: Function and Theories of Leadership, Leadership Styles.

Coordination: Principles and Techniques of coordination, Effective coordination

Unit-V

Motivation: Human needs, Techniques of motivation, Sound motivation system, Theories of motivation (suggested by Maslow, Herzberg, McGregor, Victor Vroom)

Control: Nature and process of control, Techniques of control elementary knowledge only. Effective control system

Books recommended:

- 1 Koontz and wehrich—Essentials of Management (Tata McGraw Hill Co.)
- 2 Newman, Warren & McGill—The process of management (Prentice-Hall of India Pvt, Ltd,)
- 3 Terry and Franklin—Principles of Management (All India Travellers Booksellers)
- 4 Toseph L. Massie—Essentials of management (Prentice Hall of India)
- 5 Stoner, Freeman and Gilbert—Management (Prentic Hall of India)
- 6 Robert N. Lussier-M, Lussier—Management Fundamentals (South-Western college Publishing)
- 7 Dr B.S. Mathur—Principles of Management (National Publishing House, Chaura Rasta, Jaipur)
- 8 M.J. Mathew-Business Management (Sheelsons, Jaipur)
- 9 G.S. Sudha—Business Management (RBSA, Jaipur)

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Paper-II: Business Communication

Scheme: Maximum Marks: 100

3 Hours duration

Minimum Pass Marks: 36

Unit-I

Concept and objectives of Communication, Effective Communication, Communication Process, Types of Communication-Upward and Downward Horizontal. Grapevine

Unit-II

Media of Communication: Written, oral, face-to-face, visual, audio-visual, modern media telex, fax teleconferencing, E-mail, media of non verbal communication, kinesics effects.

Unit-III

Barriers to communication: Wrong choice of medium, Physical barriers, Semantic barriers, Different comprehension of reality, Socio-psychological barriers.

Unit-IV

Aids to correct writing: Tenses, Modals, Conditional Infinitives, gerunds and participles, Active and Passive voice, Subject-verb agreement, Common errors.

Unit-V

Practical aspects of business communication: Report writing, Public speaking, Seminar Presentation, Interview, group discussion Effective listening

Writing Skills: types of business letters and letters writing.

Books recommended:

- 1 Rajendra Pal and J.S. Korlahalli- Essentials of Business Communication (Sultan Chand & Sons)
- 2 C.S. Rayed—Communication (Mumbai: Himalaya Publishing House)
- 3 C.B. Gupta—Business Communication & Customer Relations(Sultan Chand & Sons)
- 4 Parag Diwan—Communication Management (Deep & Deep publication Pvt. Ltd.)
- 5 Ronald E. Dulek and John S. Fiedler—Principles of Business Communication (Macmillan Publishing Co.)
- 6 Karl Erik Rosengern—Communication—An Introduction (Sage Publications)
- 7 Webster's Guide to Effective Letter Writing – Harper & Rom.
- 8 Krishna Mohan and Meera Banerji—Developing Communication Skill (Macmillan India Ltd)

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Paper-III: Legal Aspects of Indian Business
Scheme: Maximum Marks: 100
Minimum Pass Marks: 36

3 hours duration

Unit-I

Law of contract: Nature of contract, Classifications, Offer and Acceptance, Capacity to contract, Free Consent, Consideration, Legality of object, Agreement declared void, Performance of Contract, Discharge of Contract, Remedies for breach of contract.

Unit-II

Special Contract: Indemnity, Guarantee, Agency.

Unit-III

Sale of Goods Act: Formation of Contract of sale, Goods and their classification, price conditions & warranties, Passing of property in goods, Performance of contract of sale, Unpaid seller, sale by auction.

Unit-IV

Negotiable Instruments Act: Definition of Negotiable Instruments, Features, Promissory note, Bill of Exchange & cheque, Holder & Holder in due course, Crossing of cheque, Types of crossing, Dishonours of cheque.

Unit-V

Indian Companies Act: Meaning & Nature of company, Lifting of Corporate veil: Functions, Duties, Liabilities and Right of Promoters: Procedure of Registration: Contents and alteration of Memorandum and Articles of Association, Prospectus, Statement in lieu of Prospectus.

Directors: Power and Duties, Appointment and Removal of Directors, Appointment and Role of company secretary.

Books recommended:

- 1 Avtar Singh—Company Law (Eastern Books Co. Lucknow)
- 2 Gulshan and Kapoor—Business Law.
- 3 Avtar Singh— Mercantile Law (Eastern Books Co. Lucknow)
- 4 M.J. Matthew— Commercial Law (RBSA, Jaipur)
- 5 M.J. Matthew—Company Law (RBSA, Jaipur)
- 6 Majumdar and Kapoor—Company Law and Practice (Taxman New Delhi)



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Paper- IV: Business Economics

Scheme: Maximum marks: 100

Minimum pass marks: 36

3 Hours duration

Unit-I

Meaning and scope of Economics: Micro vs Macro Economics Methodology of Economics.

Utility Analysis: Law of Diminishing Marginal Utility, Equimarginal utility, Consumer's surplus,

Unit-II

Indifference Curve Analysis Law of Demand. Demand Forecasting.

Laws of Returns: Production Function in Short-Run and Long-Run

Unit-III

Market Cost and Revenue analysis: Pricing under perfect Competition Monopoly, Monopolistic Competition, Oligopoly.

Unit-IV

Theory of Factor Pricing: Marginal Productivity Theory of Distribution. Rent, Wages, Interest, Profit

Unit-V

National Income Analysis: Various concept, Measurement and Economic Welfare.

Keynes and classicism: Brief study of keynesian Theory of Employment. Business Cycles.

Growth vs Development: Theories OF Economic Growth.

Books recommended:

- 1 M.L Seth — Principles of Economics, Laxmi Agarwal, Agra
- 2 M.L. Jhingan— Principles of Economics, Vikas, New Delhi
- 3 Paul A. Samuelson — Economics, McGraw Hill International New York
- 4 D.N Dwivedi— Managerial Economics, Vikas, New Delhi.
- 5 N.D Mathur—Business Economics, Shivam Books House(P) Ltd. Jaipur
- 6 D.M Mithani— Fundamental of Business and Managerial Economics, Himalays Publishing
- 7 U.I Mote, Samule Pual and G.S Gupta— Managerial Economics Tata Mcgraw Hill Mumbai

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BBA Part I Exam 2019
Paper-V Financial Accounting

Scheme: Maximum Marks: 100
Minimum Pass Marks: 36

3 Hours Duration

Unit-I

Generally Accepted Accounting Principles: Concepts and Conventions, Accounting Equation, Books of Original Record, Journal and Subsidiary Books, Ledger, Trial Balance.

Unit-II

Depreciation, Provision and Reserves, Rectification of Errors, Preparation of Final Account with Adjustments.

Unit-III

Bank Reconciliation Statement.
Accounting of Non-Profit Organisations and Professional People.
Insurance claims for loss of stock and loss of profit.

Unit-IV

Issue and Forfeiture of Equity Shares, Issue and Redemption of Preference Shares and Debentures.

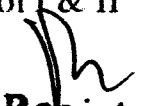
Unit-V

Financial Statements of Companies including Managerial Remuneration.
Disposal of Profits and Issue of Bonus Shares.

Books Recommended:

1. Shukla & Grewal- Advanced Accounts.
2. S.N Maheshwari-Advanced Accountancy, Vol I & II
3. Sharma & Bhardwaj-Book-keeping & Accountancy.
4. Sharma, Shah & Agarwal-Financial Accounting.
5. Monga, Sehal, Ahuja-Advanced Accounts, Vol I & II
6. R. L. Gupta & M. Radhaswamy- Advanced Accountancy, Vol I & II

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Paper VI: Computer Fundamentals

Maximum Marks:	Theory	40
	Practical	60
Minimum Pass Marks:	Theory	14
	Practical	22
Time allowed:	Theory	2 Hours
	Practical	2 hours

Unit-I

- 1 Introduction to computers and related Terminology (Basic Information only)
- (a) Hardware CPU—(Motherboard, Microprocessor, (The intel) Pentium III AMD and Cyrix), MMX Technology, System Clock, Address Bus, Data Bus (PCI & EISA) cache Memory Processing Speed, Expansion Slots (Video Controller, Sound cards, SCSI, Network card), Memory—(Unit RAM, ROM, EDO RAM, SD RAM), Input and output Devices—Keyboard (The Standard Keyboard layout) Mouse Printers (DOT-Matrix, Ink-jet, Laser Jet) Microphone, Speakers, Modem, Scanner, Digital Cameras) Storage Devices Diskette Drive (Types, Density, Formatting Boot Record FAT Folder Directory) Hard Disk Drive CD ROM Drive, (C.D /rom Speeds) CD-R Drive, DVD Rom Drive, Tape Drive
- (b) Software—Introduction to Programming Languages, systems software (Operating system and utilities) Application Software (Word Processors Spreadsheet, DBMS, Presentation Graphics, Browsers Personal Information Managers) Introduction to Multilingual word processors.
- (c) Communications and Connectivity—Data Communication system. Data transmission (Serial Parallel, bandwidth, protocols) E-Mail FAX Voice and video messaging, video conferencing, Online services user connection (types) Networking of Computers (Node, Client server LAN, WAN) Using the network, The Internet and the web.

Unit-II

- 2 Operating System (Working Knowledge at Common Users Level Only)
- Overview of important DOS commands, windows 98: Installation scandisk, Control Panel, Taskbar Toolbars, Display setting (Background Wallpaper Screensaver, Desktop themes) Files and Folder management, Windows Explorer, Finding Files and Folders, Formatting Disks and Copying files, Printer Settings.
- Modem Installation Mouse Installation Adding and Removing Programmes, Active Desktop Concepts, Winzip and its applications Norton Antivirus and its use. Use of calculators, Paintbrush, Winmap MPEG player and Window help.

Unit-III

- 3 Application Software (Working Knowledge at common users Level only)
- (a) Word Processing Software—MS Word
- Entering, Editing and formatting text document formats page size and orientation, Headers and Footers, Columns and sections page layout) Spelling and Grammar checkers. Thesaurus Find and Replace Cut and Paste. Tables and formatting tables Mail Merge Style and Templates.

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Unit-IV

(b) Spreadsheet Programme- MS Excel

Entering Data, labels Values Dates Formulas Cell reference Formats Functions Templates Charts and Maps Analysing data in a spreadsheet.

© DBMS--- Microsoft Sccess

Database, Entering data into the database Creating Databse tables editing data, Viewing Record, Shorting record, Querying a database, generating reports.

Unit-V

- 4 Computer Programming: Algorithm development—step in programme development problem indentification task analysis, Data anatyis GIGO Outputs and Inputs Pseudo cods Algorithms, Flow Charting Programme coding testing and debugging.

Programming (Using C Language) Data Types, Variables and constants, Expressions, Operators and assignments statement control statement console I/O Arrays functions Dynamics data structure in C-pointers, Structures and Uniouns and user defined variables. File Handling. The C-preprocessor C-standard Library and Header files.Simple Programming ecercise


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BACHELOR OF BUSINESS ADMINISTRATION

Part-II - 2020

Medium of instruction and examination will be English/Hindi.

For pass at each examination, a candidate shall be required to obtain a minimum of 36% marks in each paper and 48% marks in the aggregate.

Successful candidate will be qualified as under-

- | | |
|---|-----------------------------|
| (a) 48% and above but less than 60% marks | II Division |
| (b) 60% and above but less than 75% marks | I Division |
| (c) 75% marks and above | I Division with distinction |

The number of papers and practicals, wherever prescribed, the duration of examination, maximum marks and minimum pass marks are shown separately against each paper.

A student will be required to pass BBA Course within five years from the date of his/her admission.

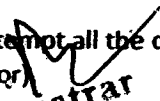
Distribution of Marks

S.No	Name of subject/Paper	No. of papers to be offered	Duration	Max. Marks	Min. Pass Marks
1.	Paper-I Strategic Management	One	3 hrs	100	36
2.	Paper-II Marketing Management	One	3 hrs	100	36
3.	Paper-III Human Resource Management	One	3 hrs	100	36
4.	Paper-IV Business Finance	One	3 hrs	100	36
5.	Paper-V Quantitative Techniques	One	3 hrs	100	36
6.	Paper-VI Management Information System	One	3 hrs	100	36

50% Papers (i.e. Three papers) can be carried forward from BBA Part-I examination to BBA Part-II examination and from BBA Part-II examination to Part- III examination. Further for BBA Part-III Examination, 50% of the papers (i.e., three papers) carried forward as due papers may be either from BBA Part-I or BBA Part-II or a mix from both years(BBA-I & BBA Part- II)

The Pattern of question papers shall be as under :-

There will be five questions in all. The candidate will be required to attempt all the questions selecting one question from each Unit with an internal choice (either/or).


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Paper-I Strategic Management

Scheme : Maximum Marks : 100
Minimum Pass Marks : 36

3 Hours duration

UNIT I

Introduction : Meaning of Strategic Management, Role of Strategic Management, Process of SM, Limitations of SM, Organizational Mission, Vision, Objectives and Goals

UNIT II

Environmental Scanning: Appraisal of External Environment, Dynamics of Internal Environment, Organizational Capabilities and Appraisal, Core Competence.

UNIT III

Strategy Formulation: Corporate Level Strategy, Business Level Strategy, Functional Level Strategy.

UNIT IV

Strategy Implementation: Aspects of Strategy Implementation, Procedural Implementation, Resource Allocation, Organizational Design and Change, Corporate Culture.

UNIT V

Strategic Evaluation and Control: Meaning of Strategic Evaluation and Control, Criteria and Techniques of Strategic Evaluation and Control.

Books Recommended :

1. David, F.R. (1997), Cases in Strategic Management, New Jersey : Prentice Hall.
2. Prasad, L.M. (1995), Business Policy & Strategy, New Delhi : Sultan Chand & Sons.
3. Jauch, L.R. & Glueck, W.F. Business Policy and Strategic Management, Mc Graw- Hill.
4. Ramaswamy, V.S. & Namakumari, S., Strategic Planning Formulation of Corporate Strategy, Delhi : Macmillan India.
5. Azhar Kazmi : Strategic Management

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Paper- II MARKETING MANAGEMENT

Scheme : Maximum Marks : 100
Minimum Pass Marks : 36

3 Hours duration

Unit-I

Introduction: Nature and scope of Marketing, Importance of marketing in liberalized Economy, Marketing concept, Product Differentiation, Brand and Trade Marks, Packaging, Labeling, Product life cycle.

Unit-II

Marketing Research: Meaning of Market Research, Nature and importance of Marketing Research, Areas and Techniques of Marketing Research, selection of the Channels of Distribution.

Unit -III

Pricing Strategy: Factors to be considered in pricing, pricing objectives and strategies, Break even analysis, Uses of sales forecast, Methods of sales forecast, Market segmentation.

Unit-IV

Determining the sales promotion programme, personal selling, selling process – qualities of a salesman. Advertising (Media choice, Good copy, Budgeting.). Sales Promotion methods, Public Relations (Methods).

Unit-V

Control of Marketing Operations: Need for control, phase of Control, Techniques of controlling (Budgeting, Sales analysis Distribution cost accounting and analysis), Marketing audit.

Books Recommended :

1. Kotler, Philip, Marketing Management (New Delhi : Prentice-Hall of India Pvt , Ltd. The Millennium edition).
2. Saxena, Rajan, Marketing Management (New Delhi : Tata Mc Graw-hill Publishing Co. Ltd.)
3. Ramaswamy, V.S. and Narayana, S. Marketing Management Planning Implementation and Control The Indian context (Delhi: Macmillan India Ltd.)
4. Varshney R.L. and Gupta, S.L. Marketing Management (The Indian Perspective) - Text and Cases (New Delhi : Sultan Chand & Sons)
5. Kotler, Philip, Armstrong, Gary, Principles of Marketing (New Delhi, Prentice Hall of India Pvt., Ltd.)
6. Sherlekar, S. Marketing Management (Mumbai: Himalaya Publishing House)
7. Gandhi, J. C. Marketing Management : An Introduction (New Delhi: Tata Mc Graw Hill Publishing Co. Ltd.)

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Paper -III : Human Resource Management

Scheme : Maximum Marks : 100
Minimum Pass Marks : 36

3 Hours duration

Unit-I

Introduction : Scope, Importance and functions of HR Management.
Role of HR Department, HR Environment in India

Unit-II

Procuring Human Resources: HR Planning, Recruitment and Selection,
Induction and Placement

Unit-III

Human Resource Development: Career Planning and Development,
Training.

Unit-IV

Performance and Potential Appraisal, Merit Rating, Executive
Development


Unit - V

Motivation and Morale, Leadership.

Books Recommended:

1. Saiyadain, Mirza S.: Human Resource Management, Dhanpat Rai and Co. Pvt. Ltd., New Delhi, 1999.
2. Chhabra, T.N.: Human Resource Management, Dhanpat Rai and Co. Pvt. Ltd., New Delhi, 1999
3. Flippo, Edwin B.: Principles of Personnel Management, McGraw Hill, New York.
4. Dessler, Garry : Human Resource Management, Prentice Hall of India,
5. Gupta, C.B. : Human Resource Management, Sultan and Sons, New Delhi

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Paper - IV BUSINESS FINANCE

Scheme : Maximum Marks : 100
Minimum Pass Marks : 36

3 Hours duration

Unit -I

Environment of Business Finance :

Finance: Concept, Finance & other discipline, Business Financing, Corporate Financing, Financial Forecasting, Fundamentals of Stock market.

Unit -II

Perspective of Finance :

Financial Management-meaning, objectives, scope and functions, functional areas of Financial management, Financial Decisions, Role of CFO.

Unit -III

Financial Planning & Forecasting.

Financial Planning : meaning, characteristics, Capitalisation : under capitalisation and over capitalisation. Financial forecasting : meaning, tools of Financial forecasting, Cost of Capital, Capital Budgeting.

Unit -IV

Working Capital Management: Theory of working capital management, Management of cash and marketable securities, Receivables Management, Inventory Management

Unit -V

Techniques of Financial Analysis: Analysis of financial Statements:

Statement of change in Financial position Funds Flow Analysis Cash Flow Analysis, Cash Volume Profit Analysis, Financial Analysis through leverages.

Books Recommended :

1. Khan, M.Y. & Jain P.K., Financial Management : Text & Problems, New Delhi : Tata McGraw-Hill
2. Chandra, Prasanna Financial Management-Theory & Practice Management Tata McGraw-Hill
3. Kulkarni P.V. & Satyaprasad, B.G. Financial Management-A Conceptual Approach Mumbai : Himalaya Publishing House
4. Pandey, I.M., Financial Management, New Delhi : Vikas Publishing House
5. Vanhorne, James C., Financial Management & Policy New Delhi : Prentice Hall of India
6. Kishore, Ravi M., Financial Management with Problems & Solutions, New Delhi : Taxmann
7. Block & Hirt, Foundation of Financial Management

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Paper-V : Quantitative Techniques For Management

Scheme : Maximum Marks : 100
Minimum Pass Marks : 36

3 Hours duration

Unit -I

Quantitative Techniques : An Introduction, Statistical and operations Research techniques, Scope and application of quantitative techniques, Scientific approach in decision making. Limitation of these techniques. Probability and probability distributions : Laws of probability, Baye's theorem, Mathematical Expectation, Binomial, poisson and normal probability distribution.

Unit -II

Decision Theory : Decision making under certainty, uncertainty and Risk, Decision tree analysis. Linear Programming : Graphical and Simplex Solutions of LPP. Primal and its dual.

Unit -III

Transport and Assignment Problems : Network Analysis - Programme Evaluation and Review Technique (PERT) and Critical Path Method (CPM), Cost Analysis and Crashing the Network.

Unit -IV

Theory of Games and Queuing Models : Two persons Zero sum games, pure and mixed strategy. Queuing mode Single channel queuing theory Application of queuing theory in business decision making.


Unit -V

Replacement Theory: Replacing of items that deteriorate with time, Time value of money concept and replacement, Simulation: Advantages, Limitations, Monte Carlo Method.

Books Recommended :

1. Kothari, CR, Quantitative Techniques, New Delhi : Vikas Publishing
2. Kapoor, V.K., Operations Research, New Delhi : Sultan Chand & Sons.
3. Khandelwal, M.C. and Gupta Quantitative Techniques.

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Paper-VI : MANAGEMENT INFORMATION SYSTEM

Scheme : Maximum Marks : 100

3 Hours duration

Minimum Pass Marks : 36

Unit –I

Introduction to MIS: Concept of MIS, role of MIS, objectives of MIS, emergence of MIS, MIS and computers, Impact of MIS, systems approach to MIS, Advantages, and disadvantages of computer based MIS.

Unit –II

Information : Classification of information, levels of information, Methods of data and Information collection, value of Information

Unit –III

Information system for decision making : Decision- making and MIS, decision making concepts organisational decision-making, MIS and decision making concepts. MIS as technique for programme decisions, Decision support system. MIS and role of DSS.

Unit –IV

Data base Management systems: Data base Management systems: Data base concepts, data base models data base design, RDEMS MIS and RDEMS, Introduction of oracle, Network topology, LAN and WAN, Data communication.

Unit –V

MIS in operations : MIS for Finance, MIS for Marketing MIS for production, MIS for Human resource Management, MIS for marketing.

Books Recommended :

1. Javedkar, W.S.-Management Information Systems (Tata McGraw-Hill Publishing Company Ltd., New Delhi)
2. Mardic R.G., Ross J.E. & Jagget J.R. - Information System for Modern Management (Prentice Hall of India)
3. James A.O. Brien Management Information Systems, (Galgota Publications)
4. Locus, Analysis, Design and Implementation of Information System (McGraw-Hill Book Co.)
5. Anderson, Lavid L. Post, Gerald V., Management Information System (Tata-McGraw Hill Publishing Co.)

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BBA Part-III - 2021

Paper I- Organizational Behaviour

Paper II- Indian Management Thought and Business Leaders

Paper III- International Business

Paper IV- Cost and Management Accounting

Paper V- E-Commerce

Paper VI- Book Review Presentation and viva-voce


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Paper- I

Organizational Behaviour

Unit I :

Meaning and Concept of Organization Behaviour, Role of OB in Today's Business organization, Challenges and Opportunities, Theories of Organization Behaviour, Social Systems and Organizational Culture.

Unit II :

Perception, Nature, Importance, Difference between Sensation and Perception; Personality: Meaning, Determinants of Personality, Personality Traits and Types, Values attitudes and Job Satisfaction.

Unit III :

Interpersonal Behaviour, Group Dynamics- Meaning, Norms and Role, Theories of Group, Cohesiveness, Dynamics of Informal Group, Team and Team building.

Unit IV :

Definitions of Conflict, Process, Negotiations Process, Individual differences in negotiation effectiveness, Causes of Stress and its effects, Stress and Conflict Management.

Unit V :

Meaning, Nature and factors of Organizational Change, Planned Change, Resistance to Change, Change Agent, Concept of Organizational Development, Organizational Development Interventions.

Books Recommended :

1. Prasad, L.M., Organizational Behaviour, S. Chand, New Delhi
2. Robbins, Stephen P., Organizational Behaviour: Concept, Controversies, Applications, Prentice Hall of India, Pvt. Ltd. New Delhi
3. Luthans Fred, Organizational Behaviour, McGraw-Hill
4. Dr. P. S. S. Kumar, Dr. Anukriti Sharma and K. S. Krishna, Organizational Behaviour, Jahanvi Publications.
5. Prof. Anil Mehta. Organizational Behaviour, RBD, Jaipur
6. Organizational Behaviour, Thakur Publication, Jaipur

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Paper- II

Indian Management Thought and Business Leaders

Unit- I

Spirituality and Management- Concept of Spirituality, Indian Ethos and Values, Role of Values in Management, Western Values vis a vis Indian Values, Applications of Yoga in Management- Personality Development, Meditation and Management of stress.

Unit- II

Indian Epics and Management- Dimensions of Vedic Management, Bhagwad Gita, Ramayan, Kautilaya's Arthshastra.

Unit- III

Indian Thinkers- Swami Vivekanand, Mahatama Gandhi, S.K. Chakraborty, C.K. Prahlad.

Unit- IV

Indian Business Leaders: JRD Tata, Ram Krishan Bajaj, G D Birla, Dhirubhai Ambani.

Unit- V

Indian Business Leaders: Narayana Murthy, Azim Premji, Lakshmi Mittal, Sunil Bharti Mittal.

Books Recommended

1. Chakraborty, S.K. and Bhattacharya, Pradip: Human Values, New Age International (P) Limited Publishers.
2. Saneey, Rinku and Khanna, Parul: Ethics and Values in Business Management, Ane Books Pvt. Ltd.
3. Khanna, S. : Vedic Management, Taxman Publications (P) Ltd.
4. Bhawad Gita as Viewed by Swami Vivekananda: Vedanta Press & Bookshop.
5. Rajgopalachari, C. : Ramayan, Bhartiya Vidya Bhawan.
6. Gita Piramal: Business Legends.



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Paper III

International Business

Unit I

Meaning of International Business, Domestic Business V/s International Business, Importance of International business, Major participants of IB, Scope of International Business.

Unit II

Understanding the International Business Environment: Cultural Environment, Economic Environment, Political Environment, Legal & financial Environment.

Unit III

International Business organisations, Forms of International organisations, World Trade Organisation (WTO).

Unit IV

International Financial Management, International Monetary Fund (IMF), World Bank.

Unit V

Global Operations and Supply Chain Management, International Human Resource Management, International Trade Procedure and Documentation, Global E-business, Ethics and Social Responsibility.

Books Recommended

1. Joshi, R.M.: International Business, Oxford University Press, New Delhi.
2. Aswathappa, K.: International Business, Tata McGraw-Hill Publishing Company Limited, New Delhi.
3. Cherunilam, Francis: International Business Environment, Himalaya Publishing House, New Delhi.

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Paper IV

Cost and Management Accounting

Unit I-

Introduction to Cost Accounting: Meaning and definition, scope and use of cost accounting, cost centre, cost centre, cost accounting and financial accounting, cost concepts, classification of costs.

Elements of Cost: Material, labour and expenses, direct Material cost-Meaning, Purchase and stores routine, methods of Pricing Material issues, wastage, scrap spoilage and defectives, Inventory Control techniques, direct labour cost-Meaning, Remuneration methods, labour-turnover, treatments of idle time, overtime premium, Employees welfare costs and fringe benefits.

Unit II-

Overheads: Introduction, direct expenses, steps in accounting of overheads, classification of overheads, techniques for separation of fixed and variable costs, allocation and inproportion of overheads, absorption of overheads-methods of overheads, absorption, over absorption and underabsorption of overheads.

Costing methods: Output costing.

Unit III-

(a) **Management Accounting:** Meaning, Nature, Scope of Management Accounting, Tools and Techniques of Management Accounting, Functions of Management Accountant, Installation of Management Accounting System, Limitations of Management Accounting.

(b) **Application of Marginal Costing in Decision Making.** Fixation of Selling Price, Make or Buy Decision. Dropping a line or product, Retain or Replace, own or lease, Selling in Foreign Market.

Unit IV-

Cost Control Techniques:

(a) **Budgeting:** Introduction, Comprehensive/Master Budget, Fixed and Flexible Budget. Cash Budget, Functional Budgets.

(b) **Standard Costing:** Introduction, Cost Variance Analysis: Material Variance and Labour Variance.

Unit V-

(a) **Responsibility Accounting.**

(b) **Activity Based Costing.**

Books Recommended:

1. M.N. Arora: Cost Accounting-Principles and Practices.
2. S.P. Jain and K.L. Narang: Cost Accounting.
3. M.Y. Khan and P.K. Jain: Management Accounting.
4. I.M. Pandey: Management Accounting.
5. P.C. Tulsian: Practical Accounting.
6. Robert Anthony, Reeceetal: Principles of Management Accounting.

Paper V

E-Commerce

Unit I :

Meaning, Characteristics, Origin, Process, Key Drivers of E-Commerce, Elements, Traditional Commerce Vs E-Commerce, Benefits, Standards, Technologies, E-Commerce Models, Mobile Commerce, Barriers to E-Commerce.

Unit II :

Internet and E-Commerce, Networking-LAN, WAN, Business Uses of Internet, www, Protocols, Intranet and Internet, Multimedia Application, Hardware and Software.

Unit III :

Electronic Payment Systems- Methods, Security Issues, Electronic Banking, Electronic Stock Trading.

Unit IV :

Data Warehousing, Client-Server Computing, Data Mining, Website Management – Steps.

Unit V :

ERP – Meaning, Functions, SAP Applications, Business Intelligences, Ethics, Security and E-Governance.

Books Recommended:

1. **E-Commerce and E-Business : Dr. C.S. Rayudu, Himalaya Publishing House.**
2. **Information Technology : E-Commerce & E-Business : V.D. Dudeja, Commonwealth Publisher, New Delhi**
3. **Electronic Consumer Framework- Technologies and Applications: B. Bhasker, Tata Mc Graw-Hill**
4. **Electronic Commerce : A Managers Guide to E-Business: Parag Diwan and Sunil Sharma, Vanity Books International, New Delhi**


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Paper VI

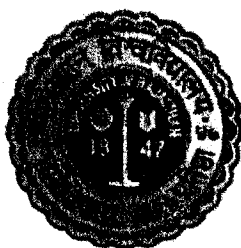
Paper VI- Book Review Presentation and viva-voce

Presentation of Review of a Reference book on Management- 50 Marks

Comprehansive viva-voce based on papers of BBA Course- 50 Marks


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UNIVERSITY OF RAJASTHAN

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SYLLABUS

Bachelor of Computer Application

BCA Part-I Examination	2019
BCA Part-II Examination	2020
BCA Part-III Examination	2021


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Bachelor of Computer Applications (BCA)

Eligibility for Admission to BCA course session 2014-2015 "A candidate must have passed 10+2 examination (Arts/Science/Commerce) or equivalent with securing 48% or more (minimum pass mark for SC/ST/OBC/SBC candidates) in aggregate without any approximations".

In regard to reservation of Seats for admission to BCA Part I, the reservation policy of Govt. of Rajasthan/University of Rajasthan will be followed.

Admission Procedure: Admission to BCA Part I course will be made on the basis of merit list (10+2 level).

Attendance: A candidate shall be required to put in a minimum of 75% attendance at the lectures and 75% attendance at the practicals separately in each paper, as per university norms.

Scheme of Examination for Bachelor of Computer Applications(BCA):

The Bachelor of Computer Applications will be a Three Part Course in Faculty of Science extending over three academic sessions. Medium of instructions and examination will be English only. There shall be an examination at the end of each part. Each theory paper examination will be of three hour duration and shall carry 100 marks. Theory paper shall contain three parts. All questions are compulsory.

Part – I (very short answer) consists 10 questions of two marks each with two questions from each unit. Maximum limit for each question is up to 40 words.

Part – II (short answer) consists 5 questions of four marks each with one question from each unit. Maximum limit for each question is up to 80 words.

Part – III (Long answer) consists 5 questions of twelve marks each with one question from each unit with internal choice.

Each practical examination (Maximum marks 100) will be of four hour duration on one day and carry 60 marks for exercises(3 exercises) assigned in the examination, 25 marks for viva-voce and 15 marks for practical records and regularity of the candidate. Other rules and procedures of examinations will be common to those for B.Sc. course.

"A candidate will be promoted to Part III if he/she passed with 40% in three theory and two practical papers of Part II examination and with at least 50% in aggregate of these papers. However, if the candidate has not passed Part I Examination then also he/she be promoted to part III if the number of due papers (part I & Part II together) does not exceed four theory papers and two practical papers."

Passing of Examination and Promotion to next Part: A candidate must secure 40% marks in each paper and 50% mark in aggregate for passing a part examination.

candidate will be promoted to part II if he/she has secured at least 40% in three theory and two practical papers of part I examination and with at least 50% in aggregate of these papers. A candidate will be promoted to Part III if he/she has passed 40% in three theory and two practical papers of Part II examination and with at least 50% in aggregate of these papers, and has passed Part I examination.

Division and Honors: On successful passing out of all three part examinations (in first attempt), those securing 75% and above in aggregate of all the three parts will be awarded **First division with Honors**, and those securing between 60% or more but less than 75% will be awarded **First division** and rest will be awarded **Second division**.

