

# FACULTY OF ECONOMICS & BUSINESS

## Syllabus

For

### BACHELOR OF VOCATION (B.Voc.) E-Commerce and Digital Marketing

(Semester I - VI)

Session: 2019-20



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# GURUNANAKDEVUNIVERSITY AMRITSAR

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**SCHEME****Semester-I**

Paper No.	Subjects	Max. Marks		Total
		Th.	Pr.	
Paper-I	Fundamentals of Management	75	-	75
Paper-II	Fundamental of E-Commerce	75	-	75
Paper-III	Information Processing Lab	-	75	75
Paper-IV	Web Designing using HTML and DHTML	-	75	75
Paper-V	Communication Skills in English-I	50	-	50
Paper-VI	Punjabi (Compulsory) OR ਮੁੱਢਲੀ ਪੰਜਾਬੀ OR Punjab History & Culture (From Earliest Times to C 320)	50	-	50
	*Drug Abuse: Problem, Management and Prevention (Compulsory)	50	-	50
<b>Total</b>				<b>400</b>

**Semester-II**

Paper No.	Subjects	Max. Marks		Total
		Th.	Pr.	
Paper-I	Marketing Management	50	25	75
Paper-II	Internet Applications	75	-	75
Paper-III	Database Management System and Structured Query Language	50	25	75
Paper-IV	Web Designing using XML and CSS	-	75	75
Paper-V	Communication Skills in English-II	35	15	50
Paper-VI	Punjabi (Compulsory) OR ਮੁੱਢਲੀ ਪੰਜਾਬੀ OR Punjab History & Culture (C 321 to 1000 A.D.)	50	-	50
	*Drug Abuse: Problem, Management and Prevention (Compulsory)	50	-	50
<b>Total</b>				<b>400</b>

**\* Note: The marks of Paper will not be added in the Grand Total.**

## Semester-III

<b>Paper No.</b>	<b>Subjects</b>	<b>Theory</b>	<b>Practical</b>	<b>Total</b>
Paper-I	Fundamentals of Entrepreneurship	75	-	75
Paper-II	Fundamentals of Finance & Accountancy	50	25	75
Paper-III	PHP Programing and MySQL	50	25	75
Paper-IV	Content Management System using Word Press	50	25	75
Paper-V	Web Designing using Photoshop		50	50
Paper-VI	Website Development	-	75	75
			Total	425

## Semester IV

<b>Paper No.</b>	<b>Subjects</b>	<b>Theory</b>	<b>Practical</b>	<b>Total</b>
Paper-I	Retailing	50		50
Paper-II	Advertisement & sales management	50	25	75
Paper-III	Linux Server Management	50	25	75
Paper-IV	Content Management System using open cart	-	75	75
Paper-V	Web Designing using Corel Draw		50	50
Paper-VI	E-Commerce Website Development	-	75	75
ESL-222	* Environmental Studies – II (Compulsory)	100	-	100

**\* Note: The marks of Environmental Studies Paper will not be added in the Grand Total.**

**Semester- V**

Paper No.	Subjects	Max Marks		Total
		Th.	Pr.	
Paper-I	Fundamentals of Entrepreneurship	75	-	75
Paper-II	Concepts of Social Media Marketing	50	25	75
Paper-III	E-commerce-Laws and Practices	75	-	75
Paper-IV	Programming in Java	50	25	75
Paper-V	Digital Marketing Development	-	100	100
	<b>Total</b>			<b>400</b>

**Semester-VI**

Paper No.	Subjects	Max. Marks		Total
		Th.	Pr.	
Paper-I	Supply Chain Management	75	-	75
Paper-II	Customer Relationship Management	75		75
Paper-III	Android Application Development	50	25	75
Paper-IV	Search Engine Optimization	50	25	75
Paper-V	Project Training		100	100
	<b>Total</b>			<b>400</b>

**PAPER – I: FUNDAMENTALS OF MANAGEMENT****Time: 3 Hours****Max. Marks: 75****Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

**SECTION-A**

**Management:** Introduction – Meaning, nature and characteristics of Management – Scope and functional areas of management – Management as a science, art or profession .

**SECTION-B**

Management & Administration – Principles of management – Social responsibility of management and Ethics. Functions of Management.

**SECTION-C**

Human Resource Management: Acquisition of Human Resource – Human Resource Planning and Job Analysis: An Overview; Recruitment – Concept and Sources;

**SECTION-D**

Selection – Concept and Process; Placement, Induction, and Socialization.  
Training and Development: Concept and Importance; Performance Appraisal System: Nature and Objectives.

**Suggested Readings:**

1. Koontz, H., “*Principles of Management (Ascent Series)*”, 2004, Tata McGraw Hill Publishing.
2. Robbins S.P. & Decenzo D., “*Fundamentals of Management: Essential Concepts and Applications*”, Third Edition, 2000, Pearson Education.
3. Gomez, Meja, Balkin, Cardy, “*Managing Human Resources*”, Pearson Education, New Delhi.
4. Aswathappa, K., “*Human Resource Management Text and Cases*”, Tata McGraw – Hill, New Delhi.

**Note: Latest edition of suggested books may be considered.**

**PAPER – II: FUNDAMENTALS OF E-COMMERCE****Time: 3 Hours****Max. Marks: 75****Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

**SECTION-A****Introduction**

E-Business - Origin and Need of E-Commerce, Factors affecting E -Commerce, Business dimension and technological dimension of E-Commerce, E-Commerce frame work Electronic Commerce Models, Value Chains in Electronic Commerce.

**SECTION-B****Internet and E-Business**

Introduction to Internet and its application, Intranet and Extranets. World Wide Web, Internet Architectures, Internet Applications, Business Applications on Internet, E - Shopping, Electronic Data Interchange, Components of Electronic Data Interchange, Creating Web Pages using HTML.

**SECTION-C**

Technology for Online Business: Internet, IT Infrastructure, Middleware Contents, Text and Integrating E-Business Applications, Mechanism of Making Payment Through Internet, Online Payment Mechanism, Electronic Payment Systems, Payment Gateways, Visitors to Website, Tools for Promoting Website, Plastic Money, Debit Card, Credit Card.

**SECTION-D**

Laws Relating to Online Transactions ,Applications in E-commerce: E-commerce Applications in Manufacturing, Wholesale, Retail and Service Sector

**Suggested Readings:**

1. E-Commerce Strategy, Technologies and Applications, Whitley, David, Tata McGraw Hill.
2. Electronic Commerce. , Schneider Gary P. and Perry, James T ,Thomson Learning.
3. E-Commerce: The Cutting Edge of Business, Bajaj, Kamlesh K & Nag, Debjani , McGraw Hill
4. E-Commerce: Business, Technology, Society, Laudon and Traver, Pearson Education
5. Designing Systems for Internet Commerce, Treese G. Winfield & Stewart C. Lawrance,

Addison Wesley.

**Note: Latest edition of suggested books may be considered.**

**PAPER-III: INFORMATION PROCESSING LAB**  
**(PRACTICAL)**

**Time: 3 Hours**

**Max. Marks: 75**

**Note: Practical exam to be conducted by the external examiner.**

**SECTION-A**

**Introduction to Computers and its Applications:**

- Computer as a system, basic concepts, functional units and their inter relation.
- Milestones in Hardware and Software.
- Batch oriented / on-line / real time applications.
- Application of computers.