BCA Part - I

Code	Subject	Hours / Week	Max. Marks
Theory			
BCA-101	Elementary Physics	4	100
BCA-102	Basic Mathematics	4	100
BCA-103	General English	4	100
BCA-104	Principles of Programming Language (Through 'C')	4	100
BCA-105	Computer Organization	4	100
BCA-106	Office Management Tools	4	100
Practical			
BCA-107	Technical Writing and Communication Skills	3	100
BCA-108	C- Laboratory	3	100
BCA-109	Office Automation Laboratory	3	100
BCA-110	Typing Skills Laboratory (English and Hindi Language)	3	100

BCA Part - II

Code	Subject	Hours / Week	Max. Marks
Theory			
BCA-201	Business Accounting	4	100
BCA-202	Discrete Mathematics	4	100
BCA-203	Operating System	4	100
BCA-204	Database Management System	4	100
BCA-205	Web Designing and Multimedia	4	100
Elective (Any One)			
BCA-206(A)	Object Oriented Programming Concepts (Through C++)	4	100
BCA-206(B)	Programming Through A.P.C.	4	100
Practical			

BCA-207	Database Laboratory	3	100
BCA-208	Object Oriented Laboratory	3	100
BCA-209	Web Designing Laboratory	3	100
BCA-210	Multimedia Laboratory	3	100

BCA Part - III

Code	Subject	Hours / Week	Max. Marks
Theory			
BCA-301	Data Structure (Using C/C++)	4	100
BCA-302	System Design Concepts	4	100
BCA-303	Networking Technologies	4	100
BCA-304	Core Java Programming	4	100
BCA-305	E-Commerce	4	100
	Elective (Any One)		
BCA-306(A)	ASP.Net	4	100
BCA-306(B)	PHP	4	100
BCA-306(C)	Linux and Shell Programming	4	100
Practical			
BCA-307	Networking Laboratory	3	100
BCA-308	Core Java Laboratory	3	100
BCA-309	Elective Laboratory	3	100
BCA-310	Project	3	100

BCA101: Elementary Physics

Question Paper pattern for Main University Examination

Max Marks: 100

Part - I (very short answer) consists 10 questions of two marks each with two questions from each unit. Maximum limit for each question is up to 40 words.

Part - II (short answer) consists 5 questions of four marks each with one question from each unit. Maximum limit for each question is up to 80 words.

Part - III (Long answer) consists 5 questions of twelve marks each with one question from each unit with internal choice.

UNIT-I

Electric charge, conductors and insulators, Coulomb's Law, quantization and conservation of electric charge, the electric field, electric lines of force and Gauss' Law of electrostatics, electric potential energy, electric potential, energy and electrical power.

Capacitors, capacitance, capacitors in series and parallel, capacitors with dielectric. Electric current, resistance, resistivity and conductivity, Ohm's law, electromotive force, series and parallel combination of resistances, current in a single loop, Kirchoff's current law, Kirchoff's Voltage law.

UNIT-II

Magnetic field due to a bar magnet, Biot Savart's law, magnetic field due to a current carrying coil, Force between two parallel currents, Magnetic field inside solenoid and toroid, magnetic flux, Faraday's law of electromagnetic induction, magnetic properties of matter, (diamagnetic, paramagnetic, ferromagnetic and ferromagnetic materials), inductance, energy stored in an inductor, LR circuits.

UNIT-III

Introduction to Logic and implementation with Logic Gates, Logic functions-NOT,AND,OR NOR, EX-NOR, Truth tables, Boolean Algebra, de Morgan's theorems, Standard forms for logical expressions, Sum of Products, Product of Sums specification of logical functions in terms of Minterms and Maxterms, Karnaugh Maps, simplification of logical functions, introduction of "don't care" states, Synthesis using only NAND or only NOR gates.

UNIT - IV

Combinational Circuits, Multiplexer-IC 74150 and IC 44151, De multiplexer-IC 74154, Decoder-IC 74139, BCD to Seven segment De-coder IC 7446/7447 IC 7448/7449 Decimal to BCD Priority Encoder- IC 7411, parity Checker IC 74180, Magnitude Comparator IC 7485.

UNIT - V

Sequential Circuits : RS Flip Flop, Clocked RS Flip Flop, D Flip Flop, Edge Triggered D Flip Flop, master Slave Technology and its advantage, Shift Register as Flip Flop system, IC 7496, UP/DOWN counters, 74 series asynchronous counters, 74 series synchronous

Reference books

1. Bernard Grob, Basic Electronics, Tata Mc Graw Hill.
2. Fowler, Electricity, Tata Mc Graw Hill.
3. Shivakumar, Engineering Physics, Tata Mc Graw Hill.
4. Iyer, Current Theory, Tata Mc Graw Hill.
5. S. Sridharan and S. Arivazhagan, Digital Circuits and Design, Vikas Publishing House, Pvt.
6. R.P. Jain, Modern Digital Electronics, Tata Mc Graw Hill Publications, New Delhi, New York.

BCA102: Basic Mathematics

Question Paper pattern for Main University Examination

Max Marks: 100

Part – I (very short answer) consists 10 questions of two marks each with two questions from each unit
Maximum limit for each question is up to 40 words

Part – II (short answer) consists 5 questions of four marks each with one question from each unit
Maximum limit for each question is up to 80 words.

Part – III (Long answer) consists 5 questions of twelve marks each with one question from each unit
with internal choice

UNIT – I

Functions : Functions, domain & range of a function, types of functions-constant, identity, polynomial, exponential, logarithmic, trigonometric, inverse- trigonometric, rational, periodic, modulus, signum and greatest integer functions with their graphs. Composite functions, Invertible Functions.

Function domain and range, one to one and onto functions, composite functions, inverse of functions. Binary operations.

UNIT - II

Matrices and Determinant : Definition and Types of Matrices, Addition , Subtraction and Multiplication of Matrices, Non-commutativity of multiplication of matrices and existence of non-zero matrices whose product is the zero matrix(restrict to square matrices of order 2), Scalar Multiplication, Transpose of a Matrix.

Determinant of a square matrix (up to 3×3 matrices), properties of determinants, minors, cofactors, expansion of determinants, application of determinants in finding the area of a triangle. Invertible matrices, Adjoint and Inverse of a matrix, Solution of system of linear equations by inverse matrix method and Cramer's Rule, Eigen Values, Eigen Vectors.

UNIT- III

Co-ordinate Geometry : Cartesian co-ordinate system, Polar coordinate system, distance between two points, section formulae, Area of a triangle, Locus and its Equation. Straight Line: Equation of straight line: slope form, two point form, intercept form, normal form, distance of a point from a line, condition of concurrency of three lines. Pair of straight lines, angle between two lines, equation of a line parallel or perpendicular to a given line. Standard equations of a Circle.

Quadratic Equation: Solution of Quadratic Equations, Nature of Roots. Solution of a quadratic equation by factorization method and Shridharacharya's formula, relation between the roots of a quadratic equation. Formation of quadratic equation from given roots.

UNIT -IV

Statistics : Frequency Distribution, Graphical representation of frequency distribution. Mean, Median, Mode and other measures of Central Tendency, Dispersion, Standard Deviations, Variance, Correlation and regression, Measure of Karl Pearson's coefficient of correlation, regression analysis, properties of regression lines.

UNIT -V

Probability: Factorial notation $n!$, Combinations and Permutations, Classical approach of Probability- trial & events, exhaustive events, equally likely events, mutually exclusive events, favourable events, independent events. Classical or mathematical definition of probability. Law of addition of probabilities. Multiplication law of probability and conditional probability. Simple problems based on addition and multiplication law of probabilities.

Reference Books:

1. C.L. Liu: Elements of Discrete Mathematics, Tata Mc-Graw Hill Publishing Company Ltd., 2000
2. Seymour Lipschutz: Discrete Mathematics; TMH.
3. Richard Johnsonbaugh: Discrete Mathematics, Pearson Education, Asia, 2001
4. John Truss: Discrete Mathematics for Computer Scientists, Pearson Education, Asia, 2001.
5. Basic Mathematics, R.D. Sharma
6. B.L. Agrawal: Basic Statistics, Khanna Pub.
7. Stephen Bernstein: Elements of Statistics, TMH.
8. SC GUPTA, VK KAPOOR: FUNDAMENTAL OF STATICS, SULTAN CHAND & SONS

BCA103: General English

Question Paper pattern for Main University Examination

Max Marks: 100

Part - I (very short answer) consists 10 questions of two marks each with two questions from each unit
Maximum limit for each question is up to 40 words

Part - II (short answer) consists 5 questions of four marks each with one question from each unit
Maximum limit for each question is up to 80 words

Part - III (Long answer) consists 3 questions of twelve marks each with one question from each unit
with internal choice

UNIT-I

Concepts and Fundamentals : Narration, Active and Passive, Modals, Subject Verb Concord, Subordination, Coordinations, Meaning of communication, Importance of communication, Communication scope, Process of communication, Communication models and theories, Essentials of good communication, The seven C's of communication, Verbal and Non Verbal communication, Formal and Informal communication, Barriers of communication

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UNIT-II

Written Communication : Objectives of written Communication, Media of written communication, Merits and demerits of written communication, Planning business messages.

Writing Letters : Business letters, Office memorandum , Good news and bad news letters , Persuasive letters , Sales letters , Letter styles/ layout.

UNIT-III

Report Writing : Meaning & Definition, Types of report (Business report & Academic report), Format of report, Drafting the report ,Layout of the report, Essential requirement of good report writing.

Language Skills : Improving command in English ,Choice of words, Common problems with verbs, adjectives, adverbs, pronouns, conjunctions, punctuation, prefix, suffix etc.

UNIT-IV

Oral Communication : Principles of effective oral communication, Media of oral communication, Advantages of oral communication, Disadvantages of oral communication, Styles of oral communication.

Interviews : Meaning & Purpose, Art of interviewing, Types of interview, Interview styles, Essential Features, Structure , Guidelines for Interviewer, Guide lines for interviewee.

Arts of Listening : Good listening for improved communications, Art of listening, Meaning, nature and importance of listening. Principles of good listening, Barriers in listening.

UNIT-V

Job Application : Types of application, Form & Content of an application, Drafting the application, Preparation of resume

Project Presentations : Advantages & Disadvantages, Executive Summary, Charts, Distribution of time (presentation - questions & answers, summing up), Visual presentation, Guidelines for using visual aids, Electronic media (power-point presentation)

Recommended Books

1. Communication by C S Rayudu, Himalaya Publishing House
2. Communication Today - Understanding Creative Skill by Reuben Ray, Himalaya Publishing House
3. Success In Communication by Mulla Finance
4. Business Communication & Tools by Bowyer & Thibb, MacGraw Hill
5. Communication Skill and report writing by Prof. K. Mohanrao, Tata MacGraw Hill



BCA104: Principles of programming (Through 'C')

Question Paper pattern for Main University Examination

Max Marks: 100

Part – I (very short answer) consists 10 questions of two marks each with two questions from each unit
Maximum limit for each question is up to 40 words.

Part – II (short answer) consists 5 questions of four marks each with one question from each unit
Maximum limit for each question is up to 80 words.

Part – III (Long answer) consists 5 questions of twelve marks each with one question from each unit
with internal choice.

UNIT- I

Basic concepts of Programming languages, Programming Domains, Language Evaluation criteria and language categories, Evolution of major programming languages. Describing syntax and semantics formal methods of describing syntax, Pseudo code, Design of Algorithm & Flowchart

UNIT- II

Fundamentals of C: History and importance of C, sample programming, basic structure and execution of C programs, constants, variables, and data types and various type of declarations, different type operators and expressions, evaluation of expressions, operator precedence and associability. Managing input and output operations, decision making and branching decision making.

UNIT- III

Iteration: while, do...while, for loop, nested loops, break & continue, goto statements.
Arrays and Strings: One-dimensional arrays and their declaration and initialization, two-dimensional arrays and their initializations, character arrays (One and Two dimensional), reading and writing strings, string - handling functions.

UNIT-IV

Functions: Need and elements for user defined functions, definition of functions, return values and their types, function calls and declaration, recursion, parameter passing, passing arrays and strings to functions, the scope, visibility and life time of variables
Understanding Pointers: Accessing the address of a variable, declaration and initialization of pointer variables, accessing a variable through its pointer, pointers and arrays, pointers and function arguments, functions returning pointers.

UNIT-V

Structures and Unions: Defining structure, declaring structure variable and accessing structure members, initialization of structure, operation on individual members and array of structures, union, size of structure

100 in C, Formatted and Unformatted I/O, File handling (Read and Write), Binary and

Recommended Books:

1. Gottfried B; Programming with C: Schaum Outlines: Mc Graw Hill Edition.
2. Balagurusamy E; Programming in ANSI C; Fifth Edn; Mc Graw Hill, 2011
3. Kanetkar Y.; LET US C: X Edition, BPB, 2010.
4. Deitel HM & Deitel JP; C How to program; 5th Edn; Pearson Pub

BCA105: Computer Organization

Question Paper pattern for Main University Examination

Max Marks: 100

Part – I (very short answer) consists 10 questions of two marks each with two questions from each unit. Maximum limit for each question is up to 40 words.

Part – II (short answer) consists 5 questions of four marks each with one question from each unit. Maximum limit for each question is up to 80 words.

Part – III (Long answer) consists 3 questions of twelve marks each with one question from each unit with internal choice.

UNIT-I

Computer System History and Architecture development von Neumann machine, Mother Board, System clock, Bus (Data, Address Control), Bus architecture (ISA, MCA, EISA, PCI, AGP), Expansion slots and cards (Network adapter cards, SCSI card, Sound card, TV tuner card, PC card), Ports (Serial Parallel, AGP, USB Fire Wire), cables (RS 232, BNC), Input devices Output devices . Storage devices, random versus sequential access, formatting, tracks and sectors, speed, storage capacity, Floppy Disk, Hard Disk tracks, cylinders, sectors, Hard Drive Interfaces Optical Disks . Magnetic tape, Modern (Fax/Data/Voice)

UNIT-II

Basic building blocks I/O, Memory, ALU and its components, Control Unit and its functions, Instruction word, Instruction and Execution cycle, branch, skip, jump and shift instruction, Operation of control registers; Controlling of arithmetic operations, Classification of Computers (Workstation, Mainframe, Super Computer, Client Server Computer, Notebook, Tablet, PalmTop Computer)

UNIT-III

Basics of Computer organization: system buses and instructions cycles, memory subsystem organization, system buses and instruction cycles, memory subsystem organization and interfacing, I/O subsystem organizations and interfacing, Register transfer languages, CPU design : specifying a CPU, design and implementation of a simple CPU (fetching instructions from memory, decoding and executing instructions, establishing required data paths, design of ALU, design of the control unit and design verification), design and implementation of a simple micro-sequencer, Features of Pentium microprocessors

UNIT-IV

Addressing modes: Direct, Indirect, Immediate, Relative, Indexed addressing and program Position, Subroutines, Control program, Special purpose registers, Interrupts



scratch. Memory Buffer register; accumulators, stack pointers; floating point; status information and buffer registers. **Memory:** Main memory, RAM, static and dynamic, ROM, EPROM, EEPROM, EAROM, Cache and Virtual memory.

UNIT- V

Buses, Interfacing buses, Bus formats – address, data and control, Interfacing keyboard, display, auxiliary storage devices and printers. I/O cards in personal computers.

Introduction to Microprocessors and Microcontrollers: introduction to 8085 microprocessor, examples of few instructions to understand addressing techniques. Difference between microprocessor and microcontrollers, RISC v/s CISC.

Recommended Books

1. Andrew S. Tanenbaum , Structured Computer Organization, Printice Hall
2. William Stallings, Computer Organization and Architecture , Sixth Edition, Pearson
3. John D. Carpinelli: Computer Systems Organization & Architecture; 3rd Edition, Person Education Asia, 2008
4. M. Morris Mano; Computer System Architectures; III Edition, Prentice Hall of India, 2008
5. Malvino B ; Digital Computer Electronics III Edition; TMHL

BCA106: Office Management Tools

Question Paper pattern for Main University Examination

Max Marks: 100

Part – I (very short answer) consists 10 questions of two marks each with two questions from each unit. Maximum limit for each question is up to 40 words.

Part – II (short answer) consists 5 questions of four marks each with one question from each unit. Maximum limit for each question is up to 80 words.

Part – III (Long answer) consists 5 questions of twelve marks each with one question from each unit with internal choice.

UNIT- I

Introduction to Operating System: Introduction to Operating system, FAT and NT file systems, file and directory Structures and naming rules of files, booting process, system files. Dos Commands (internal & external)

Windows 7.8 Windows concept features, Desktop, Taskbar, Start menu, My Computer, Recycle bin, Windows Accessories (Calculator, Notepad, Paint, Word Pad, Character Map, Windows Explorer, Entertainment, System Tools, Communication). Sharing information between programs, Smart devices tools and applications

UNIT- II

MS Word: Word processing, MS Word features, creating, saving and opening documents in Word, editing tools, undo, redo, keyboard shortcuts, editing, proofing, printing & formatting a document, advanced features of MS Word (find & replace, style



thesaurus, mail merge, handling graphics, tables, converting a Word document into various formats like-text, rich text format, Word perfect, etc

UNIT- III

MS Excel: Worksheet basics, creating worksheet, entering data into worksheet, data, text, dates, alphanumeric values saving & quitting worksheet, opening and moving around in an existing worksheet, Toolbars and menus, Keyboard shortcuts, working with single and multiple workbook, working with formula & cell referencing, Auto sum, coping formulas, absolute and relative addressing, formatting of worksheet, previewing & printing worksheet, Graphs and Charts, Database, macros, multiple worksheets-concepts.

UNIT- IV

Power Point: Creating and viewing a presentation, managing Slide Shows, navigating through a presentation, using hyperlinks, advanced navigation with action setting and action buttons, organizing formats with Master Slides, applying and modifying designs, adding graphics, multimedia and special effects.

UNIT- V

Microsoft Access: Planning a database (tables, queries, forms, reports), creating and editing database, customizing tables, linking tables, designing and using forms, modifying database structure, Sorting and Indexing database, querying a database and generating reports.

Reference Books:

1. Microsoft; 2007/2010 Microsoft Office System, PHI.
2. Microsoft; Microsoft Office 2007/2010: Plain & Simple; PHI.
3. Microsoft; Microsoft Office XP: Plain & Simple; PHI.
4. Sanjay Saxena; A First Course in Computers 2003 Edition; Vikas Pub.

BCA 107 : Technical Writing and Communication Skills

Practical Lab Exercises based on Theory Paper BCA 103

BCA 108 : C Laboratory

Practical Lab Exercises based on Theory Paper BCA 104

BCA 109 : Office Automation Laboratory

Practical Lab Exercises based on Theory Paper BCA 106

BCA 110 : Typing Skills Laboratory (English and Hindi Language)



BCA Part - II

BCA201: Business Accounting

Question Paper pattern for Main University Examination

Max Marks: 100

Part – I (very short answer) consists 10 questions of two marks each with two questions from each unit.

Maximum limit for each question is up to 40 words.

Part – II (short answer) consists 5 questions of four marks each with one question from each unit.

Maximum limit for each question is up to 80 words.

Part – III (Long answer) consists 5 questions of twelve marks each with one question from each unit with internal choice.

UNIT I

Basics of Bookkeeping and Accounting : Financial Accounting – Definition, Scope and Objective of Financial Accounting. Users of accounting information, Limitations of Financial Accounting. Financial Accounting Principles, Concepts and Conventions.

UNIT II

System of Bookkeeping : Accounting Process, Double Entry System, Books of Prime Entry, Subsidiary Books, Recording of Cash and Bank Transactions.

UNIT III

Ledger Accounts – Preparation of Ledger Accounts, Bank Reconciliation Statements, Preparation of Trial Balance.

Depreciation Accounting – Meaning, need and importance of depreciation, Straight Line and Diminishing Balance method, Computation and Accounting Statement of Depreciation, change in Depreciation method. Provisions & Reserves, Rectification of Errors.

UNIT IV

Final Accounts : Opening and Closing Entries, Trading, Profit and Loss accounts and Balance Sheet.

UNIT V

Final Accounts with Adjustments : Adjustments of Dividends, Drawings, Outstanding incomes and expenses, Depreciation. Tax liabilities. Insurance Claims for loss of Stock and loss of Profit.

Recommended reference books :

1. Shukla & Grewal : Advanced Accounts.
2. Sharma, Shah, Agrawal : Financial Accounting.
3. Rajesh Agrawal & R. Srinivasan : Accounting Made Easy (Tata McGraw-Hill)

BCA202 : Discrete Mathematics

Question Paper pattern for Main University Examination

Max Marks: 100

Part - I (very short answer) consists 10 questions of two marks each with two questions from each unit. Maximum limit for each question is up to 40 words.

Part - II (short answer) consists 5 questions of four marks each with one question from each unit. Maximum limit for each question is up to 80 words.

Part - III (Long answer) consists 5 questions of twelve marks each with one question from each unit with internal choice.

UNIT - I

Number Systems: Number systems- natural numbers, integers, rational numbers, real numbers, complex numbers, arithmetic modulo a positive integer. Radix r representation (decimal and binary); Change of radix(decimal to binary and vice versa).

Binomial Theorem and Mathematical Induction : Binomial theorem for positive integral indices, general and middle term in binomial expansion with simple applications. Some simple problems of Principle of Mathematical induction.

Recurrence Relations and Generating Functions : Recurrence relation, linear recurrence relation with constant coefficients, solution of linear recurrence relation with constant coefficients. Generating functions, Solution of recurrence relations using generating functions.

UNIT- II

Sets : Definition of sets, representation of sets, type of sets, Operations on sets, Sub sets, Power set, Universal set, Complement of a set, Union and Intersection of two sets, Venn diagrams, De-Morgans law of sets, Partition of sets, Duality Principles.

Relations: Relation, Types of relations- reflexive, symmetric, anti-symmetric, transitive , equivalence and partial order relation. Relation and diagrams, Cartesian product of two sets.

Functions: Function, domain and range, One to one and onto functions, composite functions, inverse of a functions. Binary operations.

UNIT - III

Logic and Proofs : Proposition, Conjunction, Disjunction, Negation, Compound proposition, Conditional propositions (Hypothesis, conclusion, necessary and sufficient condition) and Logical equivalence, De Morgan's law, Tautology and contradiction, quantifiers, universally quantified statements, component of a Mathematical system (axiom, definitions, undefined terms, theorem, lemma and corollary), proofs (direct proofs, indirect proofs, proof by contra-positive), Mathematical Induction.

Boolean Algebra : Definition and Laws of Boolean Algebra, Boolean functions, Simplification of Boolean functions, Special forms of Boolean functions, Application of Boolean algebra(open and closed switches, switches in series and parallel). Logic gates and Circuits.

UNIT - IV

Graph : Basic terminology, directed and undirected graphs, path and connectivity, types of graphs- Null, Regular, Complementary, Complete, Weighted and Bipartite. Subgraphs, Operation on graphs- union, intersection, complement , product and composition. Representation of graphs in computer memory(matrix representation)- Adjacency matrix, Incidence matrix. Fusion of graphs. Isomorphic and Homeomorphic graphs, paths and cycles, Eulerian and Hamiltonian graphs, shortest path algorithm. Planar graphs, graph coloring & Shortest path algorithms. Travelling salesman problem

UNIT - V

Tree : Definition of tree, Fundamental terminologies-Node, Child, Parent, Root, Leaf, Level, Height and Subling. Rooted trees, Ordered trees, Binary tree, Complete binary tree, Tree of an algebraic expression, Tree searching (traversal algorithms)- Preorder, Inorder and Postorder. Distance and centre, Relation between general tree and binary tree, Spanning trees, Algorithms for minimal spanning trees (Kruskal's and Prim's). Game tree.

Recommended reference books :

1. C.I.Liu ; elements of Discrete Mathematics Tata McGraw Hill publishing Company Ltd., 2000
2. Richard Johnsonbaugh discrete mathematics Pearson Asia 2001
3. John Truss : Discrete Mathematics for Computer Scientists, Pearson Education, Asia, 2001.
4. Robert J. McEliece : Introduction to Discrete Mathematics, Tata Mc. Graw Hill, India.
5. Lipschutz : Discrete Mathematics, Tata Mc. Graw Hill India.
6. Kenneth H. Rosen, Discrete mathematics and Applications, Tata Mc. Graw Hill, India.

BCA203 : Operating System

Question Paper pattern for Main University Examination

Max Marks: 100

Part - I (very short answer) consists 10 questions of two marks each with two questions from each unit. Maximum limit for each question is up to 40 words.

Part - II (short answer) consists 5 questions of four marks each with one question from each unit. Maximum limit for each question is up to 80 words.

Part - III (Long answer) consists 5 questions of twelve marks each with one question from each unit with internal choice.

UNIT - I

Necessity of Operating system. Operating system terminology, Evolution of Operating Systems (multiprogramming systems, batch systems, timesharing system, Process control and Real-time system). Factors in OS Design (performance protection and security, correctness, maintainability application integration, portability, and interoperability).

Device Management: General device characteristics, I/O Programming concepts, device controllers, device drivers Interrupts Driven I/O Memory Mapped I/O, Direct Memory Access Buffering, Device Management Scenarios (serial communications, sequentially accessed storage devices, randomly accessed devices).

UNIT - II

Process Management: Process definition, Process control, initializing Operating System, Process Address Spaces Process Abstraction, resource Abstraction and Process Hierarchy. Scheduling Mechanisms, Partitioning a process into small processes Non-preemptive strategies (first come-first served, shortest job next, priority scheduling deadline scheduling), Preemptive strategies (Round Robin, two queues, multiple level queues). Basic Synchronization principles : Interactive processes coordinating processes, Semaphores, Shared memory multiprocessors, AND Synchronization, Inter process communication, inter process messages, mailboxes

Deadlocks, Resource Status Modeling Handling deadlocks, deadlock detection and resolution, deadlock avoidance

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UNIT - III

Memory Management: Requirements on the primary memory, mapping the address space to primary memory, dynamic memory for data structures, Memory allocation (Fixed partition Memory allocation strategy), Dynamic Address Relocation, Memory Manager Strategies (Swapping, Virtual Memory, Shared Memory Multiprocessors). Virtual Memory : Address translation paging, Static and dynamic paging algorithms.

UNIT - IV

Information Management: Files (Low level files, structured files, database management systems, multimedia storage). Low level file implementation. Storage Abstraction (Structure sequential files, indexed sequential files, database Management Systems, Multimedia documents). Memory mapped files, Directories, directory implementation, file sharing information across network remote Viruses and Worms, Security Design principles, Authentications, Protection mechanisms, encryption, Protection of User Files.

UNIT - V

Distributed Computing: Distributed process management, message passing, remote procedure call, distributed memory management, security in distributed environment., Introduction of Parallel Processing.

Protection an Security goals, Domain of Protections, Security Problems, Authentication, System threats, Encryptions,

Introduction of different Operating systems (Linux, Unix, Windows Server)

Recommended reference books:

1. Galvin P.B, Silberschatz; Operating System Principles; (Seventh Edition),J Wiley 2008
2. Tanenbaum A.S, Modern Operating Systems, 2nd Edn. PHI Publ,2003
3. William Stalling: Operating Systems, Internal & Design Principles, Sixth Edn; Pearson, 2009.
4. Gary Nutt: Operating Systems-A Modern Perspective (Second Edition) , Pearson Education, 2008.
5. D.M. Dhandhara. Systems Programming and Operating Systems (Second Edition), Tata McGraw Hill Publishing company Limited.
6. Harvey M. Deitel, Operating Systems, Pearson Education.

BCA204 : Data base Management System

Question Paper pattern for Main University Examination

Max Marks: 100

Part - I (very short answer) consists 10 questions of two marks each with two questions from each unit. Maximum limit for each question is up to 40 words.

Part - II (short answer) consists 5 questions of four marks each with one question from each unit. Maximum limit for each question is up to 80 words.

Part - III (Long answer) consists 5 questions of twelve marks each with one question from each unit with internal choice

UNIT- I

Database System Concepts & Architecture: Overview of DBMS, Basic DBMS terminology, Data base system vs file system, Advantages and Disadvantages of DBMS, Data Control, Data Independence, Architecture of a DBMS, Schema, Instance, Database, Database Administration, Data Model.

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UNIT- II

Data Modeling: Data modeling using the Entity Relationship Model: ER model concepts, notation for ER diagram, mapping constraints, keys, Concepts of Super Key, candidate key, primary key, Generalization, aggregation.

Relational Algebra: Fundamental operations of relational algebra & their implementation, interdependence of operations.

UNIT -III

Database Design: Functional dependencies, loss less decomposition, 1st, 2nd & 3rd normal forms, dependency preservation, boyce codd NF. Introduction to Transactions, transaction states.

Security : Access control, Backup, recovery, maintenance and performance.

UNIT- IV

Introduction to SQL: Characteristics of SQL, Advantages of SQL, SQL data types and literals, Types of SQL commands, SQL operators and their procedure, Tables, views and indexes, Queries and sub queries, Aggregate functions, insert, update and delete operations, Joins, Unions, Intersection, Minus in SQL.

UNIT- V

Introduction to Advance DBMS:

Object-based Databases : Object-Oriented Databases: Object-oriented data model, Object Oriented Languages, Persistent Programming Languages. Object-Relational Databases: Nested Relations, Storage for Object Databases

Distributed Databases : Distributed Data Storage, Distributed Transactions, Commit protocol, Concurrency Control in Distributed Databases, Availability, Distributed Query Processing

Reference Books:

1. Korth H F and Silberschataz A, System Concepts, Sixth Edition; McGraw Hill, 2006
2. Leon, and Leon, SQL Tata McGraw Hill Pub. Co. Ltd.
3. Ivan Bayross; SQL/PL 4th Edn: BPB, 2009
4. Navathe S.B. Elmasri R.; Fundamentals of Database Systems, Fifth Edition, Pearson 2009.
5. Ramakrishnan and Gharke, Database Management Systems, 3rd Edition, Tata McGraw Hill, 2003.
6. Data C J Database Management Systems, Pearson Education Asia.
7. Singh S.K.; Database Systems; I Edition; Pearson, 2006

BCA205 : Web Designing and Multimedia

Question Paper pattern for Main University Examination

Max Marks: 100

Part - I (very short answer) consists 10 questions of two marks each with two questions from each unit. Maximum limit for each question is up to 40 words.

Part - II (short answer) consists 5 questions of four marks each with one question from each unit. Maximum limit for each question is up to 80 words.

Part - III (Long answer) consists 5 questions of twelve marks each with one question from each unit with internal choice.

UNIT - I

World Wide Web : Elements of the Web, Web browser and its types, viewing pages with a browser, using a browser for Mail, News and chat, Security and Privacy issues (cookies, firewalls, executable Applets and scripts, blocking system), Plug-Ins and Active controls, dealing with Web pages that contain Active X, playing streaming Audio and Video, playing MP music. Using Search engines, subscriptions and channels, making use of web resources (Portal, News and weather, sports Personal Financing and Investing, Entertainment, shopping, Computers and Internet, Travel, Health and Medicine, Communities and Clubs).

UNIT - II

HTML Fundamentals: Introduction to HTML, Creating HTML Pages, incorporating Horizontal Rules and Graphical Elements, Hyper-links, Creating HTML Tables, Creating HTML Forms, HTML and Image Techniques, HTML and Page, Frames, Development of Website and Webpage (Planning, Navigation and Themes, Elements of a Web page, steps of creating a site, publishing and publicizing site structuring web site.

UNIT-III

Introduction to DHTML: features of DHTML, CSS: Types of Style sheets, Different elements of Style sheets, Filter effects, IFrame, DIV and Layer Tags.

UNIT-IV

Java Script Fundamental: Introduction to Java Script Working with Variables and Data Functions, Methods and Events, Controlling Programming Flow. The Java Script Object Model Java Script language Objects, Developing Interactive Forms, Cookies and Java Script Security Controlling Frames in Java Script, Client - Side Java Script Custom, JavaScript Objects. Introduction to JQuery and AJAX.

UNIT - V

Introduction of Photoshop

Creating a New File:- Main Selections, Picking color, Filling a selection with color, More ways to choose colors and fill selections, Painting with paintbrush tool, Using the magic wand tool and applying a filter, Saving your document (save your file:- Save file as a JPEG, TIFF, GIF, PNG), Introduction and use of layers, Introduction and use of tool of PhotoShop.

Introduction to Coral draw-

Introduction to coral draw, use and importance in designing, various graphic file and file extension, vector image and raster images, introduction to screen and work area.

Introduction and use of tool of coral draw.

References :

1. Mastering HTML 5.0 by Deborah S. Ray and Eric J. Ray From BPB
2. Mastering Java Script, BPB publication.
3. Black book Photoshop,
4. Blackbook CoralDraw
5. M.H. Young: Complete Reference to Internet, 3rd Edition, Tata Mc Graw Hill, 2006
6. Thomas A. Powell Web Design - C.R. Second Edition TAMI 2002
7. Thomas A. Powell HTML & XHTML - C.R. Fourth Edition, TAMI 2002
8. How to use HTML from HTML - BPB Publication
9. HTML Principles & Design BPB Publication

BCA206 (A) : Object Oriented Concepts (Through 'C++')

Question Paper pattern for Main University Examination

Max Marks: 100

Part - I (very short answer) consists 10 questions of two marks each with two questions from each unit. Maximum limit for each question is up to 40 words.

Part - II (short answer) consists 5 questions of four marks each with one question from each unit. Maximum limit for each question is up to 80 words.

Part - III (Long answer) consists 5 questions of twelve marks each with one question from each unit with internal choice.

UNIT - I

Introduction to Object Oriented Concepts: Evolution of OOP, OOP Paradigm, advantages of OOP, comparison between functional programming and OOP approach, characteristics of object oriented language - objects, classes, inheritance, reusability, user defined data types, polymorphism, overloading.

UNIT - II

Introduction to C++: C++ tokens, data types, C++ operators, type conversion, variable declaration, arrays, statements, expressions, conditional statements, Jumping statements, loops, functions, pointers, structures.

UNIT - III

Classes and Objects: Classes, objects, defining member functions, arrays of class objects, pointers and classes, passing objects, constructors, types of constructors, destructors, this pointer, access specifiers, friend functions, inline functions.

UNIT - IV

Inheritance: Introduction, Importance of Inheritance, types of inheritance, Constructor and Destructor in derived classes.

Polymorphism: Function overloading, operator overloading, virtual functions, pure virtual functions

UNIT - V

File Management: Handling Data files (sequential and random), Opening and closing of files, stream state member functions, Operations on Files. Templates, Exception Handling.

Reference Books

1. Herbert Schildt; C++ : The Complete Reference 4th Edn; TMH, 2003.
2. Robert Lafore; Object Oriented Programming in C++ 4th Edition; Techmedia.
3. Balagurusamy ; Object Oriented Programming in C++; 4th Edition TMH, 2009.
4. Venugopal, Rajkumar; Mastering C++; Tata McGraw Hill, 2006.
5. Kanetkar Y.; LET US C++; BPB, 2009.
6. Deitel and deitel; How to program C++, Addison Wesley, Pearson Education Aisa
7. John R. Hubbard. Programming with C++, McGraw Hill International

BCA206 (B) : Programming through VB 6.0

Question Paper pattern for Main University Examination

Max Marks: 100

Part - I (very short answer) consists 10 questions of two marks each with two questions from each unit. Maximum limit for each question is up to 40 words.

Part - II (short answer) consists 5 questions of four marks each with one question from each unit. Maximum limit for each question is up to 80 words.

Part - III (Long answer) consists 5 questions of twelve marks each with one question from each unit with internal choice.

UNIT - I

Introduction - Introduction Graphical User Interface (GUI), Programming Language (Procedural, Object Oriented, Event Driven), The Visual Basic Environment, Editions of Visual Basic, Features of VB, How to use VB compiler, debug and run the programs, Introduction to tool box, object naming conventions, setting properties, Methods and Events, Working with basic objects - forms, labels, textboxes, command buttons, option button, check box, Frame and Image.

UNIT - II

Programming Fundamentals - Data types in VB, Variables and Declaration, Scope of variables, Operators in VB, sub procedures and functions, Control structures - IF, Select ..case, Do while ...loop, Do ... loop while, Do ... loop until, For ..Next, Exit For, Exit Do, With .. End With. Fixed size and Dynamic Arrays, control array, Data type conversion functions, VB Built in functions - Date, time, Format and String.

UNIT - III

Additional Controls and Menus - List box and combo box controls, Scroll bars, Picture box control, Shape and line controls, Timer control, Menu basics, Menu Editor, Creating menus, Assigning access keys and short cuts, Separating menu items, creating popup menus, controlling menus at run time.

UNIT - IV

Dialog Boxes, Mouse Events, MDI Forms and Error Handling - Standard, Custom and Common Dialog Control and Mouse Events, Creating and using MDI Form, Arranging the child forms, Adjusting the size of controls, Runtime errors, Handling runtime errors by on error .. Statements, Err object, Debug and immediate window.

UNIT - V

Database Connectivity and Crystal Reports - Connecting with databases through ADODC control, Bounded and unbounded methods for displaying data, Accessing and Navigating database, Recordsets - Tabletype, Dynaset, snapshot, dynamic and forward only, connecting database using connection string, Introduction to crystal reports, sections of report, creation of report using database, linking report with vb programs

Reference Books

1. Petroustos Evangelos: Mastering Visual Basic 6.0; BPB Publications, 2002.
2. Norton's Peter: Guide to Visual Basic 6.0; Techmedia.
3. Kurata Deborah: Doing Objects in Visual Basic; Techmedia.

4. Mastering database Programming with Visual Basic 6.0 by P. Petroustos

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BCA-207: Database Laboratory

Practical Lab Exercises based on Theory Paper BCA- 204

BCA-208: Web Designing Laboratory

Practical Lab Exercises based on Theory Paper BCA -205

BCA-209: Multimedia Laboratory

Practical Lab Exercises based on Theory Paper BCA- 205

Elective (any One)

BCA-210(A):Object Oriented Laboratory

Practical Lab Exercises based on Theory Paper BCA -206(A)

BCA-210(B): Programming through VB 6.0 Laboratory

Practical Lab Exercises based on Theory Paper BCA- 206(B)

BCA Part - III

BCA301 : Data Structure (Using C/ C++)

Question Paper pattern for Main University Examination

Max Marks: 100

Part - I (very short answer) consists 10 questions of two marks each with two questions from each unit. Maximum limit for each question is up to 40 words.

Part - II (short answer) consists 5 questions of four marks each with one question from each unit. Maximum limit for each question is up to 80 words.

Part - III (Long answer) consists 5 questions of twelve marks each with one question from each unit with internal choice.

UNIT - I

Introduction to Algorithm Design: Algorithm, its characteristics, efficiency of algorithms, analyzing Algorithms and problems.

Linear Structure: Arrays, records, stack, operation on stack, implementation of stack as an array, queue, types of queues, operations on queue, implementation of queue.

UNIT - II

Linked Structure : List representation, Polish notations, operations on linked list - get node and free node operation, implementing the list operation, inserting into an ordered linked list, deleting, circular linked list, doubly linked list, implementation of stack and queues using linked list.

UNIT - III

Tree Structure : Concept and terminology, Types of trees, Binary search tree, inserting, deleting and searching into binary search tree, implementing the insert, search and delete algorithms, tree traversals , Huffman's algorithm.

UNIT - IV

Graph Structure : Graph representation - Adjacency matrix, adjacency list, Warshall's algorithm , adjacency multilist representation. Orthogonal representation of graph . Graph traversals - bfs and dfs. Shortest path, all pairs of shortest paths, transitive closure, reflexive transitive closure.

UNIT - V

Searching and sorting : Searching - sequential searching, binary searching, hashing. Sorting - selection sort, bubble sort, quick sort, heap sort, merge sort, and insertion sort, efficiency considerations.

Recommended reference books

1. S. Lipschutz: Data Structures; Mc Graw Hill International Edition, 2008.
2. A.V. Aho, J.E. Hopcroft, and J.D. Ullman, Data Structures and Algorithms, 3rd Edition; Pearson Education Asia, 2008
3. Salaria R.S - Data Structure and Algorithms Using C/C++, 4th Edition; Khanna
4. Jean-Paul Tremblay and Paul G. Sorenson, An Introduction to Data structures with applications TMH Publishing Co.Ltd.
5. A. Michael Berman. Data Structures via C++ Oxford University Press
6. Jean-Paul Tremblay and Paul G. Sorenson. An Introduction to Data Structures with application, TMH Publishing Co. Ltd

BCA302 : System Design Concepts

Question Paper pattern for Main University Examination

Max Marks: 100

Part - I (very short answer) consists 10 questions of two marks each with two questions from each unit. Maximum limit for each question is up to 40 words.

Part - II (short answer) consists 5 questions of four marks each with one question from each unit. Maximum limit for each question is up to 80 words.

Part - III (Long answer) consists 5 questions of twelve marks each with one question from each unit with internal choice.

UNIT - I

Introduction to Systems Design Environment:

Systems Development Approaches-Function Oriented, Data Oriented, Object Oriented, Development Process, Methodologies, Tools, Modeling Methods, Processing Types and Systems, Batch Processing, Realtime Processing.

System Development Life Cycle, Linear or Waterfall Cycle, Linear cycle phase problem definition, system specification, system design, system development, testing, maintenance Problems with Linear Life Cycle, Iterative Cycles, Spiral model Requirements analysis, Importance of Communication, Identifying Requirements, Data and Fact Gathering Techniques, Feasibility Studies, Introduction to Prototyping, Rapid Prototyping Tools, Benefits of prototyping.

UNIT - II

System Design: Interface design tools, user interface evaluations, Introduction to Process Modeling, Introduction to Data Modeling.

System Design Techniques, Document Flow Diagrams, Documents, Physical Movement of documents, Usefulness of Document Flow diagram, Data Flow Diagrams, DFD notation, Context diagram DFD leveling, Process descriptions structured English, Decision Trees and Decision Tables, Entity Relationship Diagrams, Entities, Attributes, Relationship, Degree, Optionality, Resolving many to many relationship, Exclusive relationship, Structure Charts, Modules, Parameter passing. Execution sequence, Structured Design, Conversion from Data Flow Diagrams to Structure Charts.

UNIT - III

Testing fundamentals: Objectives, principles, testability, Test cases: White box & Black box testing strategies: verification & validation, UNIT test, integration testing, validation, testing, system testing, System Implementation, Maintenance and documentation, Document Configurations Maintaining a Configuration.

UNIT - IV

S/W Project planning Objectives, Decomposition techniques, S/W Sizing, Problem-based estimation, Process based estimation, Cost Estimation Models : COCOMO Model. S/W Design : Objectives, Principles, Concepts, Design methodologies Data design, Architectural design, procedural design, Object oriented concepts.

UNIT - V

An overview of Management Information System Definition & Characteristics, Components of MIS, Framework for Understanding MIS, Information requirements & Level of Management, Simon's Model of decision-Making, Structured Vs Unstructured decision, Formal Vs Informal system.

Developing Information Systems: Analysis & Design of Information Systems: Implementation & Evaluation, Pitfalls in MIS Development.

References :

1. Igor Hawryszkiewycz, Introduction to System Analysis and Design, 4th edition, Prentice-Hall.
2. Jeffrey L. Whitten, and Lonnie D. Bentley, Systems analysis and Design Methods 4th edition, Tata McGraw-Hill.
3. Roger S. Pressman, "Software Engineering-A Practitioner's Approach", Third Edition, McGraw Hill
4. R.E. Fairley, 'Software Engineering Concepts', McGraw Hill
5. J. Kanter, "Management/Information Systems". PHI.
6. Jalota "An Integrated Approach to Software Engineering", Narosa Publishing House.
7. Gordon B. Davis & M.H. Olson. "Management Information Systems : Conceptual Foundation, structure & Development."

BCA303 : Networking Technologies

Question Paper pattern for Main University Examination

Max Marks: 100

Part - I (very short answer) consists 10 questions of two marks each with two questions from each unit. Maximum limit for each question is up to 40 words.

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Part - III (Long answer) consists 5 questions of twelve marks each with one question from each unit with internal choice.

UNIT-I

Network architecture, configuring network, network strategies, networks types, LAN, MAN and WAN [Basic concepts, Line configuration, topology, transmission mode, identify key components of network, categories of network, differentiating between LAN, MAN, WANS and Internet].

UNIT - II

The OSI model, The physical layer (bandwidth limited signals, transmission media, wireless transmission), the data link layer, error detection and correction, data link protocols, Bridges, the network layer routing algorithm, congestion control algorithm, internet working, the transport layer, the application layer, MAC protocols for high speeds LANs.

UNIT-III

Introduction to TCP/IP [Understand the TCP/IP Protocol Suite, its history and modification processes compare TCP/IP to the Open Systems Interconnection (OSI) reference model, Examine a number of TCP/IP applications such as FTP, Telnet, DNS, DHCP, Bootp, etc. connection less Internet protocol, IP, IPv6, IP modification, Routing protocol - UDP, ICMP, SMTP and MIME, HTTP]

UNIT-IV

Circuit Switching: Simple switching Network, Circuit Switching Networks, Brief idea of following (detail working) not required:

Circuit Switching Concepts: Space Division switching, Time Division Multiplexing, Routing in circuit switching Networks, Control Signalling, Inchannel & common channel signaling, Brief idea of SS7. Packet Switching: Packet switching principles, Routing, X.25 Data Encoding: Spread Spectrum. Asynchronous and Synchronous transmission, Full and Half duplex, Interfacing, Functional and Procedural aspects of V.24,

UNIT-V

Data Communication Systems, Serial Data formats, encoded data formats, error detection and correction], information about microwave, information about microwave in Communications, Satellite, Geosynchronous Satellites and optical fiber communication [Basic concept of light propagation, Fiber Cables, Optical fiber versus Metallic cable facilities, Light sources, Optical Detectors, Fiber cable losses, SONET, ISDN, DSL

Recommended Books :

1. William Stallings: Data & Communications, Sixth Edition
2. A. S. Tanenbaum : Computer Networks
3. Behrouz A Foruzan, Data Communication and Networking; 3rd Edition; Tata McGraw Hill, 2004

BCA304 : Core Java Programming

Question Paper pattern for Main University Examination

Max Marks: 100

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UNIT - I

Overview of Object Oriented Concepts in Java.

Introduction: getting and installing the Java Development Kit, Java features like security, portability, byte code, java virtual machine, object oriented, robust, multithreading, architectural neutral, distributed and dynamic, Java programming language structure and syntax, control statements (The If statement, Logical Operators, The Conditional Operator, the Switch Statement, Variable Scop, Loops).

UNIT - II

Java arrays, Java Strings, Operations on Strings and String Buffer Objects, Class, Objects, Methods and Problem solving using classes, objects and relationships.

Inheritance, types of Inheritance, packages and interface, exception handling

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UNIT - III

Java utilities like java.lang, java.util, java.io, GUI in Java using AWT and Swing, Event Handling Mechanisms, AWT based effective GUI in Java : Detailed overview of AWT classes, Graphics primitives and UI Components, Layout features, Standalone GUI applications, Layout Managers, Implementation of event driven mechanism, Delegation of even model, Listeners and Adapters, Inner classes.

UNIT - IV

Applets : Introduction to Applet coding, Applet life cycle, Graphis facility, Color and Font, Passing parameters to applets, Apletcontext, Inter Applet Communication. Threading in Java : Fundamentals of Multi-threading Java coding with Thread classes, thread Management in Java, Implicit wait, Using Runnable interface, Thread Management in Java, Implicit wait, Using Runnable interface, Thread Synchronization, Inter thread communication.

UNIT - V

Overview of Networking in Java : URL class and its usage through connection, Sockets based connectivity, TCP/IP Sockets and server sockets, Datagram Sockets. Collections in Java-Array List, stack, queue, Hash table, Collection class hierarchy, JDBC and Jar files.

References

1. Patrick Naughton, Herbert Schildt :, Java, The Complete Reference : 7th Edition.
2. E. Balagurusamy: Programming with Java- Tata McGrawHill Publishers, II Edition.
3. Khalid A. Mughal, Rolf W. Rasmussen; A Programmer's Guide to Java Certification (2nd Edn.).
4. Cay. S Horstmann, Gary Cornell; Core Java Vol I & II; The Sun Micro Systems Press.
5. Ken Arnold, James Gosling: Core Java Fundamentals(Volume I and Volume 2). 2nd Edition-, Addison Wesley.
6. Kathy Sierra, Head first Java, 2nd Edition, Orielly.
7. Bruce Eckel: Thinking in Java, 4th Edition.

26

Question Paper pattern for Main University Examination

Max Marks: 100

Part – I (very short answer) consists 10 questions of two marks each with two questions from each unit. Maximum limit for each question is up to 40 words.

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Part – III (Long answer) consists 5 questions of twelve marks each with one question from each unit with internal choice.

UNIT – I

Introduction to Electronic Commerce : Definition of Electronic Commerce, The scope of Electronic Commerce.

Business Strategy in an Electronic Commerce : The value chain, Competitive advantage, Business strategy.

Business to Business Electronic Commerce : Inter-organizational transactions, Electronic markets, Electronic data interchange (EDI), EDI: the nuts and bolts, EDI and Business Inter organizational E-Commerce.

UNIT – II

Designing (Technical, Detailed, High Level): Introduction to Technical Design and Construction. A Client Server Model of E-Commerce, Understanding Technical Design, Construction. Introduction to Detail Design, High-Level Design, Performing High-Level Design, High Level design of Business transactions, Applying High-Level design with example.

UNIT – III

Testing & Implementation: Introduction to Testing, Understanding Testing, Applying Testing. Challenges and Opportunities in Applying Verification and Validation.

Implementation : Understanding Implementation. Applying Implementation Planning with example, Challenges and Opportunities of Implementation Planning.

UNIT – IV

Electronic Payment Systems: Special features required in payment systems, Types of E-payment systems, E-Cash, E-cheque, credit card, Smart Card, Electronic Purses, E-Marketing, E-Customer Relationship Management, E Supply Chain Management.

Security Issues in E-Commerce: Security risk of E-Commerce, Types of threats, Security tools and risk management approach. Cyber laws, Business Ethics.

UNIT V

Introduction to e-banking: Definition, Transaction websites components, E-Banking support services, Wireless Banking.

E-Banking Risk: Transaction/Operation Risk, Credit Risk, Liquidity/Internet Risk, Price Risk, Strategic Risk, Reputation Risk.

Introduction to M-Commerce: Business using smart devices (Mobile, e-wallet, online shopping and payment system via mobile, security and privacy features), Mobile delivery technology, applications of M Commerce. M Wallet, Mobile Shopping.

References

1. P.T. Joseph, E-Commerce: A Managerial Perspective, PHI, 2002.
2. Ravi Kalakota & A.B. Whinston, Frontiers of electronic Commerce Pearson Education,
3. Ravi Kalakota & A.B. Whinston, electronic Commerce-A Manager's Guide, Pearson Education,
4. Agarwala Kamlesh, N and Agarwala Deeksha, Business on the Net introduction to the E-com Macmillan India.
5. Bharat Bhaskar , Electronic Commerce - Framework Technologies and Application Tata McGraw Hill

Question Paper pattern for Main University Examination

Max

Marks: 100

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Part – III (Long answer) consists 5 questions of twelve marks each with one question from each unit with internal choice.

UNIT-I

Introduction to .Net framework: Managed Code and the CLR Intermediate Language, Metadata and JIT Compilation Automatic Memory Management

The Framework Class Library: .Net objects- ASP .NET, NET web services, Windows Forms.

Elements : Variable and constants data types, declaration. Operators, types precedence, Expressions Program flow, Decision statements, properties, delegate, indexer, attributes , Loop statements.

UNIT-II

Types: Structures, Enumerations, Reference data types, arrays.

Windows Programming: Creating windows forms windows controls, Button, Check box, Combo box, Label, List box Radio Button, Text box, Events, Click, close deactivate, Load, mousemove, mousedown, mouseup.

Menus and Dialog Boxes : Creating menus, menu items, context menu, Using dialog boxes, show dialog() method.

UNIT - III

ADO.NET : Architecture of ADO.NET, ADO.NET providers, Connection, Command, Data Adapter, Dataset, Connecting to Data Source, Accessing Data with Data set and Data reader, Create an ADO.NET application, Using Stored Procedures.

UNIT-IV

ASP.NET Features: Application of States and Structure; Change the Home Directory in IIS- Add a Virtual Directory in IIS- Set a Default Document for IIS – Change Log File Properties for IIS-Stop, Start, or Pause a Web Site. Server security and application security issues.

UNIT-V

Creating Web Controls: Web Controls, HTML Controls, Using Internist Control, Using Input Validation Controls, Selecting Controls for Applications, Data Controls and Adding web controls to a page.

Creating Web Forms: Server Controls, Types of Server Controls, state management- Types and applications, Adding ASP.NET Code to a page.

Web Services and WCF: Introduction to Web Services protocol and standards WSDL Documents-Visual Studio.NET Architecture of WCF, WCF Client

Reference Books:

1. Mathew Mac Donald: Beginning ASP.NET 4.0 in C# 2010, 3rd Edition, A Pres.
2. Bill Evjen Scott Hanselman, Devin Rader: Professional ASP.NET4, 2010, Willey.
3. George Shepherd: Microsoft ASP.NET Step by step, 2010 Microsoft Press.
4. Inar Spaanjaars: Beginning ASP.NET 4: in C# and VB (Wrox Programming to Programmer) , 2010 Wiely Publishing.
5. Steven Holzner; ASP.NET 4.0 (Cover C# & VB) Black Book; Dreamtech Press.
6. Steven Holzner; NET Programming Black Book; Dreamtech Press.

BCA306 (B): Advance Technologies of Programming through PHP

Question Paper pattern for Main University Examination

Max Marks: 100

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UNIT - I

Introduction to PHP: Server side Scripting Vs Client Side Scripting, Evaluation of PHP, Features of Php, Basic Syntax, Variable and constant, Data types, Operators and Expressions.

UNIT - II

Decision Making: If, Multiple Ifs, Nested Ifs, Loops (while, do...while, for loop, foreach), Nested Loops, Jumping Statement.

Arrays: Numeric, Associative and Multidimensional Arrays

UNIT-III

Strings: Creating and accessing String, Searching & Replacing String, Formatting String, String Related Library function, Pattern matching, Replacing text, Splitting a string with a Regular Expression

Functions: Defining a Function, Calling a Function, Parameter passing, Returning value from function

UNIT-IV

Form Data Handling: \$_GET, \$_POST, \$_REQUEST Variables, Cookies handling, Session Management, URL encryption and security functions.

Exception Handling: Understanding Exception and error, Try, catch, throw

UNIT-V

File Handling: Opening and closing a file, Copying, renaming and deleting a file

Database Handling: Connection with MySql Database or ODBC, Performing basic database, operation (Insert, Delete, Update, Select), Setting query parameter.

References

1. PHP, The CompleteReference, Steven Holzner, TMH
2. Beginning PHP 5.3, Matt Doyle, John Wiley & Sons

BCA306 (C): Linux and Shell Programming

Question Paper pattern for Main University Examination

Max Marks: 100

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UNIT-I

The Operating System: Linux history, Linux features, Linux distributions, Linux's relationship to Unix, Overview of Linux architecture, Installation, Booting, Login and Shutdown Process, Start up scripts, controlling processes, system processes (an overview, Types of users, the powers of Root, managing users (adding and deleting); using the command line. Introduction to Linux Security.

UNIT-II

The Linux File System; Basic Principals, Pathnames, Mounting and Un-mounting File Systems, Different File Types, File permissions, Disk Usage Limits, Directory Structure, Check and Repair File Systems Security and file permissions. Shells in Linux.

UNIT-III

Filter-The grep family, advanced filters-sed and awk vi editor: General startup of vi editor and it modes, Creating and editing files, features of vi, screen movement, cursor movement insertion, deletion searching, submitting operations, yank put, delete commands reading & writing files.

UNIT - IV

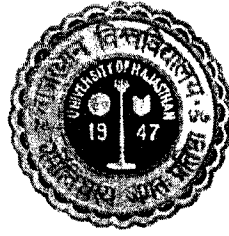
Shell: meaning and purpose of shell, introduction to types of shell. the command line, standard input and standard output, redirection pipes, filters special characters for searching files and pathnames.

UNIT-V

Shell programming shell Meta character local and global shell variables- interactive shell scripts - shell script arguments- looping and making choice- for loop, case, while and until, shell functions eval.

Recommended reference/Text Books:

1. Beginning Linux Programming N, Mathew, R. Stones, Wrox, Wiley India Ed.
2. Peterson Richard, "The Complete Reference Linux" Tata McGraw Hill.
3. Simitabha Das, "Unix/Linux Concepts & Applications". Tata McGraw Hill
4. Yshavant P, Kanetkar, Shell Programming
5. Linux System Programming, Robert Love, O'Reilly SPD.
6. Vijay Shekhar, Red hat Linux study guide firewall media
7. Richard Petersen The Complete Reference, Linux, TMH



UNIVERSITY OF RAJASTHAN
JAIPUR

SYLLABUS

Master of Business Administration

(Semester Scheme)

I & II Semester	2018-2019
III & IV Semester	2019-2020

[Signature]
Vice-Chancellor
(Academics)
University of Rajasthan
JAIPUR
6-1



**R.A. Podar Institute of Management
Faculty of Management Studies
University of Rajasthan
Jaipur**

**Semester Scheme
Master of Business Administration
2018-19**

Course Category:

CCC: Compulsory Core Course

ECC: Elective Core Course

OEC: Open Elective Course

SC: Supportive Course

SSC: Self Study Core Course

SEM: Seminar

PRJ: Project Work

RP: Research Publication

PRE: Presentation

CIA: Continuous Internal Assessment

Contact Hours:

L: Lecture

T: Tutorial

P: Presentation

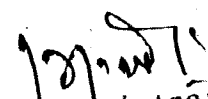
S: Self Study

18/11/18
By Registrar
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University of Rajasthan
JAIPUR

Master of Business Administration (MGM)

Master of Business Administration: Semester-I

S. No.	Subject Code	Course Title	Course Category	Credit	Contact Hours Per Week			Exam Duration (Hrs)	
					L	T	P	T	P
1	MGM 101	Accounting for Managers	CCC	4	3	1	0	3	0
2	MGM 102	Marketing Management	CCC	4	3	1	0	3	0
3	MGM 103	Human Resource Management	CCC	4	3	1	0	3	0
4	MGM 104	Quantitative Techniques	CCC	4	3	1	0	3	0
5	MGM 105	Managerial Economics	CCC	4	3	1	0	3	0
6	MGM 106	Organizational Behavior	CCC	4	3	1	0	3	0
Open Elective Courses (Opt for any three out of following five)									
7	MGM 107	IT for Managers	OEC	4	3	1	0	3	0
8	MGM 108	Business Communication and Personality Development	OEC	4	3	1	0	2	1
9	MGM 109	Rural Management	OEC	4	3	1	0	3	0
10	MGM 110	Business Statistics	OEC	2	1	1	0	3	0
11	MGM 111	Principles of Management	OEC	2	1	1	0	3	0


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Master of Business Administration: Semester-II

S. No.	Subject Code	Course Title	Course Category	Credit	Contact Hours Per Week			EOB Duration (Hrs)	
					L	T	P	T	P
1	MGM 201	Production and Operations Management	CCC	4	3	1	0	3	0
2	MGM 202	Business Research and Data Analytics	CCC	4	3	1	0	3	0
3	MGM 203	Financial Management	CCC	4	3	1	0	3	0
4	MGM 204	Human Resource Planning and Development	CCC	4	3	1	0	3	0
5	MGM 205	Organizational Change and Effectiveness	CCC	4	3	1	0	3	0
6	MGM 206	E - Business	CCC	4	3	1	0	3	0
Open Elective Courses (Opt for any three out of following five)									
7	MGM 207	Entrepreneurship Management	OEC	4	3	1	0	3	0
8	MGM 208	Micro Finance and MSME Management	OEC	4	3	1	0	3	0
9	MGM 209	Ethics, Corporate Governance and CSR	OEC	4	3	1	0	3	0
10	MGM 210	Community Based Organization Management	OEC	2	1	1	0	3	0
11	MGM 211	Corporate Fiscal Administration	OEC	2	1	1	0	3	0


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Master of Business Administration: Semester-III

S. No.	Subject Code	Course Title	Course Category	Credit	Contact Hours Per Week			Exam Duration (Hours)	
					L	T	P	T	P
1	MGM 301	Strategic Analysis and Choice	CCC	4	3	1	0	3	0
2	MGM 302	Project Formulation and Implementation	CCC	4	3	1	0	3	0
3	MGM 303	Summer Internship Project	CCC	4	3	1	0	3	0
4	MGM 304	Global Business Management	CCC	4	3	1	0	3	0
5		Specialization Elective (Functional Area-I)	ECC	4	3	1	0	3	0
6		Specialization Elective (Functional Area-I)	ECC	4	3	1	0	3	0
7		Specialization Elective (Functional Area-I)	ECC	4	3	1	0	3	0
8		Specialization Elective (Functional Area-II)	ECC	4	3	1	0	3	0
9		Specialization Elective (Functional Area-II)	ECC	4	3	1	0	3	0

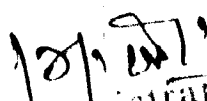

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Master of Business Administration: Semester-IV

S. No.	Subject Code	Course Title	Course Category	Credit	Contact Hours Per Week			Exam Duration (Hrs)	
					L	T	P	T	P
1	MGM 401	Strategic Execution	CCC	4	3	1	0	3	0
2	MGM 402	Business Legislation and Regulation	CCC	4	3	1	0	3	0
3	MGM 403	Indian Socio Economic Policies and Practices	CCC	4	3	1	0	3	0
4	MGM 404	Multi-Disciplinary Research Project	CCC	4	3	1	0	3	0
5		Specialization Elective (Functional Area-I)	ECC	4	3	1	0	3	0
6		Specialization Elective (Functional Area-I)	ECC	4	3	1	0	3	0
7		Specialization Elective (Functional Area-II)	ECC	4	3	1	0	3	0
8		Specialization Elective (Functional Area-II)	ECC	4	3	1	0	3	0
9		Specialization Elective (Functional Area-II)	ECC	4	3	1	0	3	0

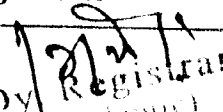
Specialization (Functional) Electives Areas III and IV Semesters:

Students are advised to refer and select papers in their area of specialization from the list appended herewith.


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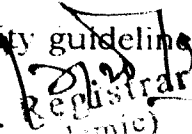
Specialization (Functional) Elective Papers

Marketing Specialization	
MGM E01	Consumer and Organizational Buying Behavior
MGM E02	Integrated Marketing Communications
MGM E03	Retail and Sales Management
MGM E04	Supply Chain Management
MGM E05	Services Marketing
MGM E06	Strategic Product & Brand Management
MGM E07	Rural Marketing
Human Resource Management	
MGM F01	Employee Relationship Management
MGM F02	Manpower Planning and Management
MGM F03	Performance Appraisal and Compensation Management
MGM F04	Knowledge Management and Learning Organization
MGM F05	Strategic HRM
MGM F06	Counselling Skills for HR Managers
MGM F07	International HRM
Financial Management	
MGM G01	Investment Management and Securities Analysis
MGM G02	Marketing of Financial Services
MGM G03	Behavioral Finance
MGM G04	Financial Institution Management
MGM G05	Indian Financial System
MGM G06	Commodity and Derivatives Securities
MGM G07	Consumer and Retail Finance
Rural Management	
MGM H01	Management of Rural and Agro Based Industries
MGM H02	Rural Credit and Finance
MGM H03	Rural Project Planning and Management
MGM H04	Rural Society and Polity in India
MGM H05	Management of NGOs
MGM H06	Natural Resources Management



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Program Administration

1. The medium of instruction and examinations shall be English.
2. There will be a component of Continuous Internal Assessment along with End of Semester Examination. Continuous Internal Assessment will be conducted by the Institute under supervision of the Director.
3. **A subject paper will consist of 100 marks out of which, the EOSE question paper will be of 80 marks and 20 marks will be of Continuous Internal Assessment (CIA) which will comprise of Internal Written Test of 10 marks and remaining 10 marks will be based on Presentations / Assignments / Projects / Quizzes. Marks obtained in EOSE and CIA both will be added for final result.**
4. **No candidate shall be considered to be eligible to pursue End of Semester Examinations unless he/she passes the Continuous Internal Assessment with 36% marks in each paper. Minimum passing percentage for any candidate in each paper in EOSE will be 36%. Aggregate percentage required in every semester will be 48%.**
5. There will be two components of evaluation for the paper no. MGM-108 titled "Business Communication and Personality Development. There will be one component of 40 marks to be evaluated through EOSE. There will be another component of 40 marks (Personality Development part) which will be evaluated on the basis of verifiable means by an external examiner and internal examiner, who shall be the Director or his/her nominee. Both of the components will have an Continuous Internal Assessment (CIA) of 20 marks as is the case with other papers.
6. Courses/papers are inter-changeable from one year to another. The optional papers are given separately for each semester.
7. The Optional Groups (Electives) for functional area to be introduced will be announced in the beginning of Semester-III. It is not necessary to introduce all the optional groups.
8. In EOSE, There will be 7 questions out of which the candidate is required to answer 5 questions. Out of 7 questions, the question number 1st will be a case/ problem which will be compulsory.
9. 75% attendance is compulsory in each paper failing which student will not be qualified to take EOSE examination in that paper.
10. Promotion from a semester to another will be as per University rules.
11. The student will submit the choice of papers as per university guidelines and by the date announced by the institute.