**Algorithm and Flowcharts Algorithm:** Definition, Characteristics, Advantages and disadvantages, Examples Flowchart: Definition, Define symbols of flowchart, Advantages and disadvantages, Examples, Pseudocodes and decision tables.

**SECTION-B**

**Interacting with the Computer:**

**Input Devices:** Keyboard, mouse, pens, touch screens, Bar Code reader, joystick, source data Automation, (MICR, OMR, OCR), screen assisted data entry: portable / handheld terminals for Data collection, vision input systems.

**Output Devices:** Monitor, Serial line page printers, plotters, voice response units.

**Data Storage Devices and Media:** Primary storage (Storage addresses and capacity, types of Memory), Secondary storage, Magnetic storage devices and Optical Storage Devices

**SECTION-C**

**MS-Word:** Overview, creating, saving, opening, importing, exporting and inserting files, formatting pages, paragraphs and sections, indents and outdents, creating lists and numbering.

Headings, styles, fonts and font size Editing, positioning and viewing texts, Finding and replacing text, inserting page breaks, page numbers, book marks, symbols and dates. Using tabs and tables, header, footer and printing.

**SECTION-D**

**MS-Power Point:** Presentation overview, entering information, Presentation creation, opening and saving presentation, inserting audio and video.

**MS-Excel:** Exploring Microsoft Excel, Creating Workbook Files, Editing Worksheet, Managing Worksheets and Workbook Files, Formulas.

**Text/References:**

1. Computer Fundamentals – P.K. Sinha.
2. Norton, Peter: Introduction to Computers, McGraw Hill
3. Introduction to Computers – N. Subramanian.

**PAPER-IV: WEB DESIGNING USING HTML &DHTML****(PRACTICAL)****Time: 3 Hours****Max. Marks: 75****Note: Practical exam to be conducted by the external examiner.****Practical based on HTML****SECTION-A****Introduction to HTML**

1. Elements of Web page (Text , Image & Hyperlink Elements)
2. Html Tags

**Using Tools**

1. Structure of a page
2. Links & Navigation
3. Backgrounds
4. Animated Graphics

**SECTION-B****Working with Tables**

1. Page Design & Layout with Links
2. Advanced Layout with Tables
3. Working Style Sheets

**SECTION-C****Forms & Frame**

1. **HTML Forms (<form> element, Form controls, creating labels for control, structuring forms, focus, sending form data to server)**
2. **Using Frame (<frame>, <frameset><noframes> element, creating links between frames, nested framesets)**

**SECTION-D****Practical based on DHTML****Introduction to DHTML**

1. Understanding DOM
2. Working with Layers
3. Drop Down Menus, Text Effects and Animation.

**Web Supportive Formats & validating Html Code*****Text/References:***

1. HTML: The complete reference by Thomas A. Powell
2. New perspectives on creating Web pages with HTML/DHTML by Patrick Carey, Mark Kemper

**Paper-V: COMMUNICATION SKILLS IN ENGLISH – I****Time: 3 Hours****Max. Marks: 50****Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

**The syllabus is divided in four sections as mentioned below:**

**SECTION–A**

**Reading Skills:** Reading Tactics and strategies; Reading purposes–kinds of purposes and associated comprehension; Reading for direct meanings.

**SECTION–B**

Reading for understanding concepts, details, coherence, logical progression and meanings of phrases/ expressions.

**Activities:**

- Comprehension questions in multiple choice format
- Short comprehension questions based on content and development of ideas

**SECTION–C**

**Writing Skills:** Guidelines for effective writing; writing styles for application, personal letter, official/ business letter.

**Activities**

- Formatting personal and business letters.
- Organising the details in a sequential order

**SECTION–D**

Resume, memo, notices etc.; outline and revision.

**Activities:**

- Converting a biographical note into a sequenced resume or vice-versa
- Ordering and sub-dividing the contents while making notes.
- Writing notices for circulation/ boards

**Recommended Books:**

- *Oxford Guide to Effective Writing and Speaking* by John Seely.
- *English Grammar in Use* (Fourth Edition) by Raymond Murphy, CUP

**Paper-VI:ਪੰਜਾਬੀ (ਲਾਜ਼ਮੀ)**

ਸਮਾਂ : 3 ਘੰਟੇ

ਕੁਲ ਅੰਕ : 50

ਪਾਠ-ਕ੍ਰਮ ਅਤੇ ਪਾਠ-ਪੁਸਤਕਾਂ

**ਸੈਕਸ਼ਨ-ਏ**

ਆਤਮ ਅਨਾਤਮ (ਕਵਿਤਾ ਭਾਗ),  
(ਸੰਪ. ਸੁਹਿੰਦਰ ਬੀਰ ਅਤੇ ਵਰਿਆਮ ਸਿੰਘ ਸੰਧੂ)  
ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ, ਅੰਮ੍ਰਿਤਸਰ।  
(ਪ੍ਰਸ਼ੰਸਾ ਸਾਹਿਤ ਵਿਆਖਿਆ, ਸਾਰ )

**ਸੈਕਸ਼ਨ-ਬੀ**

ਇਤਿਹਾਸਕ ਯਾਦਾਂ (ਇਤਿਹਾਸਕ ਲੇਖ-ਸੰਗ੍ਰਹਿ)  
ਸੰਪਾ. ਸ.ਸ.ਅਮੋਲ,  
ਪੰਜਾਬੀ ਸਾਹਿਤ ਪ੍ਰਕਾਸ਼ਨ, ਲੁਧਿਆਣਾ । (ਲੇਖ 1 ਤੋਂ 6)  
(ਨਿਬੰਧ ਦਾ ਸਾਰ, ਲਿਖਣ-ਸ਼ੈਲੀ)

**ਸੈਕਸ਼ਨ-ਸੀ**

(ੳ) ਪੈਰਾ ਰਚਨਾ  
(ਅ) ਪੈਰਾ ਪੜ੍ਹ ਕੇ ਪ੍ਰਸ਼ੰਸਾਂ ਦੇ ਉੱਤਰ।

**ਸੈਕਸ਼ਨ-ਡੀ**

(ੳ) ਪੰਜਾਬੀ ਧੁਨੀ ਵਿਉਂਤ :ਉਚਾਰਨ ਅੰਗ, ਉਚਾਰਨ ਸਥਾਨ ਤੇ ਵਿਧੀਆਂ, ਸਵਰ, ਵਿਅੰਜਨ, ਸੁਰ-ਪ੍ਰਥਮ।  
(ਅ) ਭਾਸ਼ਾ ਵੰਨਗੀਆਂ: ਭਾਸ਼ਾ ਦਾ ਟਕਸਾਲੀ ਰੂਪ, ਭਾਸ਼ਾ ਅਤੇ ਉਪ-ਭਾਸ਼ਾ ਦਾ ਅੰਤਰ, ਪੰਜਾਬੀ ਉਪ-ਭਾਸ਼ਾਵਾਂ ਦੇ ਪਛਾਣ-ਚਿੰਨ੍ਹ।