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12. There will be a Credit Monitoring Committee of the Institute whose decisions regarding credits and allied domain will be final and binding as per University rules.
13. Credit registration at least once in all compulsory credit courses shall be binding and earning all CCC credits for accumulation of minimum 120 credits. However, a student may earn more than 120 credits as well but additional credits will not be counted for Percentage or CGPA calculations.
14. All students are required to fill in readmission and examination form for each semester complete in all respects by the due date/ late fee date as announced by the Director of the Institute. Incomplete examination forms are likely not to be forwarded to the University.
15. A student may opt for not more than 03 OEC papers out of total 05 papers offered during each Semester I and Semester II whereas a student will have to opt for total 10 functional specialization papers during Semester III and IV 05 out of these will be from one functional area and 5 from another during his III and IV semesters. He / She cannot choose from more than two functional areas.
16. There should be adequate number of students willing to opt for an elective paper and functional area specialization (if the number is less than 10 then the elective will not be offered).


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Master of Business Administration Semester I

Dr. Registrar
University of Rajasthan
JAIPUR

Accounting for Managers

Subject Code: MGM101

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Paper Objective: The course has been designed keeping in mind the specific need of managers to understand and appreciate the concept of Managerial Accounting for analyzing Financial Statements. This paper will help students to know corporate sector with the help of analysis of financial statements.

Content

Transformation of Corporate Finance from Financial Accounting to Managerial Accounting, Key issues before managerial accounting, Implications of Regulatory framework for managerial accounting, Basic accounting concepts

A Review of Financial Statements from Journal Entry to Balance Sheet, IFRS, Regulatory Requirements for Annual Accounts

Analysis of Published Financial Statement - Sources of Information, Ratio analysis, Cash Flow Statement as per AS 3, Inferences from Published Financial Statements

Cost Accounting - Concepts and Classification, Cost Structure Management and Cost Saving Techniques, Budgetary Control, Marginal Costing and its applications, Activity Based Costing, Life Cycle Costing, Responsibility Accounting, Zero Based Budgeting, Variance Analysis, Price Level Change Accounting, Recent Trends in Cost Structure Management, Survival and Growth through Costing Management

Case Studies

Reference

1. Khan and Jain, Management Accounting, McGraw Hill.
2. S. Ramanathan, Accounting for Management, Oxford.
3. Hilton, Ramesh, Jayadev, Managerial Accounting, McGraw Hill.
4. Horngren, Cost Accounting, Pearson.
5. Hilton and Platt, Managerial Accounting, McGraw Hill.


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Marketing Management

Subject Code: MGM102

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of managers to understand and appreciate the concept of Marketing and various dimensions related to Exploring, Creating, Delivering and Communicating Customer Value. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Content

Nature and scope of marketing, Core marketing concepts (Market , Need, Want, Demand, Value, Satisfaction, Consumer & Customer, Goods and Services, Competition, Company Orientation towards Market Place) , Marketing Environment (External and Internal), Marketing mix of Goods and Services

Consumer buying decision process, Basics of Market Research, Levels of marketing planning, Segmentation, Targeting and Positioning

Developing products (Introduction to Products, Product Levels, Product Classification, Product Life Cycle, Product Line and Mix, Packaging and Labeling, Product Quality), Concept and Role of Brands

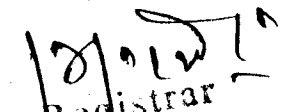
Pricing Decisions (Introduction to Price, Pricing Process, Methods), Delivering and Communicating Customer Value (Value chain Model, Market Channel, Retailing and Wholesaling, Marketing Communications)

Marketing Evaluation and Control, Sustainability and Ethics in Marketing

Case Studies

Reference

1. Kotler, Keller, Koshy, Jha, Marketing Management- 14th edition, Pearson
2. Etzel, Walker, Stanton, Pandit, Marketing - 14^{ed}, McGraw Hill.
3. Bains, Fill, Page and Sinha, Marketing - Asian Edition, Oxford.
4. Ramaswamy and Namakumari, Marketing Management - 5 Edition, McGraw Hill.
5. Saxena Rajan, Marketing Management, McGraw Hill.


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Human Resource Management

Subject Code: MGM103

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of managers to understand and appreciate the concept of Human Resource Management and various dimensions related to managing Human Resource in the organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Concept of Human Resources Management, Functions of HRM, Role of HR Managers, Human Resource Environment in India, HR as strategy, Diagnostic Approach to HRM, HR competencies and efficiency, Globalization and its impact on HR

Job Analysis - Concept of Job Analysis, Methods of Job Analysis, Job Description and Job Specification, Job Analysis Information

Recruitment and Selection - Concept of Recruitment, Factor affecting recruitment, Sources of Recruitment, Recruitment Policy, Selection Process, Placement and Induction

Performance Appraisal - Meaning, Objective, Process, Types and Methods, Limitations, Essentials of good appraisal system, 360 degree appraisal system, Internal Mobility (Promotion, Transfer and Demotion).

Employee Misconduct and Disciplinary Procedure - Maintenance of Discipline, Basic guidelines for Disciplinary Policy, Disciplinary Actions, Concept of Grievance, Causes of Grievance, Forms and Effects of Grievance, the Grievance Handling Procedure, Need for Grievance Redressal Procedure

Compensation and Reward Management - Concept of Job evaluation, Objectives, Techniques, Advantages and Limitations, Wage and Salary Administration, Managing wages, Concept of Rewards and Incentives, Financial and Non-Financial Components

Case Studies

Reference

1. Dessler and Varkkey, Human Resource Management - 14th edition, Pearson.
2. Halldar and Sarkar, Human Resource Management, Oxford
3. CB Gupta, Human Resource Management, Sultan Chand.
4. Uday Pareek and TV Rao, Human Resource Management, Oxford
5. K Aswathappa, Human Resource Management, TMH
6. Monappa et al, Human Resource Management, McGraw Hill

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Quantitative Techniques

Subject Code: MGM104

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of managers to understand and appreciate Quantitative Techniques for managerial decision making and various dimensions related to the application of such techniques in any organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Game Theory and Applications - Concepts, Zero Sum Game, Pure and Mixed Strategy

Transportation and Assignment Theory and Applications - Concepts, Methods

Decision Theory and Applications - Decision under Uncertainty, Decision under Risk, Methods

Queuing Theory and Applications - Concepts, Methods

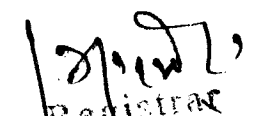
Probability Theory and Applications - Set theory, Sample space, Probability function, Events, Axioms, Conditional Probability, Independent events, Random Variables, Expectations

Linear Programming - Concepts, Methods (Simplex, Duality, Graphical)

Case Studies and application of all these techniques for managers

References

1. Levin and Kirlpetuck - Quantitative approach to Management
2. CR Kothari, Quantitative Techniques
3. Sharma, Quantitative Techniques for Managerial Decisions, MacMillan


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Managerial Economics

Subject Code: MGM105

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objectives: The course has been designed keeping in mind the specific need of managers to understand and appreciate the concept of Micro and Macro Economics in Managerial Decision Making and various dimensions related to Demand, Supply, Production, Cost, Revenue, Market and Macro Economic Variables. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Introduction to Managerial Economics - Basic Concepts, Scope, Positive and Normative, Deductive and Inductive Analysis, Objectives of Firms

Theory of Consumer Behavior - Utility Analysis (Cardinal and Ordinal), Theory of Demand, Elasticity of Demand and Business Decision Making, Demand Forecasting (Importance, Quantitative and Qualitative Techniques)

Production, Revenue and Cost - Theory of Supply, Production Possibility, Production Function, Returns to Scale, Law of Returns, Isoquant, Iso-Cost, Elasticity of Supply, Theory of Cost, Revenue Concepts, Producer's Equilibrium, Break Even Analysis

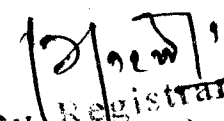
Market Structure - Perfect Competition, Monopolistic, Oligopoly, Duopoly, Monopoly, Monopsony, Market Equilibrium

Macro Economics - Basics of National Income, Money and Banking, Balance of Payment, Foreign Exchange Rate and Market, Business Cycles, Recent Trends in Indian Economy, Money Supply and Inflation (CPI, WPI and GDP Deflator), World Bank Ease of Doing Business Report

Cases Studies

Reference

1. Paul A Samuelson and William D Nordhaus, Economics 19th edition, McGraw Hill.
2. V.L. Mote, Samuel Paul and GS Gupta, Managerial Economics, Tata McGraw Hill.
3. R.L. Varshney and K.L. Maheshwari, Managerial Economics - 21st edition, Sultan Chand and Sons.
4. D.N. Dwivedi, Managerial Economics - 7th edition, Vikas Publication.


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Organizational Behavior

Subject Code: MGM106

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: This paper will facilitate students to define, relate and recognize concepts/ theories/constructs related to understanding of human behaviour in organizations and to interpret, estimate and relate issues of performance/ behaviour/ conflict/ cooperation based on cases / exercises. It will also help them to analyse, inspect, debate and diagnose issues related to intra and interpersonal behaviour.

Contents

Introduction to Organization Behavior - Individual processes and Behavior, Personality and Personal Effectiveness, Perception and Attribution, Attitudes and their measurement, Learning and performance, Work place diversity

Role concept, Role space, Role set, Role efficacy and interventions, Emotional Intelligence

Work Groups and Teams, Group dynamics, Developing Collaboration


Power and Politics in organizations, Basis of power, Conflict and negotiation, Stress Management

Leadership, Leaderships at different levels in the organization, Theories of Leadership

Work motivation, Empowerment, Managing millennial in the workplace.

References

1. Robbins, Judge and Vohra, Organisational Behavior - 15th Edition, Pearson.
2. Fred Luthans, Organisational Behavior - 12th edition, McGraw Hill.
3. Pareek, Udai, Understanding Organizational Behavior 3rd Edition. Oxford University Press.
4. Singh Pritam and Asha Bhandarkar, Millennials and the Work Place Challenges for Architecting the Organizations of Tomorrow, AIMA- Sage.
5. Mc Shane, Stevan and Mary and Glinow, Organizational Behaviour Emerging Knowledge Global Reality, McGraw Hill


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IT for Managers

Subject Code: MGM107

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objectives: The course has been designed keeping in mind the specific need of managers to understand and appreciate the implication of Information Technology in management and various dimensions related to application of IT for managerial decision making. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Computer Hardware and Software - CPU, Logic Gates, Computer Memory, Computer Hierarchy, Input Technologies, Output Technologies, Operating Systems, Application Software, Utility Softwares, Contemporary Apps for Managers

Data Base Management System - Traditional File Environment, Database Management Systems, Data Models, MS-Excel in detail, SQL in brief

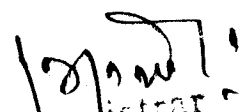
Telecommunication and Networks - Types of Telecommunication Networks, Telecommunications Media, Network Topologies, Network Architectures, Internet, Intranet and Extranets, Features of an Effective Website and App, Payment Gateways

Functional and Enterprise Systems - Management Information Systems, Transaction Processing Information Systems, Accounting and Finance Systems, Marketing and Sales Systems, Production and Operation Management Systems, Human Resources Management Systems

Cases

Reference

1. Lucas, Information Technology for Management, TMH
2. Behl, Information Technology for Management, TMH
3. Jawadekar, Management Information System, McGraw Hill.


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Business Communication and Personality Development

Subject Code: MGM108

Credits: 04

EOSE Marks: Written Test (40 marks) + External Viva for Personality Development Unit (40 marks)
CIA Marks: 20 marks

Objectives: The course has been designed keeping in mind the specific need of managers to understand and appreciate the implication of effective communication in management and various dimensions related to Verbal and Non Verbal Business Communication. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

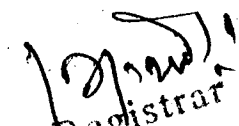
Introduction to Business Communication - Meaning, Process, Types of Communication, Channels of Communication, Barriers to Communication, Making Communication Effective

Business Writing and Correspondence - Agenda, Minutes, Notes, Report Writing, Making effective presentations, Business Letters, Writing business emails, Telephone etiquettes, Managing Business Meetings, Communicating on Social Media

Personality Development (This unit will be evaluated by External Examiner) - Role of Verbal and Non Verbal Communication, Behavioral Aspects of Communication, Effective Body Language, Preparing for Group Discussions and Interviews, Public Speaking, Formal Dressing Sense, Dining etiquettes

Reference

1. Lesikar, Flatley, Rentz, Pande, Business Communication - 11 edition, McGraw Hill
2. Kaul, Business Communication, PHI
3. Sinha, Business Communication, Galgotia
4. Biswajit Das and Ipsita Spathy, Business Communication and Personality Development, Excel Books


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Rural Management

Subject Code: MGM109

EOSE Marks: 80

CIA Marks: 20

Total Credits: 04

Objectives: To equip the students with the basic understanding of various concepts relating to rural management. This subject will develop an understanding among students regarding rural sector and various rural development institutions in India.

Contents

Meaning of development, Nature and features of rural economy of India, Dimensions of rural economy, Dynamics and Magnitude of rural population, Rural Poverty and Development Dimension, Problems of Rural Unemployment-specially Disguised Unemployment and its causes and remedies, Livelihood approach

Indian Agriculture - Production system role, Problems, Gender equity, Resource structure, Growth opportunities, Agricultural Finance and Rural Indebtedness, Development strategy - Centralization and Decentralization

The structure and function of the Union and State Government, Panchayati Raj Institutions and Urban Local Bodies, Union - State Legislative, Executive and Fiscal Relationships, Rural Management- Key Issues and Solutions

Rural Resources - Key resources and their management, Role of Rural Community in Growth and Development, Community Initiatives, Rural Entrepreneurship, Rural Infrastructure and Development, PURA (Success stories), Role of PPP in Rural Infrastructure Development, MNREGA and its role and impact on Rural Development, Skill development in Rural Areas

References:

1. EPW Articles.
2. Websites and publications of Ministry of Finance, Ministry of Rural Development, Ministry of Water Resources; MOEF, Government of India
3. Experiential learning through visit to rural areas.

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Business Statistics

Subject Code: MGM110

EOSE Marks: 80

CIA Marks: 20

Total Credits: 02

Objective: The course has been designed keeping in mind the specific need of managers to understand and appreciate the concepts and application of statistics in Business and various dimensions related to Business decision making using statistics as a tool. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Meaning and Scope of Statistics, Functions and Importance of Statistics for Managers.

Collection of Data - Primary and Secondary data, Classification, Tabulation and Diagrammatic Presentation

Measures of Central Tendency - Mean, Mode, Median, Dispersion and Skewness.

Correlation and Regression Analysis


Analysis of Time Series

Interpolation and Extrapolation,

Index Number

References

1. Freedman, Statistics, Viva Books
2. N.D. Volra, Business Statistics, McGraw Hill
3. Gupta and Gupta, Business Statistics, Himalaya Publishing House


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Principles of Management

Subject Code: MGM111

Total Credits: 02

EOSE Marks: 80

CIA Marks: 20

Objectives: This paper will facilitate students to appreciate the role of structure as an important mediating variable in the performance of organizations and the interplay of technology with structure and to define and relate to different types of organizations and their roles/ objectives of organizations in their contextual setting.

Contents

Management - Meaning, Scope, Importance of Management, Functions of management - Planning, Organising, Directing and Control functions in Modern Organizations, Functional Areas of Management, Levels of Management, Role of Managers, Managerial Skills, Decision Making as a Manager, Coordination - Meaning, Principles

Theories of organization - Classical, Neo classical and Modern Theories, Miles and Snow Typologies, Centralization and decentralization,

Organization Structure - Factors affecting Organizational Structures, Types - Functional, Divisional, Project, Matrix, Hierarchy, Pyramidal, Tall and Flat Structures, Henry Mintzberg's Organization Structure Typologies, Structure as a blue print of the organization, Technology and Structure, Structure Change- Reasons and Challenges

Indian Management Thought and Thinkers - Indian Management Thinkers, Indian Management Philosophies, Management Learning from Indian Mythology and Ancient Management, Relevance of Kautilya in Contemporary Management

Cases

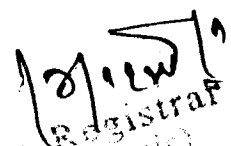
References

1. Robbins, Judge and Vohra, Organisational Behavior - 15th Edition, Pearson.
2. Fred Luthans, Organisational Behavior - 12th edition, McGraw Hill.
3. Stoner, Freeman, Gilbert, Jr., Management, PHI

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Master of Business Administration

Semester II


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Productions and Operations Management

Subject Code: MGM201

Credits: 04

EOSE Marks: 80

CIA Marks: 20

Objective: The course has been designed keeping in mind the specific need of managers to understand and appreciate the concept of Production and Operations Management and various dimensions of Production, Business Processes, Logistics and Operational issues in the organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Importance of Production and Operations Management, Link with other functional areas such as Finance, Marketing and Human Resources, Operations Strategy, Product Development, Productivity, Location Decision, Facility Layout, Work System Design

Location Decisions - Planning and Analysis, Plant Layout Decisions - Types, Process Flow, Concepts of Line Balancing, Work Measurement

Business Processes - Business Process Modeling, Inventory Management - Models and Applications, Lean Manufacturing, JIT, Supply Chain Management- Objectives and Elements, Operations and Production Scheduling

Production Planning and Control- Forecasting, Aggregate Planning, Inventory Management, Materials Requirement Planning, Capacity Requirement Planning, Enterprise Resource Planning, Production Scheduling, Waiting Lines

Network Techniques - Project Planning and Control, Project monitoring through Network Techniques, PERT-CPM, Concept of Time Estimates, Project Costs, Project Crashing

Quality Management - Techniques and Tools, Total Quality Management Systems (TQMS), Types of International Standards on Quality Systems, ISO standards, Total Quality and Safety, Six Sigma, Statistical Process Control.

Contemporary Issues/Topics- Supply Chain Management, Lean Manufacturing, JIT, Toyota Production Systems, Agile Manufacturing, Industry 4.0

Cases

Reference

1. Bula and Sarin, Modern Production and Operation Management, Wiley
2. Russell and Taylor III, Operation Management - 4th edition, Pearson
3. Adam Jr. and Ebert, Production and Operation Management, Pearson
4. Anil Kumar and N Suresh, Production and Operation Management, New Age
5. Rendex et al., Production and Operation Management, Pearson

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Business Research and Data Analytics

Subject Code: MGM202

Credits: 04

EOSE Marks: 80

CIA Marks: 20

Objective: The course has been designed keeping in mind the specific need of managers to understand and appreciate the concept of Research in Business and Analysis of Data and various dimensions related to Business Research and Data Analytics. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Introduction to Business Research - Meaning, Significance, Research Process, Approaches (Inductive and Deductive, Scientific and Non Scientific), Features of a Good Research, Types of Research

Research Design - Research Problem, Hypothesis Formulation, Defining Research Design, Sources of Information (Primary and Secondary), Methods of Primary Data Collection (Interview, Observation, Designing Questionnaire, Schedule), Sample Design (Universe, Sample Size, Validity Analysis and Reliability Analysis, Probability and Non Probability Sampling, Errors in Sampling, Scaling Techniques)

Data Processing and Analytics - Tabulation and Classification of Data, Level of Significance, Uni-variate Analysis (Mean, Mode, Median, Dispersion), Bi-variate Analysis (Correlation, Regression, Cluster Analysis, Analysis of Variance), Parametric and Non Parametric Tests (t-Test, z-Test, f-Test, Chi-Square, One and Two Way ANOVA, Mann-Whitney Analysis, Kruskal-Wallis), Basics of SPSS

Report Writing and Decision Making - Format of Report, Guidelines for Effective Report Writing, Reaching to Conclusions

Cases

References

1. CR Kothari, Research Methodology, New Age International Publisher
2. Cooper, Schindler and Sharma, Business Research Methods, McGraw Hill
3. Goode, W.J. and Paul Hatt, Methods in Social Research, McGraw Hill
4. Maxwell Joseph, Qualitative Research Design, Sage Publication
5. Dwivedi, Research methods in Behavioural Science, McMillian

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Financial Management

Subject Code: MGM 203
EOSE Marks: 80
CIA Marks: 20

Credits: 04

Objective: The course has been designed to impart knowledge of financial management as a foundation paper. Students will be exposed to various facets of financial management and related decisions including investment, financing and dividend decisions as well as sources of finances. Students will also learn about emerging issues in corporate finance.

Contents

Introduction to Financial Management - Objectives, Contemporary Financial Environment, Fundamental Concepts (Risk and Return, Time value of Money and Valuation), Behavioral Finance, Sources of Short Term and Long Term Finance

Investment Decisions - Nature, Cost of Capital, Leverage, Capital Structure Theories, Capital Budgeting, Risk Analysis in Capital Budgeting

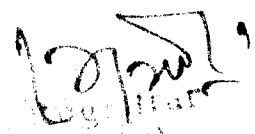
Operating and Financing Decisions - Working Capital Management, Policy - Issues and Challenges, Cash Management, Inventory Management, Accounts Receivables, Financing Current Assets

Dividend Decisions - Introduction, Determinants, Dividend Theories, Bonus Issues, Stock Split, Buy Back of Shares, Tax issues, Recent Trends in Dividend Policies, Management of Profit, Share Value Creation, Corporate Restructuring - Merger and Acquisition

Cases

References

1. IM Pandey, Financial Management, Vikas Publication
2. Prasanna Chandra, Financial Management, Tata McGraw Hill
3. Khan and Jain, Financial Management, McGraw Hill


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Human Resource Planning and Development

Code: MGM204

Credits: 04

EOSE Marks: 80

CIA Marks: 20

Objective: The course has been designed keeping in mind the specific need of managers to understand and appreciate the concept of Human Resource Planning and Development in the corporate world and various dimensions related to planning and developing Human Resource in the organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Human Resource Development - Concept, Need, Mechanism, HRD as a total system, Principles in designing HRD system

Human Resource Planning - Concepts, Process, Linking HRD with Strategic Planning

Job Design - Concept, Traditional and Modern Approaches, Job Characteristics, Model to Work Motivation, Developing Careers

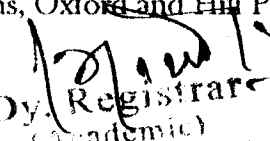
Employee Training and Development - Training Phases, Need Assessment, Establishment of Training, Objectives, Training Methods - On the Job and Off the Job, Lecture, Case, Role Play, Business Games, In Basket, Sensitivity, Syndicate, TA Evaluation of a Training Programme, Designing Training Programme

Employee Empowerment - Concepts and Approaches, Human Resources Audit, Human Resource Accounting, HRIS, Employee Engagement, Quality of Work Life, Talent Management, Emerging Issues in HRPD

Cases

References

1. Edwin B Flippo, Principles of Management
2. Hioy, S Pyars and Leslie W Rue, Human Resource and Personnel Management, Richard D. Irwin Inc.
3. Randell, S Schuler, Effective Personnel Management, West Publishing Company
4. Paul Pigors and Charles A Mayers, Personnel Administration, McGraw Hill
5. Pareek and Rao, Designing and Managing Human Resource Systems, Oxford and Hill Publications.


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Organisational Change and Effectiveness

Code: MGM204

Credits: 04

EOSE Marks: 80

CIA Marks: 20

Objective: This paper will facilitate students to appreciate the role of change as an important variable in the growth and sustainability of organizations and the value of effectiveness of managerial activities of organizations in their contextual setting.

Contents

Change Management -Change Process, Models of Change, Diagnosing Organizational Capabilities for Change, Structure, Systems and People, Change at Organizational Level, Individual Level, Transactional and Transformational Change

Resistance to Change - Reasons of Resistance, Challenges to Change, Dealing with Resistance to Change, Organizational Culture and Change

Managing Technological Change, Developing Man - Machine Synergy, Innovation Models, Diffusion of Innovation, Product and Process Innovation

Organizational Learning -Theories, Embedding Learning Creativity - Concepts, Necessity and Management,

Organizational Effectiveness - Models, Creating and Sustaining Effectiveness

Cases

Reference

1. Anderson and Barker, Effective Enterprises and Change Management, Oxford.
2. French and Bell, Organizational Development, Prentice Hall.
3. Fred Luthans, Organizational Behavior, McGraw Hill
4. Robbins, Organizational Behavior, Prentice Hall.

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E-Business

Subject Code: MGM206
EOSE Marks: 80
CIA Marks: 20

Credits: 04

Objective: The course is designed to expose students to the ever-expanding e-commerce ecosystem. This course will help budding entrepreneurs to understand and help them in setting up of their business ideas with the help of internet. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Introduction to e-Business

Definition of e commerce | e-Commerce versus traditional commerce | Components of the internet | Extranet | Mobile commerce | Components in a mobile network | Models of E-Business (B-B, B-C, C-C, G-C, B-G, G-B, C-G), Types of E-Business (E-Marketing, E-CRM, E-SCM, E-Procurement, E-Commerce), Online Revenue Models, Current Status and Trends in E-Business.

Development and growth of e-Commerce

International e-Commerce | Components of an international e-Commerce strategy | On line shopping | Integrated value chain | On line brokerage

Internet protocol and security

Internet protocols | Security issues in e-Commerce environment | E-Business Architecture and Infrastructure; E-Business Designs | Implementation - E-Business Strategies, Selling on E-Commerce Platforms, Legal Issues, Success stories in E-Business in India and World, Competition in Indian E-Business world (Issues and Strategies)

Procurement


How it works | Types of procurement | Trends in supply chain management

Electronic payment systems

Electronic payment systems | Legal and ethical issues in e commerce | e-Cash | Mobile commerce | mobile payment models

References

1. Brahm Carzer, E-Business, Cengage Learning
2. Chaffey, E-Business and E-commerce Management, Pearson
3. Laudon, E Commerce, Pearson


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Entrepreneurship Management

Subject Code: MGM207

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of students to understand and appreciate the concept of Entrepreneurship as a career option. This subject aims at making students familiar with various dimensions and the process of creating a new venture. It also aims to equip students with knowledge, skill and competencies to develop into an entrepreneur.

Contents

Introduction to Entrepreneurship (Nature, Importance, Drawbacks, Evolution), Entrepreneurial Process, Creativity (concept and process), Innovation, Entrepreneurial Traits and Competences, Types of Entrepreneurs, Role of Entrepreneurship in Society and Economy, Star Model of Entrepreneurship

Idea to Feasibility - Idea and Opportunity identification (Sources, Methods), Feasibility Analysis (Technical, Social, Legal, Economic, Market, Financial, Managerial)

Business Plan - Objective, Features of a Winning Business Plan, Structure of B-Plan

Implementation - Choice of Ownership, Sources of Capital (Equity and Debt financing, Venture Capital, Angel Investor), Financial Management Issues, Operation and Production Issues, Marketing Issues, Guerrilla Marketing Strategies, HR Issues, Information Management and Intellectual Property Rights Related Issues, E-commerce Issues, Quality Management Issues

Growth and Future - Growth and Stabilization Strategies, Managing Competitive Advantage, Institutional Assistance to New Enterprises, Exit strategies, Worldwide patterns observed in Entrepreneurship

Cases

References

1. Zimmerer and Scarborough, *Essentials of Entrepreneurship and Small Business Management*, Prentice Hall of India.
2. Hisrich, Peters, Shepherd, *Entrepreneurship*, McGraw-Hill.
3. David H. Hall, *Entrepreneurship - New Venture Creation*, Prentice Hall of India.

Micro Finance and MSME Management

Subject Code: MGM208

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of managers to understand and appreciate the concept of micro financing and small and medium enterprise management and various dimensions related to the managerial decision making regarding MSMEs. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Introduction to Micro Finance - Meaning, Significance, Challenges in Micro Financing and Social Banking Initiatives, Evolution of Micro Finance, Micro Finance Institutions in India, Micro Finance Models, Financial Inclusion - Meaning, Significance, Need, Challenges

Strategies and Application - Products and Services in Micro Financing, Models of Micro Financing, Innovative Strategies in Micro Financing, Informal Money Lenders in India, Institutional Credit System in India, Policy initiatives to align Banking Services to Socio-economic Objectives, Subsidy Linked Credit Programs in India, Without Subsidy Initiatives by Government, Overview of Lead Bank Scheme and Service Area Approach, Risk Management in Micro Financing Businesses

Self Help Groups in Micro Financing - Role, Significance, Formulation, Functioning

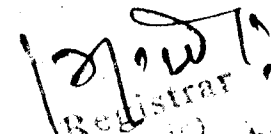
MSME Management - Definition of Micro, Small, Medium and Micro Enterprises, Salient features of MSME Act 2006, Significance, Challenges, Growth and Performance of MSMEs in India, Sickness in MSMEs (Criteria, Causes, Symptoms, Remedies), Government Policies, Incentives and Institutional Support for MSMEs, Khadi and Village Industries, Industrial Policy of Government of Rajasthan

Cluster Development - Meaning, Evolution, Types and Characteristics, Government Policy for Cluster Development, Financial and Promotional Incentives, Problems and Prospects, Cluster as tool of holistic development, Success Stories

Cases

References

1. V. Neelamegam, Micro Finance, Vrinda Publication
2. Uma Narang, Micro Finance in India, LAP Lambert
3. Jayamal Ud-Din Ahmed, Micro Small and Medium Enterprises in India, New Century Publication


Dr. Registrar
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University of Rajasthan
Jaipur

Ethics, Corporate Governance and CSR

Subject Code: MGM209

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of managers to understand and appreciate the concept of Ethics, Corporate Governance and Corporate Social Responsibility and various dimensions related to being a socially responsible organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Overview of Business Ethics - Concept of Ethics, Meaning of Business Ethics, Nature of Business Ethics, Significance, Arguments For and Against, Framework for Ethical Decision Making, Factors Affecting Business Ethics (Individual Factors, Organizational Factors, Environmental Factors)


Corporate Governance - Meaning, Accountability Issues, Current Context of CG in India, Objectives and Strategies, Role of Independent Directors, Board Structure, Performance Evaluation of Board, Training and Development of Directors, Accounting Standards & Accounting Disclosures

Corporate Social Responsibility - Concept of CSR, Significance, Good Corporate Citizenship, Balancing Profits and Social Objectives, Strategic CSR

Cases

References

1. SK Chakrabarti, Management by Values Towards Cultural Congruence, Oxford Univ. Press
2. Hill, Charles, An Integrated Approach to Strategic Management, Cengage Learning
3. Ackerman, The Social Challenge to Business


Dr. Registrar
(Academic)
University of Rajasthan
Jaipur

Community Based Organization Management

Subject Code: MGM210

EOSE Marks: 80

CIA Marks: 20

Credits: 02

Objective: The course has been designed keeping in mind the specific need of managers to understand and appreciate the concept of Community Based Organizations and Non-Government Organizations and various dimension of for managerial decision making in such an organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Introduction to NGOs and CBOs - Concept , Functions , Significance , Functional Challenges , Formation of an NGO (Trust, Societies and Company), Current Status and Trends of NGOs and CBOs in India, Volunteering (Meaning, Significance)

Financial Management - Resource Mobilization, Major Funding Agencies in India - Government and Private Corporate Funders, Pre-Requisites for Fund Raising, Tax Advantages, Rules Regarding Receiving Funds From Foreign

HRM for CBOs - Unique HR challenges for NGOs, Managing Paid and Unpaid Volunteers, Developing Systems Oriented Organization, Leadership Role in NGOs

Social Marketing - Conducting Community Meetings and Community Mobilization, Designing Campaigns, IEC Activities, Advocacy for the Cause

Project Formulation and Documentation for CBOs and NGOs

References

1. Anita Abraham, Formation and Management of NGOs, Universal Law Publishing
2. David Peters, Systems Thinking for Social Change, Chelsea Green Publishing
3. Sushil Mahajan, NGO Management, Pearl Books

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UNIVERSITY OF RAJASTHAN
AJMER

Corporate Fiscal Administration

Subject Code: MGM211

EOSE Marks: 80

CIA Marks: 20

Credits: 02

Objective: This paper will help students to Indian Fiscal Administration as an essential input for understanding the functions of corporate and Industrial sector along with overall fiscal administration.