**ਅੰਕ-ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ**

1. ਪ੍ਰਸ਼ੰਸਾ ਪੱਤਰ ਦੇ ਚਾਰ ਭਾਗ ਹੋਣਗੇ। ਹਰ ਭਾਗ ਵਿੱਚੋਂ ਦੋ ਪ੍ਰਸ਼ੰਸਾ ਪੁੱਛੇ ਜਾਣਗੇ।
2. ਵਿਦਿਆਰਥੀ ਨੇ ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ੰਸਾ ਕਰਨੇ ਹਨ। ਹਰ ਭਾਗ ਵਿੱਚੋਂ ਇੱਕ ਪ੍ਰਸ਼ੰਸਾ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ੰਸਾ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿੱਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।
3. ਹਰੇਕ ਪ੍ਰਸ਼ੰਸਾ ਦੇ ਬਰਾਬਰ ਅੰਕ ਹਨ।
4. ਪੇਪਰ ਸੈੱਟ ਕਰਨ ਵਾਲਾ ਜੇਕਰ ਚਾਹੇ ਤਾਂ ਪ੍ਰਸ਼ੰਸਾਂ ਦੀ ਵੰਡ ਅੱਗੋਂ ਵੱਧ ਤੋਂ ਵੱਧ ਚਾਰ ਉਪ-ਪ੍ਰਸ਼ੰਸਾਂ ਵਿੱਚ ਕਰ ਸਕਦਾ ਹੈ।

**Paper-VI: ਮੁੱਢਲੀ ਪੰਜਾਬੀ**  
(In lieu of Compulsory Punjabi)

ਸਮਾਂ : 3 ਘੰਟੇ

ਕੁਲ ਅੰਕ: 50

**ਪਾਠ-ਕ੍ਰਮ**

**ਸੈਕਸ਼ਨ-ਏ**

ਪੈਂਤੀ ਅੱਖਰੀ, ਅੱਖਰ ਕ੍ਰਮ, ਪੈਰ ਬਿੰਦੀ ਵਾਲੇ ਵਰਣ ਅਤੇ ਪੈਰ ਵਿਚ ਪੈਣ ਵਾਲੇ ਵਰਣ ਅਤੇ ਮਾਤ੍ਰਵਾਂ (ਮੁੱਢਲੀ ਜਾਣ-ਪਛਾਣ)  
ਲਗਾਖਰ (ਬਿੰਦੀ, ਟਿੱਪੀ, ਅੱਧਕ) : ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ

**ਸੈਕਸ਼ਨ-ਬੀ**

ਪੰਜਾਬੀ ਸ਼ਬਦ-ਬਣਤਰ : ਮੁੱਢਲੀ ਜਾਣ-ਪਛਾਣ  
(ਸਾਧਾਰਨ ਸ਼ਬਦ, ਸੰਯੁਕਤ ਸ਼ਬਦ, ਮਿਸ਼ਰਤ ਸ਼ਬਦ, ਮੂਲ ਸ਼ਬਦ, ਅਗੇਤਰ ਅਤੇ ਪਿਛੇਤਰ)

**ਸੈਕਸ਼ਨ-ਸੀ**

ਨਿੱਤ ਵਰਤੋਂ ਦੀ ਪੰਜਾਬੀ ਸ਼ਬਦਾਵਲੀ : ਬਾਜ਼ਾਰ, ਵਪਾਰ, ਰਿਸ਼ਤੇ-ਨਾਤੇ, ਖੇਤੀ ਅਤੇ ਹੋਰ ਧੰਦਿਆਂ ਆਦਿ ਨਾਲ ਸੰਬੰਧਤ।

**ਸੈਕਸ਼ਨ-ਡੀ**

ਹਫ਼ਤੇ ਦੇ ਸੱਤ ਦਿਨਾਂ ਦੇ ਨਾਂ, ਬਾਰਾਂ ਮਹੀਨਿਆਂ ਦੇ ਨਾਂ, ਰੁੱਤਾਂ ਦੇ ਨਾਂ, ਇਕ ਤੋਂ ਸੌ ਤਕ ਗਿਣਤੀ ਸ਼ਬਦਾਂ ਵਿਚ

**ਅੰਕ-ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ**

1. ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਚਾਰ ਭਾਗ ਹੋਣਗੇ। ਹਰ ਭਾਗ ਵਿੱਚੋਂ ਦੋ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ।
2. ਵਿਦਿਆਰਥੀ ਨੇ ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਭਾਗ ਵਿੱਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿੱਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।
3. ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ ਬਰਾਬਰ ਅੰਕ ਹਨ।
4. ਪੇਪਰ ਸੈੱਟ ਕਰਨ ਵਾਲਾ ਜੇਕਰ ਚਾਹੇ ਤਾਂ ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਵੰਡ ਅੱਗੋਂ ਵੱਧ ਤੋਂ ਵੱਧ ਚਾਰ ਉਪ-ਪ੍ਰਸ਼ਨਾਂ ਵਿਚ ਕਰ ਸਕਦਾ ਹੈ।

**Paper–VI: Punjab History & Culture (From Earliest Times to C 320)**  
**(Special Paper in lieu of Punjabi compulsory)**

**Time: 3 Hours**

**Max. Marks: 50**

**Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

**SECTION A**

1. Physical features of the Punjab and its impact on history.
2. Sources of the ancient history of Punjab

**SECTION B**

3. Harappan Civilization: Town planning; social, economic and religious life of the Indus Valley People.
4. The Indo-Aryans: Original home and settlements in Punjab.

**SECTION C**

5. Social, Religious and Economic life during *Rig* Vedic Age.
6. Social, Religious and Economic life during Later Vedic Age.

**SECTION D**

7. Teachings and impact of Buddhism
8. Jainism in the Punjab

**Suggested Readings**

1. L. M Joshi (ed.), *History and Culture of the Punjab*, Art-I, Patiala, 1989 (3<sup>rd</sup> edition)
2. L.M. Joshi and Fauja Singh (ed.), *History of Punjab*, Vol.I, Patiala 1977.
3. Budha Parkash, *Glimpses of Ancient Punjab*, Patiala, 1983.
4. B.N. Sharma, *Life in Northern India*, Delhi. 1966.
5. Chopra, P.N., Puri, B.N., & Das, M.N.(1974). *A Social, Cultural & Economic History of India*, Vol. I, New Delhi: Macmillan India.

**DRUG ABUSE: PROBLEM, MANAGEMENT AND PREVENTION****PROBLEM OF DRUG ABUSE****Time: 3 Hours****Max. Marks: 50****Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

**SECTION – A****Meaning of Drug Abuse:**

Meaning, Nature and Extent of Drug Abuse in India and Punjab.

**SECTION – B****Consequences of Drug Abuse for:**

Individual	:	Education, Employment, Income.
Family	:	Violence.
Society	:	Crime.
Nation	:	Law and Order problem.

**SECTION – C****Management of Drug Abuse:**

Medical Management: Medication for treatment and to reduce withdrawal effects.

**SECTION – D**

Psychiatric Management: Counselling, Behavioural and Cognitive therapy.

Social Management: Family, Group therapy and Environmental Intervention.