Contents

Corporate Fiscal Administration – Concept, Indian Fiscal Policy since Economic Liberalisation

Principles of Taxation, Taxation and Economic Growth

Reforms in Fiscal Administration and Review of select committee report, Financial sector reforms and Fiscal Challenges


Concept and application of GST in India, Challenges and Opportunities

Indian Federal Finance and key recommendations and ninth and tenth finance commission, Sharing Direct Tax

Public Debt Management, Fiscal Resource augmentation - Challenges

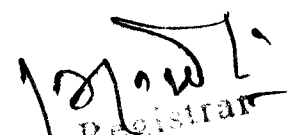
References

1. SK Singh, Public Finance, Sultan Chand
2. JMM Kennedy, Public Finance, PHI
3. A Ghosh, Public Finance, PHI


Dy. Registrar
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JAIPUR

Master of Business Administration

Semester III


Dr. Registrar
(Academic)
University of Rajasthan
JAIPUR

Strategic Analysis and Choice

Subject Code: MGM301

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objectives: The Learning objectives of the course are to develop an integrated perspective about an organizations functioning and to explain the competitive and the internal environment of business. This paper will also develop skills to analyse the competitive and internal environment and to explain the concept of corporate strategy. It will also facilitate students to analyse the different strategies within a given context.

Contents

Evolution of the Business policy Course, Strategic Decisions- Nature, impact and Risk, Board level decisions, Strategic Intent, Objectives and Strategies of an organization.

The external and the internal context of Strategic decision making - PEST Analysis; Competitive advantage: Resources, Capabilities and competences, Resource based view of the firm, implications of the resource based view, VRIO framework, Applying the VRIO framework, Creating and capturing Value in the Value Chain

The Strategy Hierarchy - Corporate level Strategies-Vertical integration and sustained competitive advantage, Corporate diversification- routes to diversification, Diversification in Indian context


Business Strategies: Generic Cost, Differentiation and Focus strategies Cost Leadership Differentiation and sustained competitive advantage, Competitors and complementors in business strategy.

Globalization as a strategy; Strategic gains from Globalization; The challenges of globalization strategy- challenge of local responsiveness, of global efficiency and of learning.

Cases

References

1. Saloner, Garth Andrea Shepard and Joel Podolny, Strategic Management(2001), John Wiley; New York
2. Gupta Vipin, Kamala Gollakota and R Srinivasan, Business Policy and Strategic Management: Concepts and Applications, Prentice Hall India
3. Barney and William, Strategic Management and Competitive Advantage, 4th Ed., Prentice Hall India
4. Wheelan, Thomas and J David Hunger: Concepts in Strategic Management and Business Policy. Pearson India


By Registrar
(Academic)
University of Rajasthan
Jaipur

Project Formulation and Implementation

Subject Code: MGM302

Credits: 04

EOSE Marks: 80

CIA Marks: 20

Objective: The course has been designed keeping in mind the specific need of managers to understand and appreciate the concept of Project Formulation and Implementation. It will also deal with various dimensions related to the managerial decision making regarding managerial projects. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Project Meaning, Importance and Scope, Types of Projects, Project Life Cycle, Identification of Project Opportunities, Generation and Screening of Project Ideas, Market, Technical and Economic Feasibility Studies.

Project Appraisal - Concepts, Phases of Capital budgeting, Levels of Capital budgeting, Estimation of Project Cash flows, Payback period, NPV of inflows, IRR concepts, Risk Analysis (Economic, Industry Risk, Company, Financial), Sensitivity Analysis, Social Cost-Benefit Analysis, Shadow Price of Investment, Social Rate of Discount, Value of Foreign Exchange


Work Breakdown Structure, Contractor Schedule, PPBS, Accomplishment Cost Procedure, Project Training and Control, Project Information System.

Implementation and Control, Monitoring and Control of Project Cost and Time, Project Audit, Ex-Post Evaluation.

Cases

References:

1. Erik Larson and Clifford Gray, 'Project Management: A Managerial Process', McGraw Hill
2. Harold Kerzner, 'Project Management: A System Approach to Planning, Scheduling and Controlling', Wiley publications
3. R. Gupta, 'Project Management', Prentice Hall India
4. Bhalla, V. K. (2008). Financial management and policy. New Delhi: Anmol Publications.
5. Chandra, P. (2009). Projects: Planning analysis, selection, financing, implementation and review (7th ed.). New Delhi: Tata McGraw Hill.
6. Clifford, E. G., & Larson, E. W. (2007). Project management the managerial process. New Delhi: McGraw-Hill.


Dy. Registrar
(Academics)
University of Rajasthan
Jaipur

Summer Internship Project

Subject Code: MGM303

EOSE Marks: 80

CIA Marks: 20

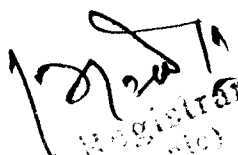
Credits: 04

Objective: The Summer Internship has been designed keeping in mind the specific need of managers to appreciate the practical on hand experience and exposure of corporate working. It will facilitate students to correlate the theory with practice in a real time world. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

At the completion of the first two semesters of the first year and before the commencement of the third semester in the second year the student is required to undergo summer training in an organization for 06-08 weeks. A report based on the summer training shall be submitted within four weeks from the commencement of the third semester as approved by the Institute. Report must be an original work. Each student will be attached with one internal project guide, with whom they shall be in continuous touch during the training period.

Evaluation

The project report will be evaluated by an external examiner appointed by the University. The evaluation will be through Viva Voce on components like Content, Presentation, Analysis and Feedback from the Organization.


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Performance Appraisal Summer Training

Student's Name: _____

You are requested to provide your opinion on the following parameters:

Outstanding
A

Good
B

Satisfactory
C

Unsatisfactory
D

1. Technical knowledge gathered about the industry and the job he/she was involved.
2. Communication Skills : Oral / Written / Listening skills
3. Ability to work in a team
4. Ability to take initiative
5. Ability to relate theoretical learning to the practical training
6. Creativity and ability to innovate with respect to work methods & procedures
7. Ability to grasp new ideas and knowledge
8. Presentations skills
9. Documentation skills
10. Sense of Responsibility
11. Acceptability (patience, pleasing manners, the ability to instill trust, etc.)
12. His/her ability and willingness to put in hard work
13. In what ways do you consider the student to be valuable to the organization?
Consider the student's value in term of:
 - a. Qualification
 - b. Skills and Abilities
 - c. Activities/ Roles performed
14. Punctuality

[illegible]

Any other comment _____

Assessor's Overall Rating: _____

Assessor's Name: _____

Designation: _____

Organization Name and Address:

Email id: _____

Contact No:

By Registrar
(Udumalag)

Global Business Management

Subject Code: MGM304

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of managers to understand and appreciate the concept of Global Business and various dimensions related to managing cross border businesses. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Introduction to global Business – Globalization (concept, evolution, Drivers, Challenges, Opportunities) Stages of global involvement- EPRG framework. Global trends and Economic Systems.

Balance of Payments International Trade Theories. Instruments of Trade Policy and Trade Barriers.

International Economic Institutions – GATT, WTO, IMF, World Bank, UNCTAD. Global Monetary System – Exchange rate mechanism. Floating Exchange Rate mechanism.

Regional Economic Integration and groups – EU, NAFTA, ASEAN, SAARC, BRICS, APEC.

Issues in Global Marketing – Product decisions, Pricing decisions, Advertising and Promotion, Global distribution and logistics decisions. Global market research.

Global Market selection and entry strategies. Global Production Decisions. Global HRM decisions.


India as an emerging market. Evolution of India's economic development – pre-liberalization and post liberalization phases. Trends in India's foreign trade.

References

1. Charles Hill and Arun Jain, 'International Business', McGraw-Hill
2. John D. Daniels and Lee H. Radebaugh, 'International Business', Pearson
3. Rakesh Mohan Joshi, 'Global Business Management', Oxford Press.
4. Francis Cherunilam, 'International Business', PHI.
5. Warren J. Keegan, 'Global Marketing', Pearson.
6. Cateora, Graham and Salwan, 'International Marketing Management', McGraw Hill.
7. Warren Keegan – Global Business Management
8. Charles Hill & Arun Jain, International Business

Master of Business Administration

Semester IV


By Registrar
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University of Rajasthan
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Strategic Execution

Subject Code: MCM401

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objectives: The learning objectives of the course are to describe the nature and scope of strategy implementation and to analyse the interrelationship between the various elements of implementation. It will also help students to learn the implementation of strategies as an integrating framework for multi-level multifunctional changes.

Contents

Strategy Implementation - Nature, Scope and Focus, Implementation of strategy through Structures, Impact of global strategy on structure, Functional Strategies.

Leadership and Strategy Implementation - Leaders as strategic change agents, Process implementation, Role of motivation, Communication in Implementation, Feedback loops

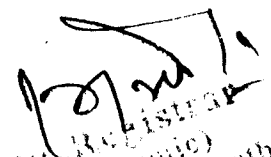
Implementing Strategic Change - The role of organizational culture in embedding change, Culture as intervening variable for innovation, Successful Mergers and Acquisitions, Quality and Productivity programs

Balanced Score Card and strategy maps as tools of implementation

Cases

References

1. Saloner, Garth Andrea Shepard and Joel Podolny, Strategic Management(2001), John Wiley, New York
2. Gupta Vipin, Kamala Gollakota and R Srinivasan, Business Policy and Strategic Management: Concepts and Applications, Prentice Hall India
3. Wheelan, Thomas and J David Hunger: Concepts in Strategic Management and Business Policy, Pearson India
4. Mascarenhas, Oswald,A.J. Business Transformation Strategies: The Strategic Leader as Innovation Manager, Sage Publishing, New Delhi.
5. Henry Anthony, Understanding Strategic Management, Oxford University Press


Dr. Rajeshwar
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University of Rajasthan
Jaipur

Business Legislation and Regulation

Subject Code: MGM402

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of managers to understand and appreciate the concept of Business Law and various dimensions related to Regulations for businesses. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Indian Contract Act 1872 - Offer, Acceptance, Agreement, Contract, Capacity to Contract, Consideration, Performance of Contract, Breach of Contract, Remedies to Breach of Contract, Quasi - Contract, Indemnity and Guarantee

Companies Act 2013 and Mercantile Acts - Meaning, Features of Company, Types of Companies, Formation of a Company, MOA and AOA, Directors, Meetings, Winding Up
Sales of Goods Act and Negotiable Instrument Act


Other Acts - Laws related to Women Protection at Workplace, Basics of Cyber Laws, Basics of Intellectual Property Right Act, RTI Act

Regulatory Framework in India - Concept of Regulatory Organizations, Objectives and Functions of RBI, IRDA, SEBI, TRAI, PFRDA, FSDC, Competition Commission, NGT

Cases

References

1. Avatar Singh, Mercantile Law, Eastern
2. SK Tuteja, Business Law for Managers, Sultan Chand
3. RL Nowlakha, Mercantile Law, RBD


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Indian Socio Economic Policies and Practices

Subject Code: MGM403

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of managers to understand and appreciate various Indian Socio Economic Policies and Practices and various dimensions related to Indian Social and Economic Trends and Government Schemes having implications on managerial decisions. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Indian Economic Structure - Growth and Milestones, Infrastructural Challenges in India (Transportation, Communication, Energy, Health, Education), Unemployment and Occupational Structure, Economic Reforms in India (Banking and Financial Reforms, Tax Reforms, Industry Reforms, Challenges and Opportunities)


Indian Socio Economic Policies - Salient feature of Fiscal Policy, Salient features of Monetary Policy, Introduction to Government Flagship Programs (MNREGA, Jan Dhan Yojna, Make in India, Digital India, Stand Up India - Start Up India, Clean India Program, Skill India Program)

Indian Socio Structure - Understanding of Indian Social Structure, Basic Characteristics of India Society, Understanding Indian Mind-Set, Cultural Diversity, Key Issues in Rural Society and Market, Population, Poverty, Literacy, Indian Demographics, Major Social Reforms in India, HDI

Cases

References

1. Naseem Azad, Social and Economic Problems in India, Ramesh Publishing House
2. SK Goyal, India's Social Milieu, Academic Foundation
3. Magazines (Economic and Political Weekly, Frontline, India Today, Others) and Newspapers
4. Nissam, India : Economic, Political and Social Issues, Nova Science Publisher


Dy. Registrar
Academics
University of Rajasthan
JAIPUR

Multi-Disciplinary Research Project

Subject Code: MGM404


EOSE Marks: 80

CIA Marks: 20

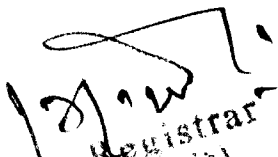
Credits: 04

Objective: This paper provides opportunities to students to work on different dimensions of business and industry in real world and will facilitate students to undertake unforeseen situations with knowledge, skill and competences.

The project shall be submitted by the student under the guidance of a research supervisor to be allotted by the Institute and will be evaluated by an external examiner appointed by the University.


By Registrar
(Academic)
University of Rajasthan
Jaipur

Specialization (Functional) Elective Papers
Marketing Area


Dy. Registrar
(Academic)
University of Rajasthan
Jaipur

Consumer and Organizational Buying Behavior

Subject Code: MGME01

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of marketing managers to understand and appreciate the concept and application of Consumer and Organizational Buying Behavior and various dimensions and managerial implication of consumer and organizational buying behavior in an organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Content

Consumer Behavior


Concept, Diversity of Consumer Behavior, Characteristics of Indian Consumers, Consumer Needs, Motives (Positive and Negative, Rational and Emotional), Consumer Relevant Reference Groups (Opinion Leaders, Family Decisions Making and Consumption Related Roles, Family Life Cycle, Social Class and Consumer Behavior, Influence of Culture on Consumer Behavior), Consumer Decision Making Models, Post Purchase Behavior (Consumer Satisfaction Concept and Models - *Expectancy Disconfirmation, Desires Congruency Model, Equity Theory, Attribution Theory, Cognitive dissonance*, Consumer Delight, Consumer Complaint Behavior), Consumerism (Evolution and Effects)

Organizational Buying

Concept, Comparison with Consumer Buying, Economic Influence, Political Influence, Legal Influence, Supplier's Influence, Technology Influence, Customer Influence, Government Influence, Labor Influence, Analyzing Buyers' Strengths and Negotiation Capabilities, Organizational Influences on Buying Behavior (Buying Roles, Market Response, The Organizational Buying Decision Process, Buying Tasks, Interpersonal Influencing in Organizational Buying)

Reference

1. Schiffman and Kanuk, Consumer Behaviour, Prentice Hall of India
2. Assael, Consumer Behaviour and Marketing Action, Ohio
3. Mowen and John, Consumer Behaviour, Macmillian


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Integrated Marketing Communication

Subject Code: MGME02

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of marketing managers to understand and appreciate the concept and application of integrated marketing communications and various dimensions associated with IMC for an organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Content


Introduction - Concept, Communication Models, Process, Importance, Advantages, Partners in IMC

Elements of IMC - Advertising (Classification, Types, Advertising Appropriation, Advantages and Limitations), Sales Promotion (Types, Relationship between Sales Promotion and Advertising), Publicity and PR (Types, Relationship with Advertising), Personal Selling, Direct Marketing, Interactive and Digital Marketing, Community Relations, Industrial Relations, Government Relations, Employee Relations, Events, Trade Fairs and Exhibitions, Successful IMC Campaigns

Developing IMC Campaign - IMC Message Design, Elements Integration Strategies, Creative Side of IMC, Ethics and Social Responsibility in IMC campaigns, Evaluating Marketing Communication Programs

References

4. Belch and Belch, Integrated Marketing Communications, McGraw Hill
1. Aaker David, Advertising Management, PHI
2. Sirgy and Don, Integrated Marketing Communications, Cengage


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Retail and Sales Management

Subject Code: MGME03

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of marketing managers to understand and appreciate the concept and application of Retail business management and various dimensions and managerial implication of consumer and organizational buying behavior in an organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Content

Marketing Channels - Definition, Importance, Functions of Marketing Channels, Types, Decisions in Channel Management, Wholesaling (Concept, Importance, Functions, Trends), Retailing (Concept, Importance, Functions)


Retail Management - Retail Formats, Retail Location, Store Design and Layout, Store Image, Store Façade, Store Administration (Floor Space Management, Managing Store Inventories and Display), Merchandising (Concept, Importance, Functions, Steps in Merchandising Planning), Category Management (Definition, Process), Private Label Brands, Planning Retail Communication (Managing In-Store Promotions and Events)

Integrated Marketing Channels - Channels for Consumer Goods, Industrial Goods and Services (Horizontal, Vertical, Multichannel Marketing Systems), Channel Management (Channel Selection, Channel Conflicts and Resolution, Channel Performance Evaluation), Technology in Distribution (Bar Coding, RFID, Electronic Payment Systems) | E-tailing

Sales Management - Introduction, Objectives, Nature, Responsibilities, Approaches to Personal Selling, Selling and Negotiation Skills, Process of Personal Selling, Organization Design and Staffing, Sales Planning, Time and Territory Management, Managing Sales Force, Automation in Personal Selling

References

1. Barry Berman, Retail Management, Pearson
2. Bajaj and Tuli, Retail Management, Oxford
3. Levy and Weitz, Retailing Management, McGraw Hill
4. Still, Cundiff, Govani, Sales Management, Pearson


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Supply Chain Management

Subject Code: MGME04

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of marketing managers to understand and appreciate the concept and application of supply chain management and various dimensions and managerial implication of SCM for an organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Content

Introduction - The Supply Chain Revolution, Generalized Supply Chain Model, Supply Chain and Networks, Extended Organization, Logistical Value Proposition, Logistical Operating Arrangements, Supply Chain Synchronization

Supply Chain Application - Procurement and Manufacturing (Quality Imperative, Procurement-Manufacturing-Logistical Interfaces), Information Technology Framework (Information System Functionality, Comprehensive Information System Integration, Communication Technology, ERP Implementation, ERP System Design, Supply Chain Information System Design), Inventory (Inventory Functionality and Definitions, Inventory Carrying Cost, Planning Inventory, Managing Uncertainty, Inventory Management Policies and Practices), Transportation (Transport Functionality, Principles and Participants, Transportation Service, Transportation Economic and Pricing, Transport Administration, Documentation), Warehousing (Strategic Warehousing, Warehousing Operations, Warehousing Ownership Arrangements, Warehouse Decisions), Packaging And Materials Handling (Packaging Perspectives, Packaging For Efficient Materials Handling)

Operational Integration - Global Strategic Positioning, Global Supply Chain Integration, Supply Chain Security, International Sourcing, Network Integration (Enterprise Facility Network, Warehouse Requirements, Total Cost Integration), Relationship Development and Management

References

1. Chopra and Kalra, Supply Chain Management, Pearson
2. Sople, Supply Chain Management, Pearson
3. Khalid Zaidan, Supply Chain Management, Createspace

12/10/21
Registrar
(Signature)
Dr. J. S. Jadhav

Services Marketing

Subject Code: MGMF05

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of marketing managers to understand and appreciate the concept and application of marketing services specifically and various dimensions and managerial implication of services marketing for an organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.


Content

Marketing of Services Introduction, Overview of Different Service Sectors, Marketing of Banking Services, Marketing in Insurance Sector, Marketing of Education Services, Marketing of Tourism and Airlines, Tourism marketing, Airlines marketing, marketing of Hospitality Services, Healthcare Marketing, Social Service by NGOs, Marketing of Online Services, Marketing of Professional Services

Emerging Issues in Service Marketing Introduction, Strategic approach in Services Marketing, Service Marketing in e-Commerce and e-Marketing, and Telemarketing Services, Service Marketing Research for Global Markets and Rural Markets, Innovations in Services Marketing, Ethical Aspects in Service Marketing

References

1. Services Marketing, Rao, Pearson Education.
2. Services Marketing, Concepts & Cases, Bhattacharjee, Excel Books.
3. Service Management, Operations, Strategy, Information Technology, Fitzsimmons & Fitzsimmons, McGraw Hill.
4. Marketing of Services, Hoffman & Bateson, Cengage Learnings.
5. Services Marketing, Zeithaml and Bitner, McGraw Hill.
6. Services Marketing, Lovelock and Chatterjee, Pearson.
7. Services Marketing, Nargundkar, McGraw Hill.


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Strategic Product & Brand Management

Subject Code: MGME06

Credits: 04

EOSE Marks: 80

CIA Marks: 20

Objective: The course has been designed keeping in mind the specific need of marketing managers to understand and appreciate the concept and application of brand as a source of competitive advantage and various dimensions and managerial implication of effective brand management for an organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Content

The Marketing Process. Product – meaning, levels, classification

Product line decisions. Distinction between products and services. Managing products through PLC. PLC and product profitability.

Product development – idea generation-concept development-business strategy & commercialization.

Brands – meaning-strategies and brand positioning.

Building brands- brand elements and brand value. Building marketing programs to build brand equity.

Branding decisions. Brand associations & co-branding. Brand equity. Brand equity management. Brand equity measurement. Sources of brand equity. Strategies for growing and sustaining Brand equity.

Brand Recall.

References

1. Keller, Parameshwaran and Jacob, Strategic Brand Management, Pearson
2. Kirti Dutta, Brand Management, Oxford
3. Harsh Verma, Brand Management, Pillappa
4. Philip Kotler - Marketing Management
5. David Aaker Building Brands
6. Kevin Keller - Strategic Brand Management
7. Cravens & Piercy - Building Brands

12/12/21

Rural Marketing

Subject Code: MGME07

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of marketing managers to understand and appreciate the concept and application of marketing of agricultural products and rural marketing. It aims at making students familiarize with various dimensions and managerial implication of rural and agricultural marketing for an organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Content

Overview of Rural Markets and Rural Marketing - Rural Economy in India, Rural Marketing (Meaning, Scope, Characteristics of Rural Markets, Taxonomy of Rural Markets, Changing Patterns, Attractiveness of Rural markets, Challenges and Constraints)

The Rural Consumer - Classification and Characteristics of Rural Consumers, Unique Rural Consumer Behavior, Innovation Adoption, Factors Influencing Rural Consumer Behavior, Rural Shopping Habits and Growing Consumerism, Rural Market Segmentation, Targeting, Positioning

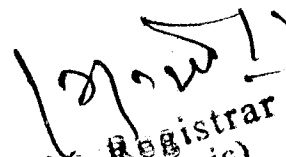
Strategies for Indian Rural Marketing - Product Strategy, Rural Branding, Product Life Cycle, Rural Pricing, Rural Distribution, Rural Communication Mix

References

1. Kashyap, Rural Marketing, Pearson
2. Rais Ahmed, Agriculture and Rural Marketing, Regal
3. Ramkishan, Rural and Agriculture Marketing, Jaico

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Dr. Registrar
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Specialization (Functional) Elective Papers
Human Resource Area


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Employee Relationship Management

Subject Code: MGMF01
EOSE Marks: 80
CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of human resource managers to understand and appreciate the concept and application of Employee Relationship Management and various dimensions of such decisions in an organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Content

Labor Relations - Meaning, Objectives, Importance, Approaches to Industrial Relations (Unitary, Pluralistic, Marxist), Role of Three Actors to Industrial Relations - State, Employer & Employees, Causes for poor IR, Developing sound IR, Ethical approach to IR, Idea of Trusteeship (Principles, Features), Code of Conduct, Characteristic Features of IR in India, Law on IR, Collective Bargaining (Meaning, Importance, Union Bargaining Process), Productivity Bargaining

Trade Unions - Meaning, Objectives, Types, Functions, Theories of Trade Unions, Trade Union Law, Trade Unionism in India, Issues and Problems, Employees Associations, Managerial Unionism


Industrial Disputes - Definition, Causes, Types, Prevention, Settlement, Industrial Dispute Act (Conditions to Strikes, Lock-outs, Lay-off & Retrenchment and Laws relating to Standing Orders), Grievance & Disciplinary Procedure, Labor Court, Industrial Tribunal, National Tribunal, Role of Judiciary and its Impact, ILO

Career Management and Quality Circles - Career Planning, Factors affecting Career Choices, Career Stages, Career Anchors, Need for Career Planning, Individual and Organizational Problems in Integration, Integration Process, Quality Circles (Meaning, Objectives, Process)

Cases

References

1. Elizabeth Aylott, Employee Relations, Kogan
2. Singh and Kumar, Employee Relations Management, Dorling Kindersley
3. Paul Blyton, Dynamics of Employee Relations, Palgrave Macmillan


Dy. Registrar
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JAIPUR

Manpower Planning and Management

Subject Code: MGMF02

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of human resource managers to understand and appreciate the concept and application of acquiring and developing human resource and various dimensions of such decisions in an organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Manpower Planning - Introduction, Rationale, Process, Factors affecting MRP

Manpower Planning - National, Corporate, Unit

Manpower Planning and Strategic Planning

Manpower Forecasting - Process, Linking business process planning with Manpower planning, Manpower demand, Forecasting techniques - Market Analysis, Replacement Analysis, Trend analysis, Expert Forecast, Delphi, Nominal group, Regression analysis, Wastage Analysis, Redeployment, Work Analysis.


Manpower Supply, Simple and Change Models Markov Analysis.

Management Succession - Succession Planning and Replacement, Career Planning, Performance Planning, Potentials Appraisal

Cases

References

1. Werner and Randy, Human Resource Development, Cengage
2. Ashok Kumar, Human Resource Development, New India Publishing
3. Gareth Roberts, Recruitment and Selection, Jaico


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Performance Appraisal and Compensation Management

Subject Code: MGMF03

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of human resource managers to understand and appreciate the concept and application of performance appraisal and compensation management for employees and various dimensions of such decisions in an organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Performance Management - Definition, Objectives, Need for Appraisal, Essentials, Problems, Methods (Traditional and Modern Methods- Graphic Rating-Scale, Straight Ranking Method, Paired Comparison Method, Critical Incident Method, Group Appraisal, Confidential Methods, Behavioral Anchored Rating Scale (BARS), Assessment centers)

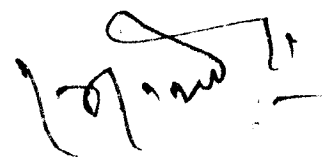
Wage and Salary Administration - Nature, Scope, Process, Factors Influencing, Wage (Theories, Types), Incentives (Definition, Types, Individual Incentives, Organization Wide Incentives, Non-financial Incentives, Fringe Benefits)

Incentives and Retirement Plans - Basic Pay, Calculation of Total Compensation Package (Provisions for Dearness Allowance, Various Methods of Compensating Cost of Living), Executive Compensation Plan, Retirement Plan and VRS

Planning For Improved Competitiveness - Diagnosis and Bench Marking, Obtaining Commitment, Determination of Inter and Intra-Industry Compensation Differentials, Internal and External Equity in Compensation Systems
Cases

References

1. Goel D, Performance Appraisal and Compensation Management, PHI
2. Jordan, Performance Appraisal, Harvard Press
3. Dipak Bhattacharya, Compensation Management, Oxford



Knowledge Management and Learning Organization

Subject Code: MGMF04

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of human resource managers to understand and appreciate the concept and application of Knowledge Management and Learning Organizations and various dimensions of such decisions in an organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Learning Organization - Concept of Learning Organization, Need for Learning, Organizational Learning: A Capabilities-Based View, Learning Tools and Techniques (Systems Thinking, Benchmarking and Process Mapping), Measuring Learning: The Intellectual Capital, Architecting a Learning Organization

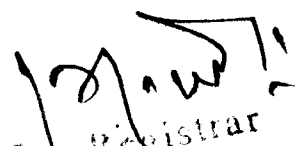
Knowledge Management- Introduction, Meaning of Knowledge, Components (Data, Information, Knowledge, Wisdom), Organizational Knowledge Mapping Techniques, Knowledge Life Cycle, Value of Knowledge, Global Knowledge Economy, Knowledge-Based Competition

Strategies and Application - Knowledge-Creation and Acquisition Processes, Developing Knowledge Management Framework, Knowledge Management Systems, KM Strategies, Knowledge and Culture, Knowledge Measurement (Framework and Techniques), Implementation Barriers, Recent Tools in Knowledge Management and Intelligent Support Systems, Intellectual Capital

Cases

References

1. Carla O'Dell and Elliott, Knowledge Management, McGraw Hill
2. Shelda, Knowledge Management, Wiley
3. The Learning Organisation, The Economist Intelligence Uni, Orient Longman


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Central Institution
GATEWAY

Strategic HRM

Subject Code: MGMF05

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of human resource managers to understand and appreciate the concept and application of Human resource management to gain competitive advantage and various dimensions of such decisions in an organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Introduction- Meaning, Need, Importance, Linking HR Strategy with Business Strategy, Strategizing HR Processes (Recruitment and Retention, Training and Development, Performance Appraisal and Compensation Management), Gaining Competitive Advantage through HR, VRIO Framework

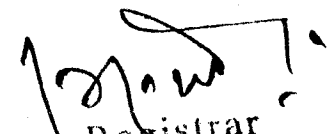
Manifestation of HR Strategies - HR and Change Management, HR and OD Interventions (General OD Competencies, OD Skills, Designing OD Interventions - *Personal, Team, Intergroup and Systems*, Evaluation, Future of OD), Human Side of Mergers and Acquisitions

Evaluating the HR Function - Scope, Importance, 5 C Model, HR Scorecard, Challenges in Evaluating HR Impact

Cases

References

1. Jeffrey, Strategic Human Resource Management, Cengage
2. Tanuja Agarwal, Strategic Human Resource Management, Oxford
3. Greer, Strategic Human Resource Management, Pearson


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Counseling Skills for HR Managers

Subject Code: MGMF06

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of human resource managers to understand and appreciate the concept and application of counseling and various dimensions of such activities in an organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

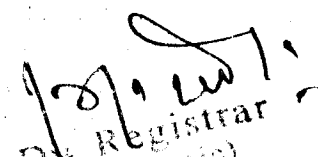
Introduction - Meaning, Significance, Features of Good Counseling, Historical Evolution, Approaches to Counseling (Psychoanalysis, Behaviorism, Humanism), Objectives, Process of Counseling (Beginning to Termination to Follow Up), Counseling Knowledge, Skills and Attitude, Dimensions of Counseling, Basics of Counseling

Organizational Application - Changing Behaviors, Techniques of Counseling, Role Conflicts of Managers and Counseling, Application of Counseling in Specific Organizational Situations (Dealing with Problem Subordinates, Performance Management, Absenteeism, Employee Exit, Employee Retention, Stress Management through Counseling, Change Management, Alcoholism and Other Behavioral Problems), Ethics in Counseling, Evaluation of Counseling

Cases

References

1. Kavita Singh, Counselling Skills for Managers, PHI
2. Premvir Kapoor, Counselling and Negotiation Skills for Managers, Dream-tech Press
3. Alok Satsangi, Counselling Skills for Managers, Laxmi Publishers


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AJMER

International HRM

Subject Code: MGMF07

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of human resource managers to understand and appreciate the concept and application of counseling and various dimensions of such activities in an organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Introduction to IHRM - Meaning, Scope, Reasons for going global, Difference between domestic HRM and IHRM, Forces of change and Global work environment, Challenges

Organizational dynamics and IHRM, Role of culture in IHRM, Culture and employee management issues, Organization processes in IHRM, Linking HR to international operations

Issues and Challenges in International Recruitment, Selection and Transfers, International Training and Development


Issues and Challenges in International Performance Appraisal and Compensation Management

Global HR Issues - Re-entry and career issues, Standardization and adaptation of work practices, HR implications for language standardization, HRM in host country context, Monitoring HR practices of Host subcontractor

Cases

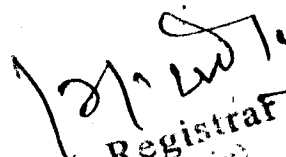
References

1. Peter J Dowling and Danice E. Welch, International HRM, Cengage Learning
2. Ashwathappa, International HRM, TMH


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Specialization (Functional) Elective Papers

Finance Area


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Investment Management and Securities Analysis

Subject Code: MGMG01

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of finance managers to understand and appreciate the concept and application of Investment management and security analysis and various dimensions of such decisions and analysis in an organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Investment - Nature and scope of investment analysis, Elements of Investments, Avenues of investment, Risk & Return, Savings and Investment in India- Types, Trends and Lesson

Capital Market - Products, Regulations, Trends in Primary and Secondary market, Role of Intermediaries and Share Market Index

SEBI guidelines on public issue, Terminology, Private Placement, Bid and Book Building, Trading Mechanism, Listing of security, Depository & Depository Participations

Technical Analysis, Fundamental Analysis - Theory, Review and Assessment

Recent Developments in Indian Stock Market, Investors Protection

Introduction to Portfolio Management, Markowitz, EMH, APT, Evaluation of Portfolio Model

Cases

References

1. P. Pandian, Security Analysis and Portfolio Management
2. Cheney and Muses, Fundamentals of Investments, Paul, New York
3. Madhumati and Rangrajan, Investment Analysis and Portfolio Management

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Marketing of Financial Services

Subject Code: MGMG02

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of finance managers to understand and appreciate the concept of Financial Services and various dimensions of managing financial decisions in an organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Concept, Nature and scope of financial services; Regulatory framework for financial services; Recent trends in marketing of financial services

Marketing of Capital Market Products, Pricing Strategies, Marketing and Branding of Banking and Insurance Products

Financial Services- Leasing and Hire Purchase; Debt Securitization; housing finance; Credit Rating; Credit cards- Process, Evaluation and Documentation

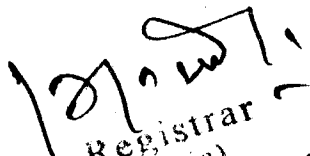
Marketing and Types of Mutual funds; Comparison, Pricing and Promotion Strategies, Creation of Financial Brand, Venture Capital

Evaluation of M&A and other Strategic Options

Cases

References

1. MY Khan, Financial Services, Tata McGraw
2. Agashe, Financial Services Market and Regulations, Himalaya


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Behavioral Finance

Subject Code: MGMG03

Credits: 04

EOSE Marks: 80

CIA Marks: 20

Objective: The course has been designed keeping in mind the specific need of finance managers to understand and appreciate the concept of Behavioral Financial and various dimensions of Behavioral Finance in managerial decision making in an organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Concepts of Behavioral Finance, Assumptions, Types of Investors, Elements and Causes of Behaviors, Factors Affecting Behavioral Finance, Type of Behavioral Biases- Over Confidence, Loss Aversion, Anchoring, Diversification, Disposition Effect, Herding, Optimism, Narrow Framing.