**References:**

1. Ahuja, Ram (2003), *Social Problems in India*, Rawat Publication, Jaipur.
2. Extent, Pattern and Trend of Drug Use in India, Ministry of Social Justice and Empowerment, Government of India, 2004.
3. Inciardi, J.A. 1981. *The Drug Crime Connection*. Beverly Hills: Sage Publications.
4. Kapoor. T. (1985) *Drug epidemic among Indian Youth*, New Delhi: Mittal Pub.
5. Kessel, Neil and Henry Walton. 1982, *Alcoholism*. Harmond Worth: Penguin Books.
6. Modi, Ishwar and Modi, Shalini (1997) *Drugs: Addiction and Prevention*, Jaipur: Rawat Publication.
7. National Household Survey of Alcohol and Drug abuse. (2003) New Delhi, Clinical Epidemiological Unit, All India Institute of Medical Sciences, 2004.

8. Ross Coomber and Others. 2013, *Key Concept in Drugs and Society*. New Delhi: Sage Publications.
9. Sain, Bhim 1991, *Drug Addiction Alcoholism, Smoking obscenity* New Delhi: Mittal Publications.
10. Sandhu, Ranvinder Singh, 2009, *Drug Addiction in Punjab: A Sociological Study*. Amritsar: Guru Nanak Dev University.
11. Singh, Chandra Paul 2000. *Alcohol and Dependence among Industrial Workers*: Delhi: Shipra.
12. Sussman, S and Ames, S.L. (2008). *Drug Abuse: Concepts, Prevention and Cessation*, Cambridge University Press.
13. Verma, P.S. 2017, "*Punjab's Drug Problem: Contours and Characteristics*", Economic and Political Weekly, Vol. LII, No. 3, P.P. 40-43.
14. World Drug Report 2016, United Nations office of Drug and Crime.
15. World Drug Report 2017, United Nations office of Drug and Crime.

**PAPER – I: MARKETING MANAGEMENT****Time: 3 Hours****Max. Marks: 75****Theory: 50****Practical: 25****Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

**SECTION-A**

Meaning and Definition of Marketing- Features of Marketing- Importance of Marketing – Functions of Marketing - Core Concept of Marketing - Need, Want, Demand, Value and Satisfaction

**SECTION-B**

Production, Concept, Product concept, selling concept Marketing concept, holistic Marketing concept. Marketing Mix: Meaning, Seven Ps of marketing mix.

**SECTION-C**

Market Segmentation: Concept and importance of Market Segmentation, Bases of market segmentation, Concept of Market Targeting and Positioning.

**SECTION-D**

Marketing Research: Meaning and Importance, Process of Marketing Research. Scope/Areas of Marketing Research: Consumer Research, Market Research, Product Research, Sales Research, Advertising & Sales Promotional Research

**Practicals (Based on the above Units):**

1. Case – studies regarding marketing management
2. Survey regarding marketing in retail malls
3. Preparation of market research project report and viva –voce
4. Oral / Seminar

**Suggested Readings:**

1. Philip Kotler: Marketing Management, Prentice Hall of India Ltd, New Delhi.
2. S.A.Sherlekar, “Marketing Management”, Himalaya Publishing House, Mumbai.
3. Marchand&B.Vardharajan: An introduction to Marketing, Vikas Publishing House, 5Ansari Road, New Delhi.
4. Biplab S Bose – Marketing Management Himalaya publishing House, Edition -2009
5. William I. Stanton, Ajay Pandit-Marketing Concepts & Cases,- The McGraw Hill companies Ltd. New Delhi

**Note: Latest edition of suggested books may be considered.**

**PAPER II- INTERNET APPLICATIONS****(THEORY)****Time: 3 Hours****Max. Marks: 75****Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

**SECTION-A**

**Introduction:** About internet and its working, business use of internet, services offered by Internet, evaluation of internet, internet service provider (ISP), windows environment for dial upNetworking (connecting to internet), audio on internet, internet addressing (DNS) and IP addresses).

**SECTION-B**

**Internet Protocol:** Introduction, file transfer protocol (FTP), Gopher, Telnet, other protocols like HTTP and TCP/IP.

**WWW:** Introduction, working of WWW, Web browsing (opening, viewing, saving and printing a web page and bookmark),

**SECTION-C**

**Search Engine:** About search engine, component of search engine, working of search engine, Difference between search engine and web directory.

**Intranet and Extranet:** Introduction, application of intranet, business value of intranet, working of intranet, role of extranet, working of extranet, difference between intranet and extranet.

**SECTION-D**

**E-Mail Basic Introduction;** Advantage and disadvantage, structure of an e-mail message, working of e-mail (sending and receiving messages), managing e-mail (creating new folder, deleting messages, forwarding messages, filtering messages) Implementation of outlook express.

**Text/References:**

1. "Understanding The Internet", Kieth Sutherland, Butterworth-Heinemann; 1st Edition(October 31, 2000).
2. "Internet Technologies", S. K. Bansal, APH Publishing Corporation (April 1, 2002).
3. "Data Communications and Networking", Behrouz A. Forouzan, 3rd Edition.

**PAPER III:DATABASE MANAGEMENT SYSTEM AND STRUCTURED QUERY LANGUAGE****Time: 3 Hours****Max. Marks: 75****Theory: 50****Practical: 25****Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

**SECTION-A**

**Basic Concepts of Database Management** (Database, Database System, why database, Dataindependence) an architecture for a database system (levels of the architecture, mappings, DBA, client/server architecture) Introduction to Relational db systems. Characteristics of database approach, data models, DBMS architecture and data independence.

**SECTION-B**

**E-R Modeling:** Entity types, Entity set, attribute and key, relationships, relation types, roles and structural constraints, weak entities, enhanced E-R and object modeling, Sub classes; Super classes, inheritance, specialization and generalization.

**SECTION-C**

**Relational Data Model:** Relational model concepts, relational constraints

**ER and ER to relational mapping:** Data base design using EER to relational language.

**SECTION-D**

**Data Normalization:** Functional Dependencies, Normal form up to 3rd normal form.

**Concurrency & Recovery:** Transaction processing, locking techniques and associated, security and authorization. Recovery Techniques, Database Security

***Text/References:***

1. C.J. Date, "An Introduction of Database System", The Systems Programming Series, 6/Ed, Addison-Wesley Publishing Company, Inc., 1995.
2. Silberschatz, Korth and Sudarshan, "Database System Concepts", Third Ed. McGraw Hill International Editions, Computer Science Series-1997.

**PAPER III: PRACTICAL LAB BASED DATABASE MANAGEMENT SYSTEM AND  
STRUCTURED QUERY LANGUAGE  
(PRACTICAL)**

**Time: 3 hours**

**Max. Marks: 25**

Retrieving data using the SQL select statement, Restricting and sorting data, Using single row function to customize output. Reporting aggregated data using the group function.

Displaying data from multiple tables –I, Displaying data from multiple tables-II, Using sub queries to solve problems,

Using set operators, Manipulating data, Using DDL statements to create and manage tables, Creating other schema objects, Managing objects with data dictionary, Controlling User access, Managing schema objects, Manipulating large data sets, Generating report by grouping related data, Retrieving data using sub queries.

**PAPER IV: WEB DESIGNING USING XML AND CSS(PRACTICAL)****Time: 3 Hours****Max. Marks: 75****Note: Practical exam to be conducted by the external examiner.****Practical based on XML****SECTION-A**

**XML:** Introduction, Syntax, Document structure, Document type Definitions, namespaces, XML schemas, Displaying raw XML documents, Displaying XML documents with CSS, XSLT stylesheets, XML Processors, Introduction XSL, XML transformed, XSL elements transforming with XSLT, web feeds (RSS).

**Practical based on CSS****SECTION-B**

**Introduction to CSS and understanding CSS syntax,** Adding Rules to a Style Sheet, managing style sheets (creating, Importing and embedding)

Controlling page layout, Understanding grouping and nesting

Styling text, Modifying background and foreground elements , Understanding tables, columns and lists ,Using global styles

Understanding CSS box model, Working with images, Creating navigation bars using CSS  
Html Website using CSS.

**References**

1. CSS Cookbook by Christopher Schmitt
2. Beginning CSS Web Development: From Novice to Professional by Simon Collison
3. Professional CSS: Cascading Style Sheets for Web Design by Christopher Schmitt
4. Patrick Carey, HTML, XHTML and XML , Course Technology CENGAGE Learning, 2010.
5. Elliotte Rusty Harold and W. Scott Means, XML in a Nutshell, O'REILLY, 2001-2004.

**Paper–V:COMMUNICATION SKILLS IN ENGLISH – II****Time: 3 Hours****Max. Marks: 50**  
**Theory Marks: 35**  
**Practical Marks: 15****Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

**Course Contents:****SECTION–A**

**Listening Skills:** Barriers to listening; effective listening skills; feedback skills.

**Activities:** Listening exercises – Listening to conversation, News and TV reports

**SECTION–B**

Attending telephone calls; note taking and note making.

**Activities:** Taking notes on a speech/lecture

**SECTION–C**

**Speaking and Conversational Skills:** Components of a meaningful and easy conversation; understanding the cue and making appropriate responses; forms of polite speech; asking and providing information on general topics.

**Activities:** 1) Making conversation and taking turns  
2) Oral description or explanation of a common object, situation or concept

**SECTION–D**

The study of sounds of English,  
Stress and Intonation,  
Situation based Conversation in English,  
Essentials of Spoken English.

**Activities:** Giving Interviews

**PRACTICAL/ ORAL TESTING****Marks: 15****Course Contents:**

1. Oral Presentation with/ without audio visual aids.
2. Group Discussion.
3. Listening to any recorded or live material and asking oral questions for listening comprehension.

**Questions:**

1. Oral Presentation will be of 5 to 10 minutes duration (Topic can be given in advance or it can be student's own choice). Use of audio visual aids is desirable.
2. Group discussion comprising 8 to 10 students on a familiar topic. Time for each group will be 15 to 20 minutes.

**Note:** Oral test will be conducted by external examiner with the help of internal examiner.

**Paper-VI:ਪੰਜਾਬੀ (ਲਾਜ਼ਮੀ)**

ਸਮਾਂ : 3 ਘੰਟੇ

ਕੁਲ ਅੰਕ : 50

ਪਾਠ-ਕ੍ਰਮ ਅਤੇ ਪਾਠ-ਪੁਸਤਕਾਂ

**ਸੈਕਸ਼ਨ-ਏ**

ਆਤਮ ਅਨਾਤਮ (ਕਹਾਣੀ ਭਾਗ),  
 (ਸੰਪ. ਸੁਹਿੰਦਰ ਬੀਰ ਅਤੇ ਵਰਿਆਮ ਸਿੰਘ ਸੰਧੂ)  
 ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ, ਅੰਮ੍ਰਿਤਸਰ।  
 (ਵਿਸ਼ਾ-ਵਸਤੂ, ਪਾਤਰ ਚਿਤਰਨ)

**ਸੈਕਸ਼ਨ-ਬੀ**

ਇਤਿਹਾਸਕ ਯਾਦਾਂ (ਇਤਿਹਾਸਕ ਲੇਖ-ਸੰਗ੍ਰਹਿ)  
 ਸੰਪਾ. ਸ.ਸ.ਅਮੋਲ,  
 ਪੰਜਾਬੀ ਸਾਹਿਤ ਪ੍ਰਕਾਸ਼ਨ, ਲੁਧਿਆਣਾ। (ਲੇਖ 7 ਤੋਂ 12)  
 (ਸਾਰ, ਲਿਖਣ ਸ਼ੈਲੀ)

**ਸੈਕਸ਼ਨ-ਸੀ**

(ੳ) ਸ਼ਬਦ-ਬਣਤਰ ਅਤੇ ਸ਼ਬਦ ਰਚਨਾ : ਪਰਿਭਾਸ਼ਾ, ਮੁੱਢਲੇ ਸੰਕਲਪ  
 (ਅ) ਸ਼ਬਦ ਸੂਚੀ

**ਸੈਕਸ਼ਨ-ਡੀ**

(ੳ) ਸੰਖੇਪ ਰਚਨਾ  
 (ਅ) ਮੁਹਾਵਰੇ ਅਤੇ ਅਖਾਣ

**ਅੰਕ-ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ**

1. ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਚਾਰ ਭਾਗ ਹੋਣਗੇ। ਹਰ ਭਾਗ ਵਿੱਚੋਂ ਦੋ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ।
2. ਵਿਦਿਆਰਥੀ ਨੇ ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਭਾਗ ਵਿੱਚੋਂ ਇੱਕ ਪ੍ਰਸ਼ਨ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿੱਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।
3. ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ ਬਰਾਬਰ ਅੰਕ ਹਨ।
4. ਪੇਪਰ ਸੈੱਟ ਕਰਨ ਵਾਲਾ ਜੇਕਰ ਚਾਹੇ ਤਾਂ ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਵੰਡ ਅੱਗੋਂ ਵੱਧ ਤੋਂ ਵੱਧ ਚਾਰ ਉਪ-ਪ੍ਰਸ਼ਨਾਂ ਵਿੱਚ ਕਰ ਸਕਦਾ ਹੈ।

**Paper-VI: ਮੁੱਢਲੀ ਪੰਜਾਬੀ**  
(In lieu of Compulsory Punjabi)

ਸਮਾਂ: 3 ਘੰਟੇ

ਕੁਲ ਅੰਕ: 50

ਪਾਠ-ਕ੍ਰਮ

ਸੈਕਸ਼ਨ-ਏ

ਸ਼ਬਦ ਸ਼੍ਰੇਣੀਆਂ : ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ  
(ਨਾਂਵ, ਪੜਨਾਂਵ, ਕਿਰਿਆ, ਵਿਸ਼ੇਸ਼ਣ, ਕਿਰਿਆ ਵਿਸ਼ੇਸ਼ਣ, ਸਬੰਧਕ, ਯੋਜਕ ਅਤੇ ਵਿਸਮਿਕ)

ਸੈਕਸ਼ਨ-ਬੀ

ਪੰਜਾਬੀ ਵਾਕ ਬਣਤਰ : ਮੁੱਢਲੀ ਜਾਣ-ਪਛਾਣ  
(ੳ) ਸਾਧਾਰਨ ਵਾਕ, ਸੰਯੁਕਤ ਵਾਕ ਅਤੇ ਮਿਸ਼ਰਤ ਵਾਕ (ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ)  
(ਅ) ਬਿਆਨੀਆ ਵਾਕ, ਪ੍ਰਸ਼ਨ ਵਾਚਕ ਵਾਕ ਅਤੇ ਹੁਕਮੀ ਵਾਕ (ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ)