Conventional Finance V/s Behavioral Finance, Theories of Behavioral Finance- Human Informatics, Processing Arbitrage, EMH, Anomalies

Behavior Finance & Indian Investors, A real time assessment of investors regarding their behavior during bullish, bearish, near miss opportunity and alternate opportunity

Cases

References

1. MM Sulphey, Behavioural Finance, PHI
2. William Forbes, Behavioural Finance, Wiley
3. Suchita Singh and Shilpa, Behavioural Finance, Vikas Publishing


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Financial Institution Management

Subject Code: MGMG04

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of finance managers to understand and appreciate the concept of Rural Finance and various dimensions of managing financial products specific to rural areas. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

The Role and Importance of Financial Institutions in India, Types, Policy, Performance
Development Banks, Role of Development Banking in Industrial Financing in India
Strategy and Growth Assessment

Banking Law and Regulation, Provisions of RBI's Operations, Monetary Policy, Management and Operations of Financial Institutions in India

Evaluation of Investment Banks in India, Role of Financial Institutions in Social Development of India
FI, FHS, Funding by VC

Cases

References

1. Bhalla, V.K.; Indian Financial System, Delhi, Anmol Pub. Pvt. Ltd., 1998.
2. Dougall, Herbert E and Gaumnitz; Capital Markets and Institutions. Englewood Cliffs, New Jersey, Prentice Hall Inc., 1980.
3. Hempel, George H and Yawitz, Jess B.; Financial Management of Financial Institutions. Englewood Cliffs, New Jersey, Prentice Hall Inc., 1977.
4. Kane, Joseph A.; Development Banking. Toronto, Lexington Books, 1984.
5. Rose, Peter S. and Fraser, Donald R.; Financial Institutions. Ontario, Irwin Dorsey, 1985.


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Indian Financial System

Subject Code: MGMG05

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Contents

Concept, Evolution of Indian Financial System since ancient India, Learnings from Kautailaya's Arthshastra

Intermediation, organization and operation of Indian Financial System

Regulatory Framework for Indian Financial System- Institutions, Instruments and Development

Role of Policy Initiatives and Government Interventions, Emergence of Industrial, Commercial and Trade Finance Bodies

Evaluation of Linkage with Global System, Terminologies, Interface, Payment Gateway and Channels

Rural Finance- BC, Micro and Indigenous System, Reforms in Financial System: The unfinished Agenda

Assessment Government Initiatives- MUDRA, MSME

Cases

References

1. Indian Financial System- Pathak, Pearson Education-2003
2. Indian Financial System- Machiraju- Vikas Publishing House -2008
3. Indian Financial System- Khan, Tata McGraw-Hill -2004


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Commodity and Derivative Securities

Subject Code: MGMG06

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Objective: The course has been designed keeping in mind the specific need of finance managers to understand and appreciate the concept of Commodity and Derivative Securities and various dimensions of managerial financial decisions related to commodity and derivatives in an organization. It also aims to equip students with knowledge, skill and competencies to manage efficiently and effectively.

Contents

Introduction to Derivatives Market - Exchange traded markets, over the counter markets, Types of traders - hedgers, speculators and arbitrageurs, Forwards, futures, options, swaps and other derivative contracts

Overview of Indian derivatives market, Financial & Commodity Mechanics of Futures and Options Markets - Background, Contract specification, Exchange clearing, Settlement and margins system, Types of traders and types of orders, Regulation, taxation.

Pricing Derivatives - Investment assets v/s consumption assets, short selling, Forward price of an investment asset, valuing forward contracts, Futures price of stock indices, forward and futures contracts on currencies, futures on commodities, interest rate futures, cost of carry model, Properties of Stock Option prices, upper and lower bound for option prices, put call parity relationship, Pricing options: Black and Scholes model, Binomial model.

Trading Strategies involving Futures, Options and Swaps: Hedging strategies using futures, basic option trading strategies, Spreads and combination strategies, Working of Future Options and Swap option

Derivatives Mishaps and learning: This unit covers some cases which experienced spectacular losses in derivatives market and the lessons that can be learned from them

Cases

References

1. Hull, Options, Futures and Derivatives, Pearson
2. Gardner, Future and Options, Macmillian
3. Gardner, Derivatives, Macmillian

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Consumer and Retail Finance

Subject Code: MGMG07

EOSE Marks: 80

CIA Marks: 20

Credits: 04

Contents

Concept, Types and Needs of Consumer & Retail Finance, Need Assessment and Documentation

Product- Features, Comparison, Mortgage, Home, Personal and Educational Loan, LAS, LAP
Assessment of Process

Pricing- Open Price, Mark-Up Price, Pseudo Price, PLR

Placement- Standalone, Combo and Cross Placement, Promotion and Placement. Branding,
Endorsement

Institution- Banking, NBFC, Insurance, Mutual Funds

Distribution- Channel Partner, Boutique, Anchor, DSA, Online, E-distribution, POP, POS


Evaluation- Pay Back, ROI, EMI, Charge and Collateral, Recovery Mechanism

Client Acquisition and Retention Strategy

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University of Jammu
Jammu

Specialization (Functional) Elective Papers

Rural Development Area


H. Registrar
(Academic)
University of Rajasthan
Jaipur

Management of Agro and Rural Based Industries

Subject Code: MGMH01
EOSE Marks: 80
CIA Marks: 20

Total Credits: 04

Course contents

Concept, Nature, Scope and Types of Agro Based Industries, Characteristics and Significance of Agro Based Industries, Choice of Agro-based Industries, Problems relating to location and size, Growth of agro based industry, Innovation, Classification, New models, Product Development, Planning marketing mix, Choices of appropriate technology for development of rural industries, Manpower Development for Rural Industries, Quality and Reliability of Rural Products, Importance & role of ABI in the economic development of India

Financing to Agriculture sector (Overview, Challenges, Opportunities, Demand side of AF, Supply side of AF)

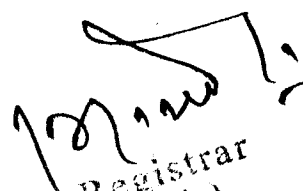
SWOT Analysis of ABIs in India. Trends in Agricultural Marketing, Agricultural products, Agro processing sector in India, Food processing sector, APMC Act, Future scenarios, Methods of Sales of agricultural products, Agents and Marketing Agencies, Commodity Markets and Trading

Gandhian approach to Rural Industrialization, Rural Entrepreneurship, Role in Rural Industrialization, Government policies & incentives for Agro Based Industries, State Govt. policies incentives & facilities for promotion of ABI challenges & opportunities, Use of biotechnology in ABIs

Cases

References

1. Problems of Development of Tribal Areas : S.G.Deogaonker
2. Rural :Planning of one country : Black, John Donald, Vestcott
3. Rural Organization, Agriculture series and Job Opportunities in Agriculture: Un.Eca.
4. Management Research Method for Agricultural, : Agarwal abd Heady
5. Agricultural Decision Atnalysis (Jack R. Anderson, John L. Dillon and Brian Hardaker
6. Agricultural Bargaining Power : George W. Ladd


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Rural Credit and Finance

Subject Code: MGMH02

EOSE Marks: 80

CIA Marks: 20

Total Credits: 04

Course contents

Understanding Rural Finance, Present situational overview, MDG Challenges, Perspective of rural finance, Rural Agriculture finance (Sources, Understanding rural client and their financial need), Financial Service needs

Financial Inclusion (Understanding , Objectives , Opportunity ,Contemporary models and recent experiment), Theory of three pillars,New Banking Paradigm, Bank initiatives and Challenges, Financial Exclusion (Understanding , Causes), Importance of financial literacy


Microfinance Models,Co-operatives operation and reforms , PACS ,Micro Insurance -Benefits and Challenges, Commercial bank (Policies and Objectives before and after nationalization of banks),Branch expansion policy and programs,Emergence of RRBs policy (Objectives , Functions , Progress and Achievements), Role of Payment Banks in Rural Economy, MUDRA Bank, CGTMSE, Micro Finance

Financial management of rural industries,Tools of Financial analysis and control,Financial forecasting and budgeting,Methods of raising rural credit,Control of investment in receivables and inventories

Cases

References:

1. Transformation of Agriculture : G.B.Singh
2. Management in Agricultural Finance :S.C.Jain
3. Production Credit Management in Changing Agriculture : Desai and Desai
4. Capital and Finance in Agriculture :UN,UNEDU
5. Agriculture Finance :Murray and Nelson
6. Agricultural Price Analysis :Geoffrey S. Shepherd


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Rural Project Planning and Management

Subject Code: MGMH03

EOSE Marks: 80

CIA Marks: 20

Total Credits: 04

Course Content

Definition of Project - A Systems Model for Development Projects, Importance of Project Approach to Rural Development - Need for and Scope of Project Management, Project Planning and Management Cycle

ZOPP methods, Genesis, Concept, Project Cycle Management, Participatory Project Cycle Management

Concept of Planning, Situational analysis and Identification of Needs, Participatory methods, Project strategy, Preparation of plan, Logical Framework Analysis: Concept, Basic Principles, Steps in Constructing a Logical Framework


Environment for Project Identification - Basic Steps in Project Identification Selection of Project Size, Location and Technology, Pre-feasibility Brief

Aspects of Rural Project Appraisal – Social Benefits, Community Development and Feasibility Assessment.

Sensitivity Analysis in Rural Projects, Role of NABARD, SIDBI and Assessment of IRDP.

References:

1. Report of Ministry of Rural Development, Government of India.
2. India Annual Issue, DAVP Publication.
3. Reports of Various Committees setup by Government of India.


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Rural Society and Polity in India

Subject Code: MGMH04

EOSE Marks: 80

CIA Marks: 20

Total Credits: 04

Course Contents

Understanding Rural Areas and Rural Development: What is rural area, Definition of urban area, Statutory towns, Census town, urban agglomeration (UA), out growths (OGs), Methodologies to define rural, and Criteria for distinguishing the rural social world from the urban social world, what is rural development.

Rural society in India: Social differentiation and stratification of rural society, Indological Perspective, Structural- Functional Perspective, Marxian Perspective, Subaltern Perspective, Non- Brahmanical Perspective, Jajmani System in Rural Society.

Concept of development, social justice & weaker sections of society: Meaning of Development, concept of underdeveloped-developing and Third World countries, Defining social justice, types, weaker sections of the society, Basis for identifying weaker sections of society

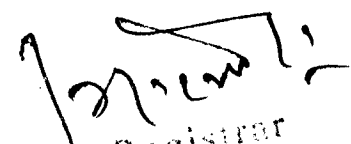
Social exclusion & Social capital: Definition and multidimensionality of social exclusion, active and passive exclusion, Types of Capital, Sources and Dimensions of Social Capital of Social Capital.

Growth with equity and inclusive growth: Understanding the concept of growth, Equity: concept and meaning, gender equity, factors influencing equity, growth versus equity, Concept of inclusive growth.

Gender and development: Differences related to sex and to gender, Women's triple roles, Gender needs, Women in Development (WID) and Gender And Development (GAD).

References

1. A.R.Desai, 'Rural Sociology in India' Popular Prakashan
2. B.D.Chattopadhyaya, 'Land System and Rural Society in Early India', Manohar Publications
3. David L. Brown and Kai A. Schaftt, 'Rural People and Communities in the 21st Century: Resilience and Transformation, Polity Press publications


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Jaipur

Management of NGOs

Subject Code: MGMH05

Total Credits: 04

EOSE Marks: 80

CIA Marks: 20

Contents

Theories of NGO Management, Problems of Accountability, Transparency and Governance, Concepts of Community and Social Capital, Context of 'Civil Society'

Typology of NGO and NGO Activity, NGO Activities in Political Advocacy, Policy Change and Development, NGO Relations with Communities and Grassroots Organizations Government, Donors and Philanthropic Agencies, Analysis of NGO Roles as Project Implementers, Technical Assistance Providers, Intermediaries, Partners, and Advocates

NGO Legal and Regulatory Framework, Accountability to Donors, Governments Stakeholders, NGO Organizational Design, Human Resource for NGOs, Strategies for NGO Growth, Fundraising and Income Generation Strategies and Practices

Management of Development and Social Sector Projects, Dealing with Community Pressures, and Local Cultural Issues, Use of Information Technology in Managing NGOs

References

1. Blakely, E., & Bradshaw, T. K. (2002). *Planning local development: Theory and practice* (3rd ed.). New Delhi: Sage.
2. CAPART. (1999-20002). *Prayas case studies of NGO success in rural development*. New Delhi: CAPART.
3. Chandra, P. (2005). *NGOs in India: Role, guidelines & performance appraisal*. New Delhi: Akansha Publishing house.
4. De Neufville, R., & Desousa, J. (2009). *Government NGOs and anti-corruption vices and virtues*. London: Routledge.

Natural Resources Management

Total Credits: 04

Subject Code: MGMH06
EOSE Marks: 80
CIA Marks: 20

Contents

Land Resources

Land Use Pattern, Changes in Land Use Pattern, Factors Influencing Changes in Land Use Pattern, Bleeding Lands - Exploitation, Soil Erosion, Desertification, Degradation - Soil, Salinity, Alkalinity and Pollution, Indigenous Knowledge Systems for Management of Land Resources - Moisture Retention, Soil Fertility Management, Cropping Patterns, Effects of Modern Agricultural Practices on Land and Environment, Nutrient Management, Integrated Pest Management, Non-pesticide Management

Management of Land Resources, Soil conservation: Concept, Methods and Practices, Application of Geographic Information System for Management of Land Resources

Water Resources

Surface Water and Ground Water Resources - Potential and Utilization, Problems in Water Management - Depletion of Water Table, Water Logging Soil Salinity and Alkalinity in Irrigated Lands, Transmission Losses, Governance Issues in Water Sector, Sustainable Use of Water for Irrigation in Indian Agriculture, National Water Policy, Types of Irrigation, Sources of Irrigation, Major, Medium and Minor Irrigation Systems - Water Conservation Technologies in Agriculture - Micro Irrigation Systems, Drip and Sprinkler Irrigation
Progress of Micro Irrigation in India- Issues and Constraints, Principles of Integrated Water Resources Management


Forest Resources

Forest resources in India, Importance of Forestry, Interface between Forestry and Rural Development, Types of forests, Bleeding Forests - Concept, Meaning, Factors Responsible for Bleeding Forests, Ethno Forestry - Concept, Indigenous Systems for the Management of Forest Resources, Sustainable Forestry - Concept and Strategies, Social Forestry - Concept and Models

Participatory Forest Management - Joint/ Community Forest Management Program, Scope, Objectives, Activities and Impact, Protection of Forests, Collection, Preservation, Storage, Grading and Marketing of Non-Timber Forest Produce

References

1. Report of Ministry of Environment.
2. Economic Survey
3. Various Reports of Special Task Force
4. Annual Report of Institute of Forest Management.


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MCA SYLLABUS

MCA Year 2 Semester III								
Sr. No.	COURSE CODE	SUBJECT	PERIODS			INTERNAL ASSESSMENT	ESE	SUBJECT TOTAL
			L	T	P			
1	MCA-301	Java Technologies	3	1		20	80	100
2	MCA-302	Web Technologies	3	1		20	80	100
3	MCA-303	Computer Graphics	3	1		20	80	100
4	MCA-304	Advanced Database System	3	1		20	80	100
5	MCA-305	Theory of Computation	3	1		20	80	100
Practicals								
1	MCA-351	Mini Project using Java			4	20	80	100
2	MCA-352	Web Design Lab			4	20	80	100
3	MCA-353	Computer Graphics Lab using C/C++			4	20	80	100
4	MCA-354	Advanced DBMS Lab			4	20	80	100
		Total				180	720	900

MCA-301
Java Technologies

Class: III Sem. MCA

Evaluation

Branch: MCA

Schedule Per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks= 100 [Mid-term (20) & End-term (80)]

Content of the Subject

Introduction to Java Enterprise

Introduction to Java Enterprise APIs, JDBC fundamentals, Multitier architecture, Web Applications in JEE. Introduction to RMI, EJB's and JavaFx.

Servlets

Servlets fundamentals, architecture, life cycle of a servlet, initialization, threads, servlets and HTML, retrieving data in servlet, servicing the GET and POST requests, servlet sessions session tracking, cookies. Inter servlet communication and servlet security.

JDBC and Inter servlet

JDBC and Inter servlet communications JDBC, Driver types, JDBC servlet, JDBC connection pooling. Introduction to Java Frameworks-Hibernate and Struts.

JSP

JSP fundamentals, architecture, implicit objects, standard actions, JSP errors. Different packages of JSP and servlets. Java Mail using JSP.

Introduction to Spring

Introduction to Spring Web MVC, The Dispatcher Servlet , A Simple View Page, Adding a View Resolver, Adding a message bundle, Using JDBC with Spring.

Text Books:

1. "Advanced Java 2 Platform HOW TO PROGRAM" by H. M.Deitel, P. J. Deitel, S. E. Santry, Prentice Hall, 2001
2. "Beginning Java™ EE 6 Platform with GlassFish 3 From Novice to Professional" by Antonio Goncalves – Apress publication, 2009
3. "Beginning Spring" by Mert Caliskan, Kenan Sevindik, Wrox Publication, 2015

References:

1. Perroud, Thierry, Inversini, Reto , "Enterprise Architecture Patterns :Practical Solutions for Recurring IT-Architecture Problems", Springer, 2013
2. Dustine R Callway , "Inside Servlets:Server Side Programming for Java ", Addison-Wesley, 1999
3. Kogent Solutions Inc., "Java 6 Programming Black Book", Dreamtech Press, 2007
4. David Flangan, "Java in a Nutshell", Oreilly Publications, 2005

5. James Gosling, Bill Joy, Guy Steele, Gilad Bracha and Alex Buckley, “TheJava language specification”, Oracle Press, 2014

MCA-302
Web Technologies

Class: III Sem. MCA
Evaluation

Branch: MCA
Schedule Per Week

Lectures: 3

Examination Time: Three Hour Maximum Marks= 100 [Mid-term (20) & End-term (80)]

Content of the Subject

Introduction to HTML:

The internet: history of the World Wide Web, hardware and software trend, object technology – java script object, scripting for the web-browser portability.

Introduction of HTML: introduction, markup language, editing HTML : common tags, headers, text styles, linking, images, formatting text, horizontal rules and more line breaks, unordered lists, nested and ordered lists, basic HTML tables : intermediate HTML tables and formatting : basic HTML forms, more complex HTML forms, HTML5: Input Types & Attributes, internal linking, creating and using image maps

Java script

Introduction to scripting: introduction- memory concepts- arithmetic- decision making. Java script control structures, Java script functions: introduction – program modules in java script - function definitions, duration of identifiers, scope rules, recursion, java script global functions.

Java script arrays: introduction, array-declaring and allocating arrays, references and reference parameters – passing arrays to functions, multiple subscripted arrays. Java script objects: introduction, math, string, date, boolean and number objects.

Dynamic HTML

CSS: introduction – inline styles, creating style sheets with the style element, conflicting styles, linking external style sheets, positioning elements, backgrounds, element dimensions, text flow and the CSS box model, user style sheets, Filter and Transitions, HTML DOM, Browser BOM

Event model : introduction, event ON CLICK, event ON LOAD – error handling with ON ERROR, tracking the mouse with event, more DHTML events.

Introduction to PHP & web server Architecture Model

Overview of PHP Capabilities, PHP HTML embedding tags & syntax, Simple script examples, PHP & HTTP Environment variables. PHP Language Core-Variables, constants, data types, PHP: operators, flow control & loops, Arrays, string, functions Include & require statements, Simple File & Directory access operations,

Error handling, Processing HTML form using GET, POST, REQUEST, SESSION, COOKIE variables, Sending E-mail, Database Operations with PHP, Connecting to My-SQL (or any other database), Selecting a db, building & Sending Query, retrieving, updating & inserting data, CMS: Wordpress

Note: XAMMP is used for PHP

Text Books:

1. Harvey M. Dietel, Paul Dietel & Tem R. Nieto, “Internet & World Wide Web How to Program”, Pearson, 2011
2. Ivan Bayross. “Web enabled commercial application development using HTML, DHTML, JavaScript, PERL-CGI”, BPB Publications, 2010

References:

1. Hofstetter, Fred, "Internet Technology at work", Osborne, 2004
2. Steven Holzner, "PHP: The Complete Reference", McGrawHill, 2008
3. Elizabeth Naramore, Jason Gerner, Jeremy Stolz, and Timothy Boronczyk Beginning PHP, Apache, MySql web development. Wrox Publication, 2009
4. Ivan Bayross, Sharanam Shah, Shroff, "PHP 5.1 for Professionals", Publishers and Distributors Pvt. Ltd., 2007

MCA-303

Computer Graphics

Class: III Sem. MCA
Evaluation

Schedule Per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks= 100 [Mid-term (20) & End-term (80)]

Content of the Subject

Introduction

Elements of graphics workstation. Video Display Devices. Raster Scan Systems. Random Scan systems. Input devices. Graphics Software Coordinate Representations, Fundamental Problems in Geometry.

Algorithms

Line drawing algorithms- DDA Algorithm. Bresenham's Line Algorithm. Frame buffers. Circle and Eclipse generating algorithms. Midpoint Circle Algorithm. Scan-line polygon fill algorithm. Inside-Outside tests. Scan- Line fill of curved Boundary Areas. Boundary fill Algorithm. Flood fill Algorithm. Character generation. Attributes of lines, curves, filling, characters. etc.

Graphics Primitives

Primitive Operations, The display file interpreter-Normalized Device Coordinates. Display-File structure. Display – file algorithm. Display control and Polygons- polygon representation.

Attributes of output primitives

Line attributes - Line type. Line width. Pen and Brush options. Line Color. Color and gray scale levels. Color-tables. Gray scale. Area- Fill Attributes- Fill styles. Pattern fill. Soft fill. Character Attributes. Text attributes.

Geometric Transformations

Matrices. Scaling Transformations. Sin and Cos Rotation. Homogeneous Co-ordinates and Translation. Co-ordinate Translations. Rotation about an arbitrary point. Inverse Transformations, Transformations Routines.

2-D Viewing

The viewing pipeline. Viewing co-ordinate, Reference Frame. Windows to view ports . co-ordinate transformation 2-D Viewing functions. Clipping operations point clipping. Line clipping. Cohen- Sutherland. Line Clipping. Polygon clipping. Sutherland Hodge man clipping.

3-D concepts

Three dimensional Display Methods Parallel projection. Perspective projection. Visible line and surface identification. Surface rendering. Three Dimensional Object representations. Bezier curves and surfaces. B-Spline curves and surfaces. Visibility, Image and object precision Z- buffer algorithm. Floating horizons.

Computer Animation

Design of Animation Sequences. General Computer Animation Functions-Raster Animations. Key Frame Systems. Morphing Simulating Accelerations. Motion Specifications. Kinematics and Dynamics.

Text Books:

1. Donald Hearn & M. Pauline Baker, "Computer Graphics", Pearson , 2008
2. James D. Foley, Andries van Dam, Steven K. Feiner & John F. Hughes, " Computer Graphics: Principles and Practice", 1997

References:

1. Jeffrey J. McConnell, "Computer Graphics: Theory and Practice", Jones and Bartlett Publishers, 2006
2. John DiMarco, "Computer Graphics and Multimedia Applications, Problems and Solutions", Idea Group Publishing, 2004

MCA-304
Advanced Database System

Class: III Sem. MCA

Evaluation

Branch: MCA

Schedule Per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks= 100 [Mid-term (20) & End-term (80)]

Content of the Subject

Object Oriented Database Management System

Introduction, Object-Oriented Data Model, Object Oriented Languages, Persistent Programming Languages. Object-Relational Databases: Nested Relations, Complex Types, Inheritance, Reference Types, Querying with Complex Types, Functions and Procedures Storage for Object Databases.

Distributed Databases

Introduction, Advantages, Architecture, Homogeneous & Heterogeneous DDBMS, Distributed Data Storage (Fragmentation & Replication), Distributed Transactions, Commit protocol, Concurrency Control in Distributed Databases, Availability, Distributed Query Processing

Parallel Databases

Introduction, Architecture, I/O Parallelism and Skew, Interquery Parallelism, Intraquery Parallelism, Intraoperation Parallelism (Parallel Sort, Parallel Join), Interoperation Parallelism, Design of Parallel Systems

PL/SQL

PL/SQL basics, blocks, architecture, variables, constants, attributes, character set, PL/SQL control structure, data types, precompiler, conditional and sequential control statements, cursors, exceptions, triggers, procedures and packages.

Introduction to Advanced Database Concepts

Spatial Data Management, Web Based Systems, Multimedia databases, Mobile Database, Deductive Database and Recursive Queries, Information Retrieval and Indexing for Text Search, XML Database, XML Data Model, Xquery, Efficient Evaluation of XML Queries

Text Books:

1. Raghu Ramkrishnan, Johannes Gehrke, "Database Management Systems", McGraw Hill International, 2007
2. Abraham Silberschatz, Henry Korth, S, Sudarshan, "Database System Concepts", McGraw Hill International, 2005
3. C.J.Date, Longman, "An Introduction to Database System", Pearson Education, 2003

References:

1. Elmasri R and Navathe SB, "Fundamentals of Database Systems", Addison Wesley, 2000.
2. Thomas Connolly, Carolyn Begg, "Database Systems, A Practical Approach to Design, Implementation and Management, Addison Wesley, 2014

3. Ceri Pelagatti, "Distributed Database: Principles and System" , Addison Wesley, 1999.
4. Simon AR, "Strategic Database Technology: Management for the year 2000", Morgan Kaufmann, 1995
5. Gray J and Reuter A, "Transaction Processing: Concepts and Techniques", Morgan Kaufmann, 1993.

MCA-305
Theory of Computation

Class: III Sem. MCA

Evaluation

Branch: MCA

Schedule Per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks= 100 [Mid-term (20) & End-term (80)]

Content of the Subject

Review of basic concepts

Graphs, Trees, Strings, Mathematical Induction, finite State Machine, types of languages and Grammars. Overview of Theoretical Computer Science (including computationally intractable problems), Introduction to System software including various phases / Modules in the design of a typical compiler, Chomsky Classification.

Finite Automata

Finite Automata, Deterministic Finite Automata (DFA), Non-Deterministic Finite Automata (NFA), statement of Kleen's Theorem, Regular Expressions, Equivalence of DFAs, NFAs and Regular Expressions, Closure properties of Regular Language, Non-Regular Languages, Pumping Lemma. Myhill Nerode Theorem, Use of Regular expressions in the Design of scanner (lexical analyzer). Introduction to JFLAP Simulation.

Context Free Languages

Context Free Grammar (CFG), Parse Trees, Push Down Automata (deterministic and nondeterministic) (PDA), Equivalence of CFGs and PDAs, Closure properties of CFLs, Pumping Lemma, Parsing (including LL(1) , SLR and LR(1) Parsing Method).

Turing Machines and Computability Theory

Definition of Turing Machine, Extensions of Turing machines, Non – deterministic Turing machines, Equivalence of various Turing Machine Formalisms, Church – Turing Thesis, Decidability, Halting Problem, Reducibility, Recursion Theorem.

Complexity Theory

Time and Space measures, Hierarchy theorems, Complexity classes P, NP, space complexity, Savich theorem, L, NL, PSPACE complexity, Post correspondence problem, Probabilistic computation.

Text Books:

1. John C. Martin, "Introduction to Languages and the Theory of Computation", McGraw-Hill, 2003
2. Michael Sipser, "Introduction to the Theory of Computation", Cengage Publication, 2003
3. Wayne Goddard, "Introducing the Theory of Computation", Jones & Bartlett India Pvt.Ltd, 2009.

References:

1. Dexter C. Kozen, "Theory of Computation: Classical and Contemporary Approaches", Springer, 2006
2. J. Hopcroft, R. Motwani, and J. Ullman, "Introduction to Automata Theory, Language and Computation", Pearson, 2008.
3. K. L. Mishra and N. Chandrasekharan, "Theory of Computer Science Automata Language Computation", PHI, 2006
4. H. R. Lewis and C. H. Papadimi Triou, "Elements of the Theory of Computation", Pearson, 1997

MCA-351
Mini Project Using Java

Class: III Sem. MCA

Evaluation

Branch: MCA

Examination Time: Three Hours
End-term (80)]

Maximum Marks= 100 [Mid-term (20) &

Objective: Student should able to develop a small real time industry application using Java.

Guidelines regarding project:

1. Students should work in group. Minimum number of students in one group can be 2. Maximum number of students in one group can be 4.
2. Students will be working under supervision of one teacher.
3. A teacher can have maximum 5 groups to supervise.
4. Students will submit a synopsis of the project.
5. Two copies of the report should be submitted.
6. The reports should be spiral bound along with the soft copy of the project.
7. The reports should be submitted with the following guidelines in the prescribed format.
 - Paper size: A4
 - Font: Times New Roman
 - Chapter Heading: 16pt
 - Sub Heading: 14, Sub-Sub Headings: 12
 - Bold Running Matter: 12 pt
 - All topics should be numbered accordingly.
 - Paragraph Gap: 6 Pt Maximum
 - Line Gap: 1.5
 - Margins: Left 1.5, Right, Top and Bottom 1 inch

MCA-352
Web Design Lab

Class: III Sem. MCA

Evaluation

Branch: MCA

Examination Time: Three Hours Maximum Marks:100 [Mid-term (20) & End-term (80)]

Objectives of the laboratory

- Learn how to design and develop a Website using HTML, CSS , JavaScript & PHP
- Learn how to link pages so that they create a Web site.
- Design and develop a Web site using text, images, links, lists, and tables for navigation and layout.
- Learn how to develop a blog

List of experiments

HTML:

- Basics Elements & Attributes, HTML Formatting tags, Links,
- Images, Tables, Forms Elements
- HTML5 Audio and Video, HTML5 Input Types & Attributes
- CSS Syntax, CSS Attribute Selectors
- CSS properties: Fonts, Background, Colors, Links, Lists,
- CSS Box Model, Display, Opacity, Float, Clear
- CSS Layout, CSS Navigation Bar,
- CSS Rounded Corners, CSS Border Images, CSS Animations

JavaScript:

- Displaying Output, Declaring Variables, Operators, Arithmetic, Data Types, Assignment,
- JavaScript Functions, Booleans, Comparisons, Conditional ,
- JavaScript Switch, Loops, Break, Type,
- JavaScript Objects, Scope,
- Strings and String Methods
- Numbers and Number Methods, Math, JavaScript Dates: Formats and Methods
- JavaScript Events, JavaScript, JavaScript Forms (API and Validation), Objects,
- JavaScript Functions, JavaScript DOM, JavaScript Validation, Browser BOM

PHP:

- Installing XAMMP
- Variables, Data Types, Constants, Operators, Programming Loops,
- PHP Functions,
- Arrays
- Strings Functions
- PHP Form Handling, Require & Include
- PHP with Mysql
- WordPress Installation

MCA-353
Computer Graphics Lab Using C/C++

Class: III Sem. MCA

Evaluation

Branch: MCA

Examination Time: Three Hours Maximum Marks:100 [Mid-term (20) & End-term (80)]

Objectives of the Laboratory

- The objective of this course is to get hands-on experience with graphics programming and implementing the techniques learnt in the theory course.
- Students acquire knowledge about the basic concepts of 2D and 3D graphic functions. They also learn various transformation and clipping techniques.