ਸੈਕਸ਼ਨ-ਸੀ

ਪੈਰ੍ਰਾ ਰਚਨਾ  
ਸੰਖੇਪ ਰਚਨਾ

ਸੈਕਸ਼ਨ-ਡੀ

ਚਿੱਠੀ ਪੱਤਰ (ਘਰੇਲੂ ਅਤੇ ਦਫ਼ਤਰੀ)  
ਅਖਾਣ ਅਤੇ ਮੁਹਾਵਰੇ

**ਅੰਕ-ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ**

1. ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਚਾਰ ਭਾਗ ਹੋਣਗੇ। ਹਰ ਭਾਗ ਵਿਚੋਂ ਦੋ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ।
2. ਵਿਦਿਆਰਥੀ ਨੇ ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਭਾਗ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।
3. ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ ਬਰਾਬਰ ਅੰਕ ਹਨ।
4. ਪੇਪਰ ਸੈੱਟ ਕਰਨ ਵਾਲਾ ਜੇਕਰ ਚਾਹੇ ਤਾਂ ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਵੰਡ ਅੱਗੋਂ ਵੱਧ ਤੋਂ ਵੱਧ ਚਾਰ ਉਪ-ਪ੍ਰਸ਼ਨਾਂ ਸ਼ਵਚ ਕਰ ਸਕਦਾ ਹੈ।

**PAPER–VI: PUNJAB HISTORY & CULTURE (C. 320 TO 1000 B. C)  
(SPECIAL PAPER IN LIEU OF PUNJABI COMPULSORY)**

**Time: 3 Hours**

**Max. Marks :50**

**Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

**Section A**

1. Alexander's Invasion and its Impact
2. Punjab under Chandragupta Maurya and Ashoka.

**Section B**

3. The Kushans and their Contribution to the Punjab.
4. The Panjab under the Gupta Empire.

**Section C**

5. The Punjab under the Vardhana Emperors
6. Socio-cultural History of Punjab from 7<sup>th</sup> to 1000 A.D.

**Section D**

7. Development of languages and Education with Special reference to Taxila
8. Development of Art & Architecture

**Suggested Readings**

1. L. M Joshi (ed), *History and Culture of the Punjab*, Art-I, Punjabi University, Patiala, 1989 (3<sup>rd</sup> edition)
2. L.M. Joshi and Fauja Singh (ed.), *History of Punjab* , Vol.I, Punjabi University, Patiala, 1977.
3. Budha Parkash, *Glimpses of Ancient Punjab*, Patiala, 1983.
4. B.N. Sharma: *Life in Northern India*, Delhi. 1966.

**DRUG ABUSE: PROBLEM, MANAGEMENT AND PREVENTION****DRUG ABUSE: MANAGEMENT AND PREVENTION****Time: 3 Hours****Max. Marks: 50****Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

**SECTION – A****Prevention of Drug abuse:**

Role of family: Parent child relationship, Family support, Supervision, Shaping values, Active Scrutiny.

**SECTION – B**

School: Counselling, Teacher as role-model. Parent-teacher-Health Professional Coordination, Random testing on students.

**SECTION – C****Controlling Drug Abuse:**

Media: Restraint on advertisements of drugs, advertisements on bad effects of drugs, Publicity and media, Campaigns against drug abuse, Educational and awareness program

**SECTION – D**

Legislation: NDPs act, Statutory warnings, Policing of Borders, Checking Supply/Smuggling of Drugs, Strict enforcement of laws, Time bound trials.

**References:**

1. Ahuja, Ram (2003), *Social Problems in India*, Rawat Publication, Jaipur.
2. Extent, Pattern and Trend of Drug Use in India, Ministry of Social Justice and Empowerment, Government of India, 2004.
3. Inciardi, J.A. 1981. *The Drug Crime Connection*. Beverly Hills: Sage Publications.
4. Kapoor. T. (1985) *Drug epidemic among Indian Youth*, New Delhi: Mittal Pub.
5. Kessel, Neil and Henry Walton. 1982, *Alcoholism*. Harmond Worth: Penguin Books.
6. Modi, Ishwar and Modi, Shalini (1997) *Drugs: Addiction and Prevention*, Jaipur: Rawat Publication.
7. National Household Survey of Alcohol and Drug abuse. (2003) New Delhi, Clinical Epidemiological Unit, All India Institute of Medical Sciences, 2004.
8. Ross Coomber and Others. 2013, *Key Concept in Drugs and Society*. New Delhi: Sage Publications.
9. Sain, Bhim 1991, *Drug Addiction Alcoholism, Smoking obscenity* New Delhi: Mittal Publications.
10. Sandhu, Ranvinder Singh, 2009, *Drug Addiction in Punjab: A Sociological Study*. Amritsar: Guru Nanak Dev University.

11. Singh, Chandra Paul 2000. *Alcohol and Dependence among Industrial Workers*: Delhi: Shipra.
12. Sussman, S and Ames, S.L. (2008). *Drug Abuse: Concepts, Prevention and Cessation*, Cambridge University Press.
13. Verma, P.S. 2017, “*Punjab’s Drug Problem: Contours and Characteristics*”, Economic and Political Weekly, Vol. LII, No. 3, P.P. 40-43.
14. World Drug Report 2016, United Nations office of Drug and Crime.
15. World Drug Report 2017, United Nations office of Drug and Crime.

**PAPER – I: FUNDAMENTALS OF ENTREPRENEURSHIP****Time: 3 Hours****Max. Marks: 75****Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

**The student can use only Non-programmable & Non-storage type Calculator.**

**SECTION-A**

**Concept of Entrepreneurship:** The Entrepreneur: Definition, nature, and characteristics of entrepreneurship. Emergence of entrepreneurial class including women entrepreneurs.

**SECTION-B**

Theories of entrepreneurship; Socio-economic environment and the entrepreneur. The concepts of joint stock company, public company, private company, Government Company, Partnership Company, Hindu undivided family.

Characteristics of Entrepreneur Leadership risk taking, decision making and business planning. Innovation and entrepreneurship, entrepreneurial behavior and motivation.

**SECTION-C**

**Entrepreneurial Development Programmes -** Relevance and achievements, Role of government in organizing such programmes. Critical Evaluation.

**SECTION-D**

**Modern technology for entrepreneurship:** concept, significance, benefits & avenues; websites, e-portals, blogs, social networking sites

**Suggested Readings**

- Hisrich, Robert D and Peters, Michael P, “*Entrepreneurship*”, 2012, Tata McGraw Hill, Delhi.
- Srivastava, S.B., “A Practical Guide to Industrial Entrepreneurs”, 1980, Sultan Chand & Sons, New Delhi.
- Kumar, A. et al., Entrepreneurial Development, New Age International Publisher, New Delhi.

**Note: Latest edition of suggested books may be considered.**

**PAPER – II: FUNDAMENTALS OF FINANCE AND ACCOUNTANCY****Time: 3 Hours****Max. Marks: 75****Theory: 50****Practical: 25****Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

- (i) **The student can use only Non-programmable & Non-storage type calculator.**  
 (ii) **Practical exam to be conducted by the external examiner.**

**SECTION-A**

Basic Accounting concepts: Kinds of Accounts, Financial Accounting vs. Cost Accounting, Financial Accounting vs. Management Accounting, Double Entry Book Keeping: Rules of Double Entry System, Preparation of Journal and Ledger Accounts problems,

**SECTION-B**

Trial balance, Manufacturing, Trading and Profit & Loss Account, Balance sheet. Problems with simple adjustments.