List of Experiments

1. Implementation of algorithms on line (DDA,Bresenham), circle (Mid-point)
2. Two Dimensional transformations- Translation, Rotation, Scaling, Reflection
3. Composite 2D Transformation
4. 2D Line Clipping- Cohen Sutherland
5. 3D Transformation- Translation, Rotation, Scaling
6. Color Fill Algorithms – Flood Fill, Boundary Fill
7. Drawing 2D & 3D objects
8. Generating images
9. Implementation of programs using following functions. Instructors will instruct students to use different given graphics functions in making graphics programs:
circle, cleardevice, closegraph, drawpoly, fillpoly, imagesize, line, lineto, linerel, moveto, moverel, outtext, outtextxy, putimage, putpixel, rectangle, sector, setbkcolor, setcolor, setfillstyle, setlinestyle, getarccords, getbkcolor, getcolor, getdrivername, getimage, getmaxcolor, getmaxx, getmaxy, getpixel.

MCA-354
Advanced DBMS Lab

Class: III Sem. MCA

Evaluation

Branch: MCA

Examination Time: Three Hours Maximum Marks= 100 [Mid-term (20) & End-term (80)]

Objectives of the laboratory:

Upon successful completion of this lab the student of this lab will be able to:

1. Familiarize with creation of databases with constraints.
2. Understand the Control structures of PL/SQL Programming.
3. To be able to apply advanced concepts of PL/SQL like cursors, procedures and triggers.

List of experiments:

1. SQL data types, Operators, Literals, Constraints
2. Assignment on Queries: Select / From / Where/ Group By/Having Clause/ Order By Clause/ SQL Operators/ Joins/ Built-in Functions
3. PL/SQL Block Structure
4. Conditional Statements
5. Iterations: Simple Loops, For Loop, While Loop, Nested Loops
6. Exception Handling
7. Database Programming with Record Variables
8. Database Programming with Cursors, Cursor-For Loop
9. Procedures & Functions
10. Triggers
11. Packages

MCA Year 2 Semester IV								
Sr. No.	COURSE CODE	SUBJECT	PERIODS			INTERNAL ASSESMENT	ESE	SUBJECT TOTAL
			L	T	P			
1	MCA-401	Software Engineering & UML	3	1		20	80	100
2	MCA-402	.Net Framework and Programming in ASP.Net	3	1		20	80	100
3	MCA-403	Open Source Operating System	3	1		20	80	100
4	MCA-404	Artificial Intelligence	3	1		20	80	100
5	MCA- 405	Elective 1*	3	1		20	80	100
Practicals								
1	MCA-451	Seminar Presentation-I			4	20	80	100
2	MCA-452	. Net Mini Project			4	20	80	100
3	MCA-453	Linux Lab(Shell Script & Security)			4	20	80	100
4	MCA-454	Colloquium (Group Discussion)			4	20	80	100
		Total				180	720	900
		Elective 1*						
	MCA-405A	Data Mining & Data Warehousing						
	MCA-405B	Information Protection & Security						
	MCA-405C	Soft Computing						
	MCA-405D	Mobile Application Development						
	MCA-405E	E-Commerce						

Note: A student can opt for **one** of the five given specializations in semester **IV**. Accordingly corresponding electives will be chosen from the given category for **Elective 2** and **Elective 3** in semester **V**.

Specializations

A: Database Systems [MCA-405A, MCA-504A, MCA-505A]

ELECTIVES	COURSE CODE	SUBJECT
Elective 1	MCA-405A	Data Mining & Data Warehousing
Elective 2	MCA-504A	Big Data Technologies & Analytics
Elective 3	MCA-505A	Database Intensive Computing & Security

B: Security [MCA-405B, MCA-504B, MCA-505B]

ELECTIVES	COURSE CODE	SUBJECT
Elective 1	MCA-405B	Information Protection & Security
Elective 2	MCA-504B	Cyber Security & Quantum Cryptography
Elective 3	MCA-505B	Cryptography

C: Artificial Intelligence[MCA-405C, MCA-504C, MCA-505C]

ELECTIVES	COURSE CODE	SUBJECT
Elective 1	MCA-405C	Soft Computing
Elective 2	MCA-504C	Bio-Informatics
Elective 3	MCA-505C	Artificial Neural Networks

D: Mobile Computing [MCA-405D, MCA-504D, MCA-505D]

ELECTIVES	COURSE CODE	SUBJECT
Elective 1	MCA-405D	Mobile Application Development
Elective 2	MCA-504D	Mobile Operating System
Elective 3	MCA-505D	Embedded Systems

E: e-business Technologies [MCA-405E, MCA-504E, MCA-505E]

ELECTIVES	COURSE CODE	SUBJECT
Elective 1	MCA-405E	E-Commerce
Elective 2	MCA-504E	ERP Systems
Elective 3	MCA-505E	Web Mining

MCA 401

Software Engineering and UML

Class: IV Sem. MCA

Branch: MCA

Schedule Per Week

Lectures: 3

Examination Time: Three Hours **Maximum Marks:** 100 [Mid-term (20) & End-term (80)]

Evaluation

Content of the Subject

Software Engineering Fundamentals: Software Engineering - A layered Technology, The importance of software, software myths, software engineering paradigms, Software Process Models: Linear Sequential Model, Prototyping Model, RAD Model Evolutionary Software Process Models: Incremental Model, Spiral Model Component Assembly Model, Formal Methods, Fourth-Generation Techniques.

Analysis Concepts and Principles: Analysis Concepts and Principles, the Elements of the Analysis Model Data Modifying, Functional Modeling and Information Flow and Behavior Modeling, Mechanics of Structured Analysis, Data Dictionary. Requirement analysis, tasks, analyst, software prototyping, specification principles, representation and the software requirements specification.

Software Project Planning: Software Project Planning, Size Estimation, Cost Estimation, Models, Static, single variable models, Static, Multivariable Models, COCOMO, The Putnam Resource Allocation Model, Risk Identification and Projection: RMMM, Project scheduling and Tracking.

Software Design Process, Design Principles, Design Concepts: Effective Modular Design, Design Heuristics, Design Documentation, Design Methods: Data Design, Architectural Design, Interface Design, Human Computer Interface Design, Procedural Design. Case Study for Design of any Application Project.

Software Testing : S/W Testing Fundamentals, White Box Testing, Black Box Testing, software testing strategies, verification and Validation, System Testing, Unit testing, Integration testing and Debugging. Software Maintenance Maintainability – maintenance Tasks, Characteristics of a good quality software. Case Study for Testing Techniques

Unified Modeling Language (UML): Unified Modeling Language, Basic structures and modeling classes, common modeling techniques, relationships, common mechanism, class diagrams. Advanced structured modeling, advanced classes and relationships, interfaces, types and roles, instances and object diagram. Basic idea of behavioral modeling. State diagrams, Interaction diagrams, Use case diagrams Object- oriented concepts and principles. Identifying the elements of an object model. Object oriented projects metrics and estimation.

Text Books:

1. Roger S Pressman, Bruce R Maxim, “Software Engineering: A Practitioner’s Approach”, Kindle Edition, 2014.
2. Ian Sommerville,” Software engineering”, Addison Wesley Longman, 2014.

References:

1. James Rumbaugh. Micheal Blaha “Object oriented Modeling and Design with

- UML”, 2004.
2. Ali Behforooz, Hudson, “Software Engineering Fundamentals”, Oxford, 2009.
 3. Charles Ritcher, “ Designing Flexible Object Oriented systems with UML”, TechMedia , 2008.
 4. Grady Booch, James Rumbaugh, IvarJacobson.,” The Unified Modeling Language User Guide”, 2004.

MCA-402
.Net Framework and Programming in ASP.Net

Class: IV Sem. MCA

Evaluation

Branch: MCA

Schedule Per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Content of the Subject

Introduction to .NET Framework: Introduction, Advantages & Components, CLR, CTS,CLS,MSIL,JIT,GC, BCL(Base Class Library), Compilation of .NET Applications, Features of .NET Framework, C#/VB .Net Basics, Creating Applications using Visual studio IDE and Command Line compiler, About .NET Assemblies- Creating an Assembly, Namespaces

Conceptual Overview of ASP.NET Framework: Client And Server Architecture, Page Life Cycle, All Standard Controls, Validation Controls, Navigation Controls, Rich Web Controls. Creating and Implementing User and Custom Controls, Design website with Master Pages.

ASP.NET Configuration: Session and Application Management, Caching, Security-Authentication and Authorization, Localization and Globalization, Exception Handling, Using AJAX Control toolkit.

Working with Data Controls: Basics of ADO.NET, OLEDB and SQL Managed Data Providers- Data adapters, Dataset, DataReader, ExecuteReader, ExecuteScalar, ExecuteNonQuery, DataTable, DataRow, DataColumn, Crystal Reports

Introduction to Web Services: need of Web Services, role of XML, UDDI, WSDL, HTTP and SOAP Protocol, Web Service Vs WCF (Windows Communication Foundation).

Text Books:

1. Jeffery Ritcher “Applied Microsoft .Net framework programming”, MS Press 2002.

References:

1. ImarSpaanjaars,” Beginning ASP. NET 4: in C# and VB”, Wrox Publication 2010.
2. Thuan L. Thai, Hoang Q. Lam “.Net framework essentials”, O’Reilly 2003
3. Juval Lowy “Programming .Net components” O’Reilly.2003

MCA -403
Open Source Operating System

Class: IV Sem. MCA

Evaluation

Branch: MCA

Schedule per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Contents of the Subject

Introduction: Introduction to concept of Open source software, Introduction to Linux , Evolution of Linux, Linux vs. UNIX, Different Distributions of Linux, Installing Linux, Linux Architecture, Linux file system (inode, Super block, Mounting and Unmounting), Essential Linux Commands (Internal and External Commands), Kernel, Process Management in Linux, Signal Handling, System call, System call for Files, Processes and Signals.

Shell Programming: Shell Programming – Introduction to Shell, Various Shell of Linux, Shell Commands, I/O Redirection and Piping, Vi and Emacs editor, Shell control statements, Variables, if-then-else, case-switch, While, Until, Find, Shell Meta characters, Shell Scripts, Shell keywords, Tips and Traps, Built in Commands, Handling documents, C language programming, Prototyping, Coding, Compiling, Testing and Debugging, Filters, Advanced filters: sed and awk

Advance Shell Programming: Shell and sub shells, export, Shell Procedures and Reporting, exec.

Linux System Administrations: File listings, Ownership and Access Permissions, File and Directory types, Managing Files, User and its Home Directory, Booting and Shutting down (Boot Loaders, LILO, GRUB, Bootstrapping, init Process, System services)

Text Book:

1. UNIX: Concepts and Applications, Sumitabha Das, McGraw-Hill, 4th Edition, 2008.
Reference

References:

1. Practical Guide to Linux Commands, Editors, and Shell Programming, Sobell, Pearson, 2nd Edition, 2010.
2. A Practical Guide to Fedora and Red Hat Enterprise Linux, Sobell, Pearson, 5th Edition, 2010.

MCA -404
Artificial Intelligence

Class: IV Sem. MCA

Evaluation

Branch: MCA

Schedule Per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Content of the Subject

Concept of intelligence

An Overview of AI: The AI problems, what is an AI technique; Characteristics and applications of AI, General Problem solving: Production systems; Control strategies; forward and backward chaining, Exhaustive searches: Depth first Breadth first search.

Heuristic Search Techniques: Hill climbing, Branch and Bound technique; Best first search and A* algorithm; AND/OR Graphs; Problem reduction and AO* algorithm; Constraint Satisfaction problems Game Playing Min Max Search procedure; Alpha-Beta cutoff; Additional Refinements.

Knowledge Representation Techniques: First Order Predicate Calculus; Skolemisation; Resolution Principle and Unification; Inference Mechanisms Horn's Clauses; Semantic Networks; Frame Systems; Scripts; Conceptual Dependency, AI Programming Languages: Introduction to LISP, Syntax and Numeric Function; List manipulation functions; Iteration and Recursion; Property list and Arrays.

Natural Language Processing and Parsing Techniques: Context Free Grammar; Recursive Transition Nets (RTN); Augmented Transition Nets (ATN); Semantic Analysis, Case and Logic Grammars

Probabilistic Reasoning and Uncertainty: Probability theory; Bayes Theorem and Bayesian networks; Certainty Factor.

Expert Systems: Introduction to Expert Systems, Architecture of Expert Systems; Expert System Shells; Knowledge Acquisition; Case Studies; MYCIN, Concept of Learning, Rote Learning; Learning by Induction; explanation based learning.

Text Books:

1. Elaine Rich and Kevin Knight: Artificial Intelligence, 3rd Edition, Tata McGraw Hill, 2008
2. Dan W. Patterson, Introduction to Artificial Intelligence and Expert Systems – Prentice Hal of India., 1999

References:

1. Artificial Intelligence: A Modern Approach, Stuart Rusell, Peter Norving, Pearson Education 2nd Edition., 2009
2. Nils J. Nilsson: Principles of Artificial Intelligence – Narosa Publication house, 2009
3. Artificial Intelligence, Winston, Patrick, Henry, Pearson Education, 1998

MCA- 405A
Data Mining and Data Warehousing

Class: IV Sem. MCA

Evaluation

Branch: MCA

Schedule per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Contents of the Subject

Data Warehousing: Introduction, Definition, Multidimensional data transformation, OLAP operations, Ware house schema, Ware house Server, Other features. Data Mining: Introduction, Definition, KDD vs. DM, DBMS vs. DM, DM Techniques, Issues and Challenges in DM, DM Applications. Association Rules: A Prior Algorithm, Partition, Pincer search, Incremental, Border, FP-tree growth algorithms, Generalized association rule.

Classification: Parametric and non-parametric technology: Bayesian classification, two class and generalized class classification, classification error, Decision boundary, Discriminate functions, Non-parametric methods for classification.

Clustering: Hierarchical and non-hierarchical techniques, K-MEDOID Algorithm, Partitioning, Clara, Clarans. Advanced Hierarchical algorithms

Decision Trees: Decision tree induction, Tree pruning, Extracting classification rules from decision trees, Decision tree construction algorithms, Decision tree construction with presorting.

Techniques for Data mining: Introduction, Learning, Neural Networks, Data mining using neural networks, Genetic algorithms. Web Mining: Web mining, Text mining, Content mining, Web structure mining. Searching Techniques: Optimal, non-optimal, Min-max, $\alpha - \beta$ pruning.

Text Books:

1. Alex Berson, Stephen J. Smith, Data Warehousing, Data Mining and OLAP, McGrawHill, 2004
2. D. Hand, H. Mannila, and P. Smyth, Principles of Data Mining, MIT Press, 2011
3. Jiawei Han, MichelineKamber, Data Mining: Concepts and Techniques, Harcourt India Pvt., 2011

References:

1. W. H. Innmon, Building the Data Warehouse, Wiley Computer Publishing, 2005

MCA- 405B
Information Protection and Security

Class: IV Sem. MCA

Evaluation

Branch: MCA

Schedule per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Contents of the Subject

Introduction

Introduction to Cryptography: Introduction To Security: Attacks, Services & Mechanisms, Security, Attacks, Security Services. Conventional Encryption: Classical Techniques, Conventional Encryption Model, and Stenography, Classical Encryption Techniques.

Modern Techniques:

Simplified DES, Block Cipher Principles, DES Standard, DES Strength, Differential & Linear Cryptanalysis, Block Cipher Design Principles, Block Cipher Modes of Operation

Conventional Encryption Algorithms

Triples DES, Blowfish, International Data Encryption Algorithm, RCS, CAST-128, RC2 Placement & Encryption Function, Key Distribution, Random Number Generation, Placement Of Encryption Function. Public Key Encryption: Public-Key Cryptography: Principles of Public-Key Cryptosystems, RSA Algorithm, Key Management, Fermat's & Euler's Theorem, Primality, The Chinese Remainder Theorem.

Hash Functions

Message Authentication & Hash Functions: Authentication Requirements, Authentication Functions, Message Authentication Codes, Hash Functions, Birthday Attacks, Security Of Hash Function & MACS, MD5 Message Digest Algorithm, Secure Hash Algorithm (SHA), Digital Signatures: Digital Signatures, Authentication Protocol, Digital Signature Standard (DSS), Proof Of Digital Signature Algorithm.

Network & System Security

Authentication Applications: Kerberos X.509, Directory Authentication Service, Electronic Mail Security, Pretty Good Privacy (PGP), S / Mime, Security: Architecture, Authentication Header, Encapsulating Security Payloads, Combining Security Associations, Key Management, Web Security: Secure Socket Layer & Transport Layer Security, Secure Electronic Transaction (Set), System Security: Intruders, Viruses, Firewall Design Principles, Trusted Systems.

Text Books:

1. Kaufman, c., Perlman, R., and Speciner, M., Network Security, Private Communication in a public world, 2nd ed., Prentice Hall, 2002
2. Stallings, W., Cryptography and Network Security: Principles and Practice, 3rd ed., Prentice Hall PTR, 2002

References:

1. Pieprzyk Josef and et.al; Fundamentals of Computer Security, Springer-Verlag, 2008.
2. Trappe & Washington, Introduction to Cryptography, 2nd Ed. Pearson.,2006

3. Johannes A. Buchmann, “Introduction to cryptography”, Springer- Verlag, 2004

MCA- 405C
Soft Computing

Class: IV Sem. MCA

Evaluation

Branch: MCA

Schedule per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Contents of the Subject

Overview of Crisp sets and fuzzy sets : Basic concepts of crisp sets and fuzzy sets, Basic types of fuzzy sets, Fuzzy sets versus crisp sets, Representation and extension principle for fuzzy sets, Operations on Fuzzy sets

Fuzzy Relations and Fuzzy Logic: Crisp versus Fuzzy relations, Binary relations on fuzzy sets, Equivalence, compatibility and ordering relations, Morphisms and compositions of relations, Fuzzy relations equations, Fuzzy measures and possibility theory, Classical logic and multivalued logics, Fuzzy propositions and approximate reasoning

Fuzzy systems and neuro fuzzy systems : Relevance of integration between fuzzy sets and neural networks – pros and cons, Fuzzy neurons, Fuzzy neural networks, Neuro fuzzy systems, Fuzzy associative memories

Introduction to Genetic Algorithms : What are genetic algorithms?, Robustness of traditional optimisation and search methods, The Goals of optimisation, How are genetic algorithms different from traditional methods?, A simple genetic algorithm, Genetic algorithms at work – a Simulation by hand, Grist for the Search Mill – Important Similarities, Similarity Templates (Schemata), Learning the Lingo.

Genetic Algorithms Revisited : Mathematical Foundations, Who shall live and who shall die? The fundamental Theorem, Schema processing at work: An example by hand revisited. The two-armed and k-armed bandit problem, How many schemata are processed usefully?, The building block hypothesis, Another perspective: The minimal deceptive problem, Schemata revisited: similarity templates as hyper planes.

Computer Implementation of A Genetic Algorithm : Data Structures, Reproduction, Crossover, and mutation, A Time to reproduce, a time to cross, Get with the main program, How well does it work?, Mapping objective functions to fitness form, Fitness scaling, Codings, A multiparameter, Mapped, Fixed-Point coding, Discretization, Constraints

Introduction To Genetic-Based Machine Learning : Genetics-Based machine learning: whence it came, What is a classifier system?, Rule and message system, Apportionment of credit: The bucket brigade, Genetic algorithm, A simple classifier system in Pascal, Results using the simple classifier system

Text Books:

1. G. Klir and B. Yuan “Fuzzy Sets and Fuzzy Logic: Theory and Applications”, Prentice Hall of India, 1997.
2. B. Kosko “Neural Networks and Fuzzy Systems” A Dynamical Systems Approach

to Machine Intelligence”, Prentice Hall of India, 1997.

References:

1. David E. Goldberg, “Genetic Algorithms in Search, Optimization and Machine Learning, Addison-Wesley an imprint of Pearson Education Asia .

MCA- 405D
Mobile Application Development

Class: IV Sem. MCA

Evaluation

Branch: MCA

Schedule per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Contents of the Subject

INTRODUCTION

Introduction to mobile applications – Embedded systems - Market and business drivers for mobile applications – Publishing and delivery of mobile applications – Requirements gathering and validation for mobile applications, Basics of embedded systems design – Embedded OS - Design constraints for mobile applications, both hardware and software related – Architecting mobile applications – User interfaces for mobile applications – touch events and gestures.

ADVANCED DESIGN

Designing applications with multimedia and web access capabilities Integration with GPS and social media networking applications – Accessing applications hosted in a cloud computing environment – Design patterns for mobile applications – Achieving quality constraints – performance, usability, security, availability and modifiability.

TECHNOLOGY I ANDROID

Establishing the development environment, Android architecture, Android Application structure, Emulator- Android virtual device, UI design, Fragments, Activity, Services, broadcast Receiver, Intents/Filters, Content provider- SQLite Programming , SQLite Open Helper, SQLite Database, Interaction with server side applications.

Advanced ANDROID

Using Google Maps, GPS and Wi-Fi Integration, Android Notification, Audio manager, Bluetooth ,Camera and Sensor integration, Sending SMS, Phone Calls. Publishing Android Application.

TECHNOLOGY II IOS

Introduction to Objective C, iOS features UI implementation Touch frameworks Data persistence using Core Data and SQLite, Action and Outlets, Delegates, Storyboard, Location aware applications using Core Location and Map Kit , Integrating calendar and address book with social media application Using Wifi iPhone marketplace.

Text Books:

1. Jeff McWherter and Scott Gowell, "Professional Mobile Application Development", Wrox, 2012
2. Charlie Collins, Michael Galpin and Matthias Kappler, "Android in Practice", DreamTech, 2012

References:

1. David Mark, Jack Nutting, Jeff LaMarche and Frederic Olsson, “Beginning iOS 6 Development: Exploring the iOS SDK”, Apress, 2013.
2. James Dovey and Ash Furrow, “Beginning Objective C”, Apress, 2012
3. Paul Deitel ,Harvey Deitel, Abbey Deitel and Michael Morgano “Android for Programmers An App-Driven Approach” ,Pearson, 2013

MCA- 405E
E-Commerce

Class: IV Sem. MCA

Evaluation

Branch: MCA

Schedule per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Contents of the Subject

Introduction to e-Commerce

Definition, Activities, Objectives, Components, Functions, Advantages and disadvantages, Scope, Forces driving E-Commerce, Traditional commerce Vs. E-Commerce, E-Commerce opportunities for industries, Growth of E-Commerce, e-Commerce Applications.

E-Commerce Models

Business to consumer, Business to Business, Consumer to Consumer, Government to Citizen, Features and Benefits, Portal Vs. Website.

Other Models

Brokerage Model, Aggregator Model, Info-Mediary Model, Community Model and value chain Model.

Electronic Payment Systems

Introductions, Special features, Types of E-Payment Systems (EFT, E-Cash, E-Cheque, Credit/Debit Card, Smart Card, Digital Tokens and Electronic Purses/ Wallets), Traditional Payments Vs E-Payment Systems, The SET protocol, SET vs. SSL, Payment Gateway, Certificate Issuance, Certificate Trust Chain.

Security Issues in E-Commerce

Security risk of E-Commerce, Types of threats, Security Tools, Cyber Laws, Business Ethics, EDI Architecture, EDI Standards, EDI Application in business.

Applications of E-Commerce

E-Marketing, E-Customer Relationship Management, E-Supply Chain Management, E-Governance, E-Buying, E-Selling, e-Banking, E-Retailing
Creation of An E-Commerce Application and Project Report based on any of the above models/modules

Text Books:

1. Ravi Kalakota, "Electronic Commerce: A Manager's Guide", Addison-Wesley Professional, Edition 2012.
2. Ian Daniel, "E-Commerce get it Right", Neuro Digital Publication, 2011.

References:

1. Dr. K Abirami Devi & Dr. M Alagammai, "E-Commerce Essentials", Margham Publication, 2012.
2. Kenneth C. Loudon, Karol Traver, "E-Commerce 2014", Prentice Hall Publication, 2013.

MCA – 451
Seminar Presentation-I

Class: IV Sem. MCA

Evaluation

Branch: MCA

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Objective: To get in depth knowledge of the upcoming trends in the field of Computer Science. The objective of the seminar is to prepare the student for a systematic and independent study of the state of the art topics in a broad area of his / her specialization.

Term Paper Presentation:

- Research work / Technical Learning must be done individually.
- Final Evaluation will be done by evaluating the electronic Presentation and the printed report
- The semester end assessment of Seminar Presentation shall be on the basis of Presentation/ Seminar Report and Viva Voice.

General Instructions For Preparation Of Seminar Presentation Report

The Report should broadly include the following heads / subheads

1. Introduction

- 1.1 Cover Page
- 1.2 Title Page
- 1.3 Certificate
- 1.4 Acknowledgement
- 1.5 Table of Contents

2. Research / Technology Description

- 2.1 Overview/ Introduction
- 2.2 Objective & Scope of the study
- 2.3 Description of the Technology

3. Drawbacks and Limitations

4. Proposed Enhancements

5. Conclusion

6. Bibliography

MCA-452
. NET MINI PROJECT

Class: IV Sem. MCA

Evaluation

Branch: MCA

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Objective: Student should be able to develop a small real time industry application using Microsoft Visual Studio 2010 or above.

Guidelines regarding project:

8. Students should work in group. Minimum number of students in one group can be 2. Maximum number of students in one group can be 4.
9. Students will be working under supervision of one teacher.
10. A teacher can have maximum 5 groups to supervise.
11. Students will submit a synopsis of the project.
12. Two copies of the report should be submitted.
13. The reports should be spiral bound along with the soft copy of the project.
14. The reports should be submitted with the following guidelines in the prescribed format.
 - Paper: A4
 - Font: Times New Roman
 - Chapter Heading: 16pt
 - Sub Heading: 14, Sub-Sub Headings: 12
 - Bold Running Matter: 12 pt
 - All topics should be numbered accordingly.
 - Paragraph Gap: 6 Pt Maximum
 - Line Gap: 1.5
 - Margins: Left 1.5, Right, Top and Bottom 1 inch

MCA 453
Linux Lab (Shell Script and Security)

Class: IV Sem. MCA

Evaluation

Branch: MCA

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Objectives of the laboratory:

Upon successful completion of this lab the student of this lab will be able to:

1. Introduce the student to Unix/Linux Shell programming techniques.
2. To describe and understand the LINUX file system.
3. To make students aware about security aspects in Linux.

List of experiments:

1. Basic Commands of Linux.
2. Accessing help options, File names and Wild Card, Types of Files, Directory Hierarchy, Operations.
3. Introduction of vi and Emacs Editor, File Permissions.
4. Shell Programming: Basics of Shell Programming, Meta Characters, Predefined Variables, Shell Variables, Storing and Accessing value of variables, Reading files, Expression, Strings Handling.
5. Conditional Statements: if, if-else, nested conditions, Case Statements.
6. Positional Parameters, argument Validations, Looping Statements: while loop, until, for, Nested Loops, User Defined Functions.
7. Simple Filter Commands: pr, head, tail, cut, paste, sort, uniq, tr, Regular Expressions, grep.
8. Practical Aspects of Security.

MCA 454
COLLOQUIUM (Group Discussion)

Class: IV Sem. MCA

Evaluation

Branch: MCA

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Objectives

Upon successful completion of this exercise student will develop skills to

- Exchange ideas in a systematic and structured way.
- Train one to discuss and argue about the topic given.
- Improve thinking, listening and speaking skills.
- Promote confidence level in problem solving, decision making and personality assessment.

Evaluation

In Group discussion performances would be evaluated on the basis of following points:

1. Knowledge about the topic
2. Oral communication skills.
3. Leadership skill – how well candidate is able to discuss among the group i.e. putting points, listening to others & trying to manage the whole discussion
4. Listening & articulating other points
5. Concluding all the points put forward in the group and sharing overall opinion of the group.
6. Team management

Sr. No.	COURSE CODE	SUBJECT	PERIODS			INTERNAL ASSESSMENT	ESE	SUBJECT TOTAL
			L	T	P			
1	MCA-501	Cloud Computing & Service Oriented Architecture	3	1		20	80	100
2	MCA-502	Analysis and Design of Algorithms	3	1		20	80	100
3	MCA-503	Wireless Technologies	3	1		20	80	100
4	MCA-504	Elective 2**	3	1		20	80	100
5	MCA-505	Elective 3***	3	1		20	80	100
Practicals								
1	MCA-551	Case Study on Mobile Applications			4	20	80	100
2	MCA-552	ADA Lab Mini Project			4	20	80	100

3	MCA-553	Wireless Technology Lab			4	20	80	100
4	MCA-554	Seminar Presentation-II			4	20	80	100
		Total				180	720	900
		Elective 2**						
	MCA-504A	Big Data Technologies & Analytics						
	MCA-504B	Cyber Security & Quantum Cryptography						
	MCA-504C	Bio-Informatics						
	MCA-504D	Mobile Operating System						
	MCA-504E	ERP Systems						
		Elective 3***						
	MCA-505A	Database Intensive Computing & Security						
	MCA-505B	Cryptography						
	MCA-505C	Artificial Neural Networks						
	MCA-505D	Embedded Systems						
	MCA-505E	Web Mining						

MCA- 501

Cloud Computing and Service Oriented Architecture

Class: V Sem. MCA

Evaluation

Branch: MCA

Schedule Per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks= 100 [Mid-term (20) & End-term (80)]

Content of the Subject

Introduction: Historical development, Vision of Cloud Computing, Characteristics of cloud computing as per NIST, Migration into cloud, Cloud computing environments, Cloud services requirements, Cloud and dynamic infrastructure, Cloud Adoption and rudiments

Cloud Computing Architecture: Cloud Reference Model, Types of Clouds, Service Model of Cloud, Cloud Interoperability & Standards, Scalability and Fault Tolerance, Cloud Solutions: Cloud Ecosystem, Cloud Business Process Management, Cloud Service Management. Cloud Offerings: Cloud Analytics, Testing Under Control, Virtual Desktop Infrastructure, Architectural Design of Compute & Storage Cloud

Cloud Management & Virtualization Technology: Resiliency, Provisioning, Asset management, Concepts of Map reduce, Cloud Governance, High Availability and Disaster Recovery. Virtualization: Fundamental concepts of compute, Implementation Level of Virtualization, Storage, Networking, Desktop and application virtualization. Virtualization benefits, server virtualization, Block and file level storage virtualization Hypervisor management software- VMware, KVM, Xen, Infrastructure Requirements, Virtual LAN (VLAN) and Virtual SAN (VSAN) and their benefits.

Introduction to SOA: Fundamental SOA- Common Misperceptions about SOA- Common tangible benefits of SOA- Common pitfalls of adopting SOA. The Evolution of SOA:-from XML to Web services to SOA, Comparing SOA with N-tier architecture, The continuing evolution of SOA, The roots of SOA. Benefits of SOA, Principles of Service orientation , Service layers.

Web Service: Service descriptions, WSDL, Messaging with SOAP, Service discovery, UDDI, Message Exchange Patterns, Orchestration, Choreography, WS Transactions. Service Oriented Analysis and Design , Service Modeling, Design standards and guidelines, Composition , WS-BPEL , WS-Coordination , WS-Policy , WS-Security, SOA support in J2EE

Text Books:

1. RajkumarBuyya, J.Broberg, A. Goscinski, “Cloud Computing Principles and Paradigms”, Wiley, 2011
2. A. Srinivasan, J. Surish “ Cloud Computing A Practical Approach for Learning and implementation””, Pearson, 2014
3. Ron Schmelzer et al. “XML and Web Services”, Pearson Education, 2002.
4. Thomas Erl, “Service Oriented Architecture: Concepts, Technology, and Design”, Pearson Education, 2005.

References:

1. Barrie Sosinsky, “ Cloud Computing Bible”, Wiley., 2010
2. Tim Mather, “Cloud Security and Privacy”, O’REILLY., 2009
3. Kai Hwang, Jack Dungaree, and Geoffrey Fox: Distributed and Cloud Computing From Parallel Processing to the Internet of Things, MK Publishers, 2012.
4. Frank P.Coyle, “XML, Web Services and the Data Revolution”, Pearson Education, 2002
5. Eric Newcomer, Greg Lomow, “Understanding SOA with Web Services”, Pearson Education, 2005
6. Sandeep Chatterjee and James Webber, “Developing Enterprise Web Services: An Architect’s Guide”, Prentice Hall, 2004.
7. James McGovern, Sameer Tyagi, Michael E.Stevens, Sunil Mathew, “Java Web Services Architecture”, Morgan Kaufmann Publishers, 2003.