**SECTION-C**

Introduction to Finance: Nature, Scope and Objective. Finance Function. Role of Finance Manager. Sources of Finance: Long term & Short terms. Tools and Techniques of Financial Management: Comparative Analysis, Commonsize Analysis, Trend Analysis, Ratio Analysis.

**SECTION-D**

Working Capital: Concepts of Working Capital, Operating & Cash Cycles, Risk Return Trade off, Working Capital Estimation, Factors influencing working capital.

**TALLY LAB PRACTICAL**

1. Create a new company, group, voucher and ledger and record minimum 10 transactions and display the relevant results.
2. Prepare trial balance, Profit and Loss A/c and Balance Sheet (with minimum of any five adjustments).
3. Prepare inventory statement using (Calculate inventory by using all methods)
  - a) FIFO b) LIFO c) Simple Average Method d) Weighted Average Method

**Suggested Readings:**

- Pandey, I.M., “Financial Management”, Vikas Publishing House, Delhi.
- Khan MY, Jain PK, “*Financial Management*”, Tata McGraw Hill, New Delhi.
- Grewal, T.S. : Double Entry Book Keeping
- Jain and Narang : Advanced Accountancy
- Maheshwari S.N., “Financial Management-Principles & Practice”, Sultan Chand & Sons

**Note: Latest edition of suggested books may be considered.**

**PAPER–III: PHP PROGRAMMING AND MYSQL****Time: 3 Hours****Max. Marks: 75****Theory: 50****Practical: 25****Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

- (i) **The student can use only Non-programmable & Non-storage type calculator.**
- (ii) **Practical exam to be conducted by the external examiner.**

**SECTION-A**

**Understanding the Preliminaries :** Introduction to web & internet, Introduction to server, Understanding localhost server , Starting PHP, PHP syntax and variables, Operators and Expressions, Conditional Branching and Looping Statements, Learning Arrays in PHP

**The Core Logics and Techniques :** String and Math functions in PHP, Introduction HTML Form Elements and Fields, Accessing PHP, HTTP Data, Query Strings and Hyperlinks, Describing Pre-Defined Variables - Super Global Arrays, Understanding Functions, Important PHP Functions, What are the Scope of variables, 2.8 Usage of Include and require statements

**SECTION-B**

**File Handling: The Plain Repository of Data** Handling files and directories in PHP, Fetching information from files, Uploading and downloading files

**PHP and MySQL - The Structured Repository** PHP MySQL Connectivity, Integrating Web Forms and Database, Using PHP's MySQL Extension, Using PHP's PDO Extension

**SECTION-C**

**Advanced Techniques in PHP** Introduction to Object Oriented Programming, Classes and Objects, Abstraction, Encapsulation, Inheritance and Polymorphism, Constructors and Destructors, Overloading, Overriding of functions, Exception Handling, Regular Expressions, Session Handling, Using Cookies **Content Management Systems** Knowing Content Management System, Introducing a CMS, Knowing how to configure the CMS, Working with the CMS, Sample Web Application Development using Wordpress

**SECTION-D**

**Relational Database Basics** Brief History of MySQL, Relational Databases and Popular Databases, SQL Statements, Data Manipulation Language (DML) :INSERT, UPDATE, DELETE, SELECT, Data Definition Language (DDL) :CREATE, ALTER, DROP, Sub-Queries, Joins and Unions with MySQL ,Order By, Like , And & Or, Where , Between, Joins & Unions, Aggregate Functions and Grouping, Constraints and Normalization

**References:**

1. Beginning PHP and MySQL: From Novice to Professional, By W. Jason Gilmore.
2. PHP and MySQL Web Development , Luke Welling, Laura Thomson, Pearson publications.
3. Web Database Applications with PHP and MySQL, Hugh E. Williams, David Lane, O'Reilly.
4. Learning PHP, MySQL & JavaScript: With JQuery, CSS & HTML5, By Robin Nixon

**# Note: Practical Lab based on Php and MySQL**

**PAPER-IV: CONTENT MANAGEMENT SYSTEM USING WORDPRESS****Time: 3 Hours****Max. Marks: 75****Theory: 50****Practical: 25****Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

- (i) **The student can use only Non-programmable & Non-storage type calculator.**
- (ii) **Practical exam to be conducted by the external examiner.**

**SECTION-A****Installing WordPress:**

Creating a Database, Installing WordPress, Installing Themes, Downloading a Theme from the, WordPress Dashboard, Manually Installing a Theme, Adding Custom Header with Theme Name, Author, etc.

**Setting Up Your WordPress.com Account:**

Creating an Account on WordPress or at your own website/localhost, Logging Into Your Account, Writing Your First Post with little explanation, Customizing Your Account, Personal Settings, General Settings

**SECTION-B****Changing Themes (How the Blog Looks)**

Widgets, Editors, Writing Posts, Adding a Post, Using the Visual Editor, Adding Hyperlinks, Categories, Tags, & Reading/Writing Settings, Using Categories and Tags, Managing Categories

and Tags, Controlling the Number of Posts That Are Displayed, Understanding Comments, Managing and Moderating Comments, Trackbacks and Pingbacks

**SECTION-C****Making Pages**

Adding and Deleting a Page, Pasting from Text Files, Changing the Page Order, Adding and Managing Media, Adding a Photo, Adding a Video, Adding Other Content (.pdf, .doc, etc.), Managing Uploaded Content, Media Settings, Working with Links, Adding Links, Managing Links

**Appearance Customization**

Changing the Header Image, Customizing the Sidebar with Widgets, Previewing Custom Fonts, Using the Dashboard, Managing Recent Comments, Tracking Statistics, Customizing the Dashboard's Appearance, Installing some important plugins,

**SECTION-D****SEO Ultimate**

Fast Secure Contact Form, Efficient Related Posts, Wordpress Backup to dropbox, WP-DBBackup, WP-Polls, WP Survey and Quiz Tool, Subscribe to comments, Share button by lockerz Statpress Visitors, Google XML sitemaps, Social Login, First Visit Message

**References:**

1. Professional WordPress: Design and Development, Brad Williams, David Damstra, Hal Stern.
2. WordPress 3 Complete, April Hodge Silver

**# Note: Practical Lab based on WordPress**

**PAPER-V: WEB DESIGNING USING PHOTOSHOP****(PRACTICAL)****Time: 3 Hours****Max. Marks: 50****Note: Practical exam to be conducted by the external examiner.****SECTION-A****Introduction to Photoshop:** About Digital Images, Creating New Images, Scanning New images, Size and Resolution, Managing Workspace,**Using Tools: Toolbox & Options,** Screen Modes, Cut , Copy & Paste, Working with selections, Color modes**SECTION-B****Working with Layers:** Layer Panel, Creating, Deleting & Hiding Layers, Layer Mask, Clip Mask, Group & Ungroup Layers, Blending Modes**Adjustments and Transforming Layers:** Adjustment Layers, Color correction, Variations, Retouching Images, Clone Sources**SECTION-C****Painting and Drawing Tool:** Brushes, Strokes, Work Path, Painting Tools**Working with Channels & Action:** Working with Channels, Creating Actions, Save New Action Group**SECTION-D****Working with Filters:** Applying Filters, Liquefy, Vanishing Point, Filter Gallery**Working with Text and Extensions:** Type Tools, Text with Path, Adjusting & converting Text

Detail of useful Extensions &amp; use

**Final assignments:**

Web ads, Web Banners, Animated GIFs, Web Buttons and Design of two Web Templates.

**PAPER-VI: WEBSITE DEVELOPMENT (*PRACTICAL*)**

**Time: 3 Hours**

**Max. Marks: 75**

**Note: Practical exam to be conducted by the external examiner.**

**# Creating a Dynamic Website**

**PAPER – I: RETAILING****Time: 3 Hours****Max. Marks: 50****Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

(i) **The student can use only Non-programmable & Non-storage type calculator.**

**SECTION-A**

**Introduction to retailing:** Definition and scope, evolution of retailing, types of retail, trends in retailing industry, benefits of retailing, retailing environment.

**Information system in retailing:** Acquiring and using information strategies, technology in retail, information sources, retail information system.

**SECTION-B**

**Retail purchasing and pricing:** Purchase management:- Merchandise purchasing, open to buy, open to buy planning, analyzing the merchandise performance, Pricing strategies:-every day pricing, competitive based pricing, price skimming, market-oriented pricing, marginal cost pricing. Retail price strategies: - mark-up pricing, vendor pricing, competitive pricing, psychological pricing.

**SECTION-C**

**Retail marketing and promotion:** Nature and scope:-relationship marketing, market strategies, retail research Understanding the retail customer:- retail market, population analysis, demographic analysis, consumer behavior Retail promotion Mix: - Retail promotion programme, retail advertising media, promotional budget. Customer services: - customer services, services quality gaps, service recovery.

**SECTION-D**

**Retailing in India:** Evolution and trends in organised retailing, Indian organised retail market, FDI in Indian organised retail sector, retail scenario in India, future trends of retail in India.

**Ethical and legal issues in Retailing:** Dealing with ethical issues, social responsibility, environmental orientation, waste reduction at retail stores.

Suggested Readings

**Suggested Readings:**

- *Swapna Pradhan: Retailing Management (Tata McGraw Hill: New Delhi) Third Edition, (2009)*
- *Levy, Michael and Weitz, Barton A.: Retailing Management (Tata McGraw Hill: New Delhi)*
- *David J. Bloomberg, Stephen LeMay & : Logistics, Prentice-Hall of India Pvt Joe B. Hanna Ltd.,New Delhi, 2003.*
- *Donald J. Bowersox & David J. Closs : Logistical Management, Tata McGraw Hill Publishing Co. Ltd, New Delhi, 2004*

**Note: Latest edition of suggested books may be considered.**

**PAPER –II: ADVERTISING & SALES MANAGEMENT****Time: 3 Hours****Max. Marks: 75****Theory: 50****Practical: 25****Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

- (i) **The student can use only Non-programmable & Non-storage type calculator.**
- (ii) **Practical exam to be conducted by the external examiner.**

**SECTION-A**

**Introduction to Advertisement:** Concept and Definition of Advertisement, Social, Economic and Legal Implications of Advertisements, Setting Advertisement Objectives, Advertisement Agencies, Selection and Remuneration, Advertisement Campaign.

**Advertisement Media:** Media Plan, Type and Choice Criteria, Reach and Frequency of Advertisements, Cost of Advertisements Related to Sales, Media Strategy and Scheduling.

**SECTION-B**

**Design and Execution of Advertisements:** Message Development, Different Types of Advertisements, Layout, Design Appeal, Copy Structure, Advertisement Production, Print, Radio, T.V. and Web Advertisements, Media Research, Testing Validity and Reliability of Ads, Measuring Impact of Advertisements

**SECTION-C**

**Sales Management :** Definition and meaning, Objectives, Sales Research, Sales Forecasting, sales Forecasting methods, Sales Planning and control : Goal setting, Performance measurement, diagnosis and corrective actions.

**SECTION-D**

**Sales Organization:** Need for sales Organizations, their structure, Sales Managers Functions and responsibilities, planning for major customers and sales Budget, Specific Characteristics of a successful salesman

**Developing the sales Force:** Recruitment, Selection ,Training and Motivation of Sales force

**Suggested Readings:**

- Belch, George E. and Michael A. Belch, *Adverlising and Promotion: An Integrated Marketing Communications Perspective*, 6th edition, Tata McGraw Hill Co., 2003.
- Batra, Rajeev, John G. Myers and David A. Aakers, *Adverlising Management*, 5<sup>th</sup> edition, Prentice Hall of India, New Delhi, 2003.
- *Professional Sales Management – Anderson, Hair and Bush*
- *Sales Management – Richard Rstill Edward W. Cundiff*

**Note: Latest edition of suggested books may be considered.**

**PAPER – III: LINUX SERVER MANAGEMENT****Time: 3 Hours****Max Marks: 75****Theory:-50****Practical: 25****Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

- (i) **The student can use only Non-programmable & Non-storage type calculator.**
- (ii) **Practical exam to be conducted by the external examiner.**

**Linux Web Server administration:**

Introduction to Apache Web Server, Installation of Apache Web Server, Start/Stop and Testing

Apache Web Server, Apache Web Server Logs, Performance Tuning of Apache Web Server, Introduction to Pure-FTPd (FTP Server), Installation of Pure-FTPd, Start/Stop and Testing Pure-FTPd, Pure-FTPd Logs, Performance Tuning of Pure-FTPd

**Linux File & Print Server administration:**

Network Information Services (NIS), NIS Installation, NIS - Lab Exercise, NFS - Network File System, NFS Installation, NFS - Lab Exercise, Introduction to SAMBA, Installation of SAMBA,

Start/Stop and Testing SAMBA, SAMBA Logging, Performance Tuning of SAMBA, Lab:Setting Samba as Windows PDC

**Linux Mail Server administration:**

DNS in a Nutshell, Basic DNS Setting (Manually), DNS Setting Using GUI Interface, Basic Sendmail Configuration

**Linux Cache Server administration:**

Introduction, Installation, Start/Stop Squid, Login, Advertisement Blocking using Adzap, Transparent Proxy, Authentication Proxy, Content Filtering using SquidGuard

**Linux Firewall and Security administration:**

Introduction to Firewall Security Administration, System & Network Security, Monitoring Your

Network, Introduction To Firewall, Setting Up Linux For Firewall, Netfilter and Iptables (Kernel 2.4.x onwards), Configuring IP Accounting.

**References:**

1. Red Hat Linux Networking & System Admin 3rd Edition Author: Terry Collings, Kurt Wall Publisher: Wiley India Pvt. Ltd.
2. Unix and Linux System Administration Handbook 4th Edition Author: Evi Nemeth, Trent R. Hein, Garth Snyder, Ben Whaley, Publisher: Pearson Education (2011)
3. Linux Administration : A Beginner's Guide 5th Edition Authored By: Wale Soyinka, Publisher: Tata McGraw - Hill Education (2008)
4. Linux System Administration Author