MCA- 502
Analysis and Design of Algorithms

Class: V Sem. MCA

Evaluation

Branch: MCA

Schedule Per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks= 100 [Mid-term (20) & End-term (80)]

Content of the Subject

Introduction

Algorithm definition and specification – Design of Algorithms, and Complexity of Algorithms, Asymptotic Notations, Growth of function, Recurrences, Performance analysis

Elementary Data structures

Stacks and queues – trees – priority queues – Linked List – graphs – basic traversal and search techniques. Divide and conquer:- General method – binary search – merge sort – Quick sort

The Greedy method

General method – knapsack problem – minimum cost spanning tree (Prims and Kruskal algorithm) – single source shortest path – Dijkstra Algorithm .

Dynamic Programming – general method – multistage graphs – all pair shortest path – 0/1 Knapsack – traveling salesman problem – flow shop scheduling.

Backtracking

General method – 8-Queens problem – sum of subsets – graph coloring – Hamiltonian cycles – knapsack problem, Branch and bound:- The Method – 0/1 Knapsack problem – traveling salesperson.

Parallel models

Basic concepts, performance Measures, Parallel Algorithms: Parallel complexity, Analysis of Parallel Addition, Parallel Multiplication and division, parallel Evaluation of General Arithmetic Expressions, First-Order Linear recurrence.

Text Books:

1. Anany Levitin, “Introduction to the Design and Analysis of Algorithms”, Third Edition, Pearson Education, 2012.
2. Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest and Clifford Stein, “Introduction to Algorithms”, Third Edition, PHI Learning Private Limited, 2012.

References:

1. Donald E. Knuth, “The Art of Computer Programming”, Volumes 1 & 3 Pearson Education, 2009.
2. Steven S. Skiena, “The Algorithm Design Manual”, Second Edition, Springer, 2008.

MCA- 503
Wireless Technologies

Class: V Sem. MCA

Evaluation

Branch: MCA

Schedule per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Contents of the Subject

Introduction

Introduction, wireless transmission - frequencies for radio transmission - signals - antennas - signal propagation - multiplexing - modulation - spread spectrum - cellular systems - medium access control - specialized MAC - SDMA - FDMA - TDMA - aloha - CSMA - collision avoidance - polling - CDMA - comparison of S/T/F/CDMA

Telecommunication systems

Mobile services - system architecture - radio interface - protocols - localization and calling - handover - security - new data services - satellite systems- broadcast systems - digital audio broadcasting, - digital video broadcasting

Wireless LAN

Infrared Vs radio transmissions - infrastructure and adhoc networks - IEEE 802.11 - bluetooth - Mobile network layer - mobile IP - packet delivery - registration - tunneling and encapsulation - optimizations - reverse tunneling - dynamic host configuration protocol Adhoc networks - routing - algorithms - metrics –

Mobile transport layer

TCP - indirect TCP - snooping TCP - mobile TCP - retransmission - recovery - transaction oriented TACP - support for mobility

File systems

WWW - WAP - architecture - datagram protocol - transport security - transaction protocol - session protocol - application - environment - WML - WML script - wireless telephony application.

Text Books:

1. Communications, Pearson Schiller J., Mobile Education,2003
2. Stallings, W; Wireless Communications and Networks ,2002

References:

1. Blake Roy, Wireless Communication Technology, Thompson, 2001
2. Shambhu Upadhyaya, Abhijeet Chaudhary, Kevin Kwiat, Mark Weises, “Mobile Computing”, Kluwer Academic Publishers. 2002
3. C. Siva Ram Murthy, Ad Hoc Wireless Networks: Architectures and Protocols, Pearson Education.2004
4. C. Siva Ram Murthy, WDM Optical Networks: Concepts, Design, and Algorithms, Pearson Education.2002

MCA- 504A
Big Data Technologies & Analytics

Class: V Sem. MCA

Evaluation

Branch: MCA

Schedule Per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks= 100 [Mid-term (20) & End-term (80)]

Content of the Subject

Introduction to Big Data

Classification of Digital Data, Big Data and its importance, Four Vs, Drivers for Big data, Big data analytics, Classification of Analytics , Top Challenges Facing Big Data, Responsibilities of data scientists, Big data applications in healthcare, medicine, advertising.

Hadoop Architecture

Hadoop Architecture, Hadoop Storage: HDFS, Common Hadoop Shell commands , Anatomy of File Write and Read., NameNode, Secondary NameNode, and DataNode, Hadoop MapReduce paradigm, Map and Reduce tasks, Job, Task trackers - Cluster Setup – SSH & Hadoop Configuration – HDFS Administering –Monitoring & Maintenance, Managing Resources and Applications with Hadoop YARN. Interacting with Hadoop Ecosystem. Introduction to Hive, Introduction to Pig.

Introduction to NoSQL & Hadoop

Introduction to NoSQL Advantages of NoSQL, SQL versus No SQL, Introduction to Hadoop, Features of Hadoop, Hadoop Versions, Hadoop Ecosystems, Hadoop Distributions, Hadoop Versus SQL.

Types of Analytics & Techniques

Open source technology for Big Data Analytics – cloud and Big Data – Mobile Business Intelligence and Big Data – Crowd Sourcing Analytics – Inter- and Trans-Firewall Analytics In-Memory Analytics, In-Database Processing, Symmetric Multiprocessor System, Massively Parallel Processing, Shared Nothing Architecture, Open source Analytical Tools, Sampling Techniques, Data classification, Tabulation, Frequency and Graphic representation, Measures of central value - Arithmetic mean, Geometric mean, Harmonic mean, Mode, Median, Regression Analysis, Correlation analysis.

Predictive Analysis

Predictive Analytics, Supervised, Unsupervised learning, Clustering Techniques, Hierarchical, K- Means, Basics of R, Working of R - Creating, listing and deleting the objects in memory - The on-line help Data with R Objects, R data Frames and Matrices, Reading data in a file , Saving data, Generating data, Manipulating objects Graphics with R Managing graphics , Graphical functions

Text Books:

1. Seema Acharya ,Subhashini Chellappan ,“Big Data and Analytics (WIND)”, Wiley, ISBN: 8126554789, 2015.

2. Boris lublinsky, Kevin t. Smith, Alexey Yakubovich, “Professional Hadoop Solutions”, Wiley, ISBN: 9788126551071, 2015.
3. Chris Eaton, Dirk deroos et al. , “Understanding Big data ”, McGraw Hill, 2012.
4. Alberto Cordoba, “Understanding the Predictive Analytics Lifecycle”, Wiley, 2014.

References:

1. Tom White, “HADOOP: The definitive Guide” , O Reilly 2012. 6 IT2015 SRM(E&T)
2. VigneshPrajapati, “Big Data Analytics with R and Haoop”, Packet Publishing 2013.
3. Tom Plunkett, Brian Macdonald et al, “Oracle Big Data Handbook”, Oracle Press, 2014.
4. Jay Liebowitz, “Big Data and Business analytics”,CRC press, 2013.

MCA- 504B
Cyber Security and Quantum Cryptography

Class: V Sem. MCA

Evaluation

Branch: MCA

Schedule per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Contents of the Subject

Introduction: Cyber Security, Cyber Security policy, Domain of Cyber Security Policy ,Laws and Regulations, Enterprise Policy, Technology Operations ,Technology Configuration , Strategy Versus Policy, Cyber Security Evolution, Productivity, Internet, E commerce, Counter Measures Challenges.

Cyber Security Objectives and Guidance: Cyber Security Metrics, Security Management Goals ,Counting Vulnerabilities , Security Frameworks ,E Commerce Systems ,Industrial Control Systems ,Personal Mobile Devices ,Security Policy Objectives ,Guidance for Decision Makers ,
Tone at the Top, Policy as a Project, **Cyber** Security Management, Arriving at Goals, Cyber Security Documentation, the Catalog Approach, Catalog Format, Cyber Security Policy Taxonomy.

Cyber Security Policy Catalog: Cyber Governance Issues ,Net Neutrality ,Internet Names and Numbers ,Copyright and Trademarks , Email and Messaging , Cyber User Issues ,Advertising , Impersonation ,Appropriate Use ,Cyber Crime ,Geo location , Privacy , Cyber Conflict Issues,
Intellectual Property Theft, Cyber Espionage, Cyber Sabotage, Cyber Welfare.

Cyber Management Issue: Fiduciary Responsibility, Risk Management, Professional Certification, Supply Chain, Security Principles, Research and Development, Cyber Infrastructure Issue, Banking and finance, Health care, Industrial Control systems

Quantum Cryptography. Introduction, quantum cryptography. Key distribution and bit commitment, BB84 B92 protocols. Introduction to security proofs for these protocols

Text Books:

1. Jennifer L. Bayuk J. Healey P. Rohmeyer Marcus Sachs Jeffrey Schmidt Joseph Weiss "Cyber Security Policy Guidebook" John Wiley & Sons 2012.
2. Rick Howard "Cyber Security Essentials" Auerbach Publications 2011.
3. Dan Shoemaker Cyber security The Essential Body Of Knowledge 1st ed. Cengage Learning 2011.
4. Quantum Computation and Quantum Information M.A. Nielsen and I.L. Chuang Cambridge University Press 2000.

References:

- 1 Richard A. Clarke Robert Knake "Cyberwar: The Next Threat to National Security & What

to Do About It” Ecco 2010

MCA- 504C
Bio-Informatics

Class: V Sem. MCA

Branch: MCA

Schedule per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Evaluation

Contents of the Subject

Introduction:

Importance of Bioinformatics, Biological Sequence Structure, Deficit, Genome Projects – Status, Sequence analysis, Homology and analogy. EMBNET – NCBI – virtual Tourism.

Primary Sequence Databases Biological Database: Primary Sequence Database, Composite Protein Sequence Database, Secondary Database, Composite Protein, Pattern database structure and classification of database.

Genome Information Resources: DNA Sequence database, Specialized genomic Resources. DNA Sequence analysis, Gene structure, Features of DNA sequence analysis, Issues in the interpretation and EST search – Approach of Gene hunting, Cell CDNA libraries and ESTs – Approaches to EST analysis – Effect of EST data on DNA data base examples of EST analysis.

Database Searchers and Pair Wise Alignment Database searching: Alphabets and Complexity, Comparing Two Sequences, Sub-Sequence, Identity and Similarity, Dot plots, Simple alignment – Gaps – Scoring Matrices, Dynamic programming – BLAST , FSTA and related algorithms – Alignment scores and statistical significance of data base sequences.

Global and local Alignments: Algorithms, Similarities, Semi global alignment, Multiple Sequence Alignment Goals, Definition, Complex methods, Database of multiple Alignment, searching database with multiple alignment.

Methods of Photo Genetics: Distance Based Methods & their Comparison.

RNA Structure: Amino Acids, Polypeptide Composition Algorithm, Modeling protein folding prediction, RNA Sequence Structure.

Proteomics: Classification, Techniques, Inheritors, Drying Design, Structures, X-Ray Crystal – NMR – Empirical methods and prediction techniques.

Text/References:

1. T.K.Attwood, D.J. Parry-Smith, Introduction to Bioinformatics, Pearson Education Asia, 2004
2. Dan E. Krane, Michale L. Raymer, Fundamental Concepts of Bioinformatics, Pearson Education Asia, 2004
3. Cynthia Gibas, Per Jambeck, Developing Bioinformatics Computer Skills, O' Reilly, 2001

MCA- 504D
Mobile Operating System

Class: V Sem. MCA

Evaluation

Branch: MCA

Schedule per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Contents of the Subject

Fundamentals of Operating Systems

Overview Synchronization Mechanisms Processes and Threads Process Scheduling Deadlocks: Detection, Prevention and Recovery Memory Management Techniques

Basic Concept of Mobile Operating Systems

Introduction, Design Principal, Structure, platform and features of mobile operating system comparison of mobile os to traditional os Application life cycle Micro Kernel Design concept of MOS

Type of Mobile Operating Systems

Type of Mobile OS Android OS (Google Inc.), Bada (Samsung Electronics), BlackBerry OS (Research In Motion), iPhone OS / iOS (Apple), MeeGo OS (Nokia and Intel) Palm OS (Garnet OS), Windows Mobile (Windows Phone 7) Basic Model of Real Time Systems - Characteristics- Applications of Real Time Systems – Commercial Real Time Systems: General concepts, Unix and Windows as RTOS

Mobile Issues and Development Strategies

Issues facing Mobile devices, Securing mobile application development, Android Securable IPC Mechanism, Android Security Model, Intents, Activities, Services, Android Security tools

CASE STUDIES: Case study of Android as Mobile OS

Text Books:

1. Mukesh Singhal and Niranjana G. Shivaratri, “Advanced Concepts in Operating Systems – Distributed, Database, and Multiprocessor Operating Systems”, Tata McGraw-Hill, 2001
2. Abraham Silberschatz; Peter Baer Galvin; Greg Gagne, “Operating System Concepts”, Seventh Edition, John Wiley & Sons, 2004.

References:

1. Daniel P Bovet and Marco Cesati, “Understanding the Linux kernel”, 3rd edition, O’Reilly, 2005.
2. Mobile Application Security, Himanshu Dwivedi, Chris Clark, David Thiel, Tata McGraw Hill, 1st Edition, 2010.

MCA- 504E
ERP Systems

Class: V Sem. MCA

Evaluation

Branch: MCA

Schedule per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Contents of the Subject

Introduction to ERP

Enterprise wide information system, Custom built and packaged approaches, Needs and Evolution of ERP Systems, ERP and Related Technologies: Business Process Reengineering and Information Technology, Supply Chain Management, Relevance to Data Warehousing, Data Mining and OLAP, ERP Drivers, Decision support system.

Market & Life Cycle

ERP Domain, ERP Benefits, Classification, Present global and Indian market scenario, pitfalls, Forecast, Market players and profiles, Evaluation criterion for ERP product, ERP Life Cycle: Adoption decision, Acquisition, Implementation, Use & Maintenance, Evolution and Retirement phases, ERP Modules.

Evaluation

Framework for evaluating ERP acquisition, Analytical Hierarchy Processes (AHP), Applications of AHP in evaluating ERP, Role of consultants, vendors and users in ERP implementation, Vendors Evaluation Criterion, ERP Implementation approaches and methodology, ERP implementation strategies, ERP Customization, ERP-A manufacturing Perspective.

Critical success and failure factors for implementation

ROI of ERP implementation, Hidden costs, ERP success inhibitors and accelerators, Management concern for ERP success, Useful guidelines for ERP Implementations.

ERP Technology

ERP Software, Functionality of ERP Packages, Multimedia, Virtual Reality, Persuasive Computing and Internet in ERP, ERP and Ecommerce.

Text Books:

1. Textbook of Enterprise Resource Planning, Mahadeo Jaiswal, Ganesh Vanapalli, Macmillan Publishers India, 2005.
2. ERP: A Managerial Perspective Book Description, Sadagopan S, Tata McGraw Hill, 2013

References:

1. ERP tools techniques and applications for integrating the supply chain by Carol A. Ptak, Eli Schragenheim.
2. ERP A-Z Implementer's Guide for Success, Travis Anderegg, Resource Publishing, 2000.
3. Enterprise Resource Planning Systems System, Lifecycle, Electronic Commerce and Risk by Daniel E.O. Leary, 2011
4. Enterprise Resource Planning (ERP): The Dynamics of Operations Management by Avraham Shtub, 2011

MCA- 505A
Data Intensive Computing and Security

Class: V Sem. MCA

Evaluation

Branch: MCA

Schedule per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Contents of the Subject

Distributed Computing: Introduction, Distributed Computing Architecture, web based distributed model and protocols, Message Passing Inter process Communication, Synchronization, Buffering, Multi-datagram Messages, Encoding and Decoding of Message Data, Process Addressing, Failure Handling, Group Communication, Remote Procedure Calls (RPC), RPC Model, Transparency of RPC, Implementing RPC Mechanism, RPC Messages

Parallel Computing: Introduction, Parallel Architectures and network topologies, Parallel Algorithms, Parallel Metrics, Parallel Languages, granularity, applications, Parallel Programming Design and debugging, Message based Parallelism (MPI), Thread based Parallelism (Open PM)

Grid Computing: Introduction, Infrastructure of hardware and software, The Open Grid Forum, Grid Architecture, Overview of Grid Systems, Web Services, Grid Portals

Security: -Introduction, Overview of Security techniques, Cryptographic algorithms, Digital signatures, Distributed Database Security, Grid Computing Security.

Big Data Privacy, Ethics and Security: Privacy-Re-identification of Anonymous People, Ethics-Ownership and Ethical Guidelines, Big data Security, Organizational Security, Steps to secure Big Data, Protecting, Big Data Compliance, Intellectual Property Challenge

Text Books:

1. Distributed Computing, Principles, Algorithms and Systems, Ajay D.Kshemakalyani and Mukesh Singhal, Cambridge, rp 2010.
2. Parallel Algorithms, Henri Casanova, A.Legrand, Y.Robert, Chapman & Hall/CRC, Taylor and Francis Group.
3. Security in Data Intensive Computing Systems, Eduardo B. Fernandez, Springer, New York 2011

References:

1. Handbook of Parallel Computing, S.Rajasekaran, John Reif, Chapman & Hall/CRC, Taylor and Francis Group, 2008
2. Distributed and Cloud Computing, Kaïttwang Geoffrey C.Fox and Jack J Dongarra, Elsevier India 2012.
3. Distributed Computing, M.L.Liu, Pearson, 2004.

MCA- 505B Cryptography

Class: V Sem. MCA

Evaluation

Branch: MCA

Schedule per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Contents of the Subject

Introduction & Number Theory

Services, Mechanisms and attack the OSI security architecture-Network security model-Classical Encryption techniques (Symmetric cipher model, substitution techniques, transposition techniques, steganography).FINITE FIELDS AND NUMBER THEORY: Groups, Rings, Fields Modular arithmetic Euclid's algorithm-Finite fields- Polynomial Arithmetic Prime numbers Fermat's and Euler's theorem Testing for primality The Chinese remainder theorem Discrete logarithms.

Block Ciphers & Public Key Cryptography

Data Encryption Standard Block cipher principles-block cipher modes of operation-Advanced Encryption Standard (AES)-Triple DES Blowfish-RC5 algorithm. Public key cryptography: Principles of public key cryptosystems-The RSA algorithm Key management Diffie Hellman Key exchange Elliptic curve arithmetic Elliptic curve cryptography

Hash Functions and Digital Signatures

Authentication requirement Authentication function MAC Hash function Security of hash function and MAC MD5 SHA HMAC CMAC Digital signature and authentication protocols DSS El Gamal Schnorr.

Security Practice & System Security

Authentication applications Kerberos X.509 Authentication services Internet Firewalls for Trusted System: Roles of Firewalls Firewall related terminology Types of Firewalls Firewall designs SET for E Commerce Transactions. Intruder Intrusion detection system Virus and related threats Countermeasures Firewalls design principles Trusted systems Practical implementation of cryptography and security.

E-Mail, IP & Web Security

E-mail Security: Security Services for E-mail-attacks possible through E-mail establishing keys privacy authentication of the source Message Integrity Non-repudiation Pretty Good Privacy S/MIME. IPSecurity: Overview of IPsec IP and IPv6 Authentication Header Encapsulation Security Payload (ESP) Internet Key Exchange (Phases of IKE, ISAKMP/IKE Encoding). Web Security: SSL/TLS Basic Protocol-computing the keys- client authentication-PKI as deployed by SSL Attacks fixed in v3- Exportability-Encoding-Secure Electronic Transaction (SET).

Text Books:

1. William Stallings, Cryptography and Network Security, 6th Edition, Pearson Education, March 2013.
2. Charlie Kaufman, Radia Perlman and Mike Speciner, “Network Security”, Prentice Hall of India, 2002.

References:

1. Behrouz A. Ferouzan, “Cryptography & Network Security”, Tata Mc Graw Hill, 2007.
2. Man Young Rhee, “Internet Security: Cryptographic Principles”, “Algorithms and Protocols”, Wiley Publications, 2003.
3. Charles Pfleeger, “Security in Computing”, 4th Edition, Prentice Hall of India, 2006.
4. Ulysess Black, “Internet Security Protocols”, Pearson Education Asia, 2000.
5. Charlie Kaufman and Radia Perlman, Mike Speciner, “Network Security, Second Edition, Private Communication in Public World”, PHI 2002.
6. Bruce Schneier and Neils Ferguson, “Practical Cryptography”, First Edition, Wiley Dreamtech India Pvt Ltd, 2003.
7. Douglas R Simson “Cryptography – Theory and practice”, First Edition, CRC Press, 1995.

MCA- 505C
Artificial Neural Networks

Class: V Sem. MCA

Evaluation

Branch: MCA

Schedule per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Contents of the Subject

Introduction

Concept of neural network, Human Brain, Models of a Neuron, Neural networks viewed as Directed Graphs, Network Architectures, Knowledge Representation, Artificial Intelligence and Neural Networks.

Models of ANNs

Feedforward & feedback networks; learning rules; Hebbian learning rule, perception learning rule, delta learning rule, Widrow-Hoff learning rule, correction learning rule, Winner-take-all learning rule, etc.

Single Layer Perceptrons

Adaptive filtering problem, Unconstrained Organization Techniques, Linear least square filters, least mean square algorithm, learning curves, Learning rate annealing techniques, perception-convergence theorem, Relation between perception and Bayes classifier for a Gaussian Environment.

Multilayer Perceptron

Back propagation algorithm XOR problem, Heuristics, Output representation and decision rule, Computer experiment, feature detection.

Back Propagation

Back propagation and differentiation, Hessian matrix, Generalization, Cross validation, Network pruning Techniques, Virtues and limitations of back propagation learning, Accelerated convergence, supervised learning.

Applications of ANN

Pattern classification – Recognition of Olympic games symbols, Recognition of printed Characters. Neocognitron – Recognition of handwritten characters, to convert English text to speech. Recognition of consonant vowel (CV) segments, texture classification and segmentation.

Text Books:

1. Neural networks A comprehensive foundations, Simon Haykin, Pearson Education 2nd Edition 2004
2. Artificial Neural Networks – B. Yegnanarayana PHI

References:

1. Artificial neural networks - B. Yegnanarayana Prentice Hall of India P Ltd 2005
2. Neural networks in Computer intelligence, Li Min Fu TMH 2003

3. Neural networks James A Freeman David M S kapura Pearson Education 2004

MCA- 505D
Embedded Systems

Class: V Sem. MCA

Evaluation

Branch: MCA

Schedule per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Contents of the Subject

Introduction to Embedded systems. Embedded system vs general Computing system. Classification of Embedded system. Core of Embedded system. RISC vs CISC controllers. Harvard vs Van Neumen architecture.

Application market segments, control system and industrial automation, Data communication, Networked Information Appliances, Telecommunications.

Hardware Architecture: Processor, Memory, Latches and buffers, ADC & DAC, Application specific control, Display units, keypads, DSP.

Microcontrollers and their applications, Communication interfaces: Serial interface, IEEE 1394, USB, Infra red, Ethernet and PCI bus.

Embedded system development process : requirement ,system architecture, operating system and processes. Development platform and tools, HLL support Cross compilers, Linux and Windows CE based development Tools. Mobile/ handheld systems.

Basic idea of embedded system application like mobile networks, GPS, Real time system, Database applications, Networked and JAVA-enabled information appliances, Mobile JAVA applications.

Text Books:

1. Introduction to Embedded Systems -Shibu K.V, Mc Graw Hill ,2011

References:

1. Embedded Systems -Raj Kamal, TMH.
2. Embedded System Design -Frank Vahid, Tony Givargis, John Wiley, 2007.
3. Embedded Systems –Lyla, Pearson, 2013
4. An Embedded Software Primer -David E. Simon, Pearson Education 2010

MCA- 505E
Web Mining

Class: V Sem. MCA

Branch: MCA

Schedule per Week

Lectures: 3

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Evaluation

Contents of the Subject

Introduction

Introduction – Web Mining – Theoretical background –Algorithms and techniques – Association rule mining – Sequential Pattern Mining -Information retrieval and Web search – Information retrieval Models-Relevance Feedback- Text and Web page Pre-processing

Web Content Mining

Web Content Mining – Supervised Learning – Decision tree - Naïve Bayesian Text Classification -Support Vector Machines - Ensemble of Classifiers. Unsupervised Learning - K-means Clustering -Hierarchical Clustering –Partially Supervised Learning

Web Structure Mining

Web Link Mining – Hyperlink based Ranking – Introduction -Social Networks Analysis- Co-Citation and Bibliographic Coupling - Page Rank -Authorities and Hubs -Link-Based Similarity Search -Enhanced Techniques for Page Ranking - Community Discovery – Web Crawling -A Basic Crawler Algorithm- Implementation Issues- Universal Crawlers- Focused Crawlers- Topical Crawlers Evaluation- Crawler Ethics and Conflicts - New Developments

Structured Data Extraction

Structured Data Extraction: Wrapper Generation – Preliminaries- Wrapper Induction- Instance-Based Wrapper Learning :- Unstructured Data Mining Techniques- Automatic Wrapper Generation: Problems - String Matching and Tree Matching -Multiple Alignment - Building DOM Trees - Extraction Based on a Single List Page and Multiple pages- Introduction to Schema Matching - Schema-Level Match -Domain and Instance-Level Matching – Extracting and Analyzing Web Social Networks. Tools

Web Usage Mining

Web Usage Mining – sources of data- Applications -Click stream Analysis -Web Server Log Files - Data Collection and PreProcessing- Cleaning and Filtering- Data Modeling for Web Usage Mining – Issues- Discovery and Analysis of Web Usage Patterns – Used tools in Web Usage mining.

Text Books:

1. Bing Liu, “ Web Data Mining: Exploring Hyperlinks, Contents, and Usage Data (Data-Centric Systems and Applications)”, Springer; 2nd Edition 2009

References:

1. Guandong Xu ,Yanchun Zhang, Lin Li, “Web Mining and Social Networking: Techniques and Applications”, Springer; 1st Edition.2010
2. Zdravko Markov, Daniel T. Larose, “Data Mining the Web: Uncovering Patterns in Web Content, Structure, and Usage”, John Wiley & Sons, Inc., 2007

3. Soumen Chakrabarti, "Mining the Web: Discovering Knowledge from Hypertext Data", Morgan Kaufmann; edition 2002.

MCA-551
Case Study on Mobile Applications

Class: V Sem. MCA

Evaluation

Branch: MCA

Examination Time: Three Hours

Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Introduction to Android: Setting up development environment, Dalvik Virtual Machine & .apk file extension, Basic Building blocks – Activities, Services, Broadcast ,Receivers & Content, UI Components- Views & notifications, Components for communication -Intents & Intent Filters, Android API levels(versions & version names), Providers.

Application Structure (in detail): AndroidManifest.xml, Uses-permission & uses-sdk, Activity/services/receiver declarations, Resources & R.java, Assets, Layouts & Drawable Resources, Activities and Activity lifecycle, First sample Application.

Emulator & Intents: Launching emulator, Editing emulator settings, Emulator shortcuts, Logcat usage, Introduction to DDMS, File explorer, Explicit Intents.

Basic UI design, Styles & Themes: Form widgets, Text Fields, Layouts, styles.xml, drawable resources for shapes, gradients(selectors), style attribute in layout file, Applying themes via code and manifest file Examples.

Dialog boxes: Alert Dialogs, Toast, Time and Date

Images and media, Composite: ListView and ListActivity, Custom listview, GridView using adapters, Gallery using adapters.

Menu: Option menu, Context menu, Sub menu, menu from xml, menu via code, Examples

Adapters: ArrayAdapter, BaseAdapters

Receivers and services: Alarm Via services, Broadcast Receiver

Content Providers: SQLiteDatabase and SQLiteOpenHelper, DB programming using 2 and 3 tier architecture, Reading and updating Contacts, Reading bookmarks

Customized controls: • Custom Toast, Custom dialogs, Custom Tabs, Custom animated popup panels

Fragments: Fragment Life Cycle, Fragments in Activity, Develop Fragment based UI designs

Location based Services: GPS, Geocoding

Accessing Phone services: Call,SMS,MMS

Text Book:

1. Jeff McWherter and Scott Gowell, "Professional Mobile Application Development", Wrox, 2012
2. Charlie Collins, Michael Galpin and Matthias Kappler, "Android in Practice", DreamTech, 2012

References:

1. David Mark, Jack Nutting, Jeff LaMarche and Frederic Olsson, "Beginning iOS 6 Development: Exploring the iOS SDK", Apress, 2013.
2. James Dovey and Ash Furrow, "Beginning Objective C", Apress, 2012
3. Paul Deitel ,Harvey Deitel, Abbey Deitel and Michael Morgano "Android for Programmers An App-Driven Approach" ,Pearson, 2004

MCA-552
ADA Lab Mini Project

Class: V Sem. MCA

Evaluation

Branch: MCA

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Objective: Student should able to develop an application using ADA.

Guidelines regarding project:

1. Students shall use “C” or “C++” language to develop 3 applications using different algorithms for application based problems (e.g. calculating shortest distance in ATM network using different Shortest Path Algorithms)
2. Students shall provide documentation and it should be based on the prescribed standards
3. Need to submit a Report, Presentation with Demonstration.
4. Students shall work individually for project.
5. Students will submit a synopsis of the project.
6. Two copies of the report should be submitted.
7. The reports should be spiral bound along with the soft copy of the project.
8. The reports should be submitted with the following guidelines in the prescribed format.
 - Paper: A4
 - Font: Times New Roman
 - Chapter Heading: 16pt
 - Sub Heading: 14, Sub-Sub Headings: 12
 - Bold Running Matter: 12 pt
 - All topics should be numbered accordingly.
 - Paragraph Gap: 6 Pt Maximum
 - Line Gap: 1.5
 - Margins: Left 1.5, Right, Top and Bottom 1 inch

MCA-553
Wireless Technology Lab

Class: V Sem. MCA

Evaluation

Branch: MCA

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Contents of the Subject:

List Of Experiments (NS2/QUALNET/BWSIM/MATLAB)

1. Wired and Wireless network scenario creation.
2. Study of Routing Protocols
3. Analysis of Network Security Algorithms
4. Study of Zig Bee Energy Model and MAC protocols
5. Queuing mechanism.
6. QoS analysis of Multimedia traffic.
7. Bandwidth Analysis
8. Call establishment in cellular network
9. Handover in cellular network (Inter cell)
10. Handover in cellular network (Intra cell)
11. Handover in cellular network (Inter BSC)
12. Handover in cellular network (Inter MSC)
13. Throughput performances for various terrain models,
14. Transmission modes
15. Loading conditions
16. Traffic profiles in LTE network
17. Introduction of Basic Networking command (ping, pathping, tracert, ipconfig, ipconfig/all,arg)

MCA – 554
Seminar Presentation-II

Class: V Sem. MCA

Evaluation

Branch: MCA

Examination Time: Three Hours Maximum Marks: 100 [Mid-term (20) & End-term (80)]

Objective: To carry out a research based study in the field of Computer Science/ Application. The objective of the seminar is to prepare the student for a systematic and independent study of the state of the art topics in a broad area of his / her specialization.

Term Paper Presentation:

- Research work / Technical Learning must be done individually.
- Final Evaluation will be done by electronic presentation
- The semester end assessment of Seminar Presentation shall be on the basis of Presentation, Seminar Report and Viva Voice.

General Instructions for Seminar Presentation Report

Each student is required to write a comprehensive report about the seminar. The report should consist of 15 to 20 pages describing the topic selected. The report should be in the format as described below.

1. Page Dimension and Binding Specifications:

The dimension of the seminar report should be in A4 size. The project report should be **hard bound** using flexible cover of the thick art paper. Report (hard copy only) should be submitted along with soft copy of the presentation in a CD.

2. Typing Instructions:

One and a half spacing should be used for typing the general text. The general text shall be justified and typed in the Font style 'Times New Roman' and Font size 12.

Subheading shall be typed in the Font style 'Times New Roman' and Font size 12 and bold. **Heading** shall be typed in the Font style 'Times New Roman' and Font size 14 and bold.

3. Preparation Format:

Cover Page—The Cover page of the Seminar Presentation Report must include College Name along

with Logo, University associated with along with Logo, title of Seminar Presentation and Paper Code.

Abstract – Abstract should be one page synopsis, it should summarize the aims, conclusions and

implications of the seminar topic, typed with double line spacing, Font Style Times New Roman and
Font Size 14.

Table of Contents – The table of contents should list all material following it as well as any material,

which precedes it. The page numbers of which are in lower case Roman letters. One and a half

spacing should be adopted for typing the matter under this head.

Subject Contents - The Term Paper should be a culmination and final product of involved process

of research, critical thinking, source evaluation, organization, and composition that encourages

students to explore, interpret, and evaluate sources related to a specific topic.

List of References –The listing of references should be typed 2 spaces below the heading “REFERENCES” in alphabetical order in single spacing left – justified. Should be numbered

consecutively (in square [] brackets, throughout the text and should be collected together in the

reference list at the end of the report. The references should be numbered in the order they are used

in the text. The name of the author/authors should be immediately followed by the year and other

details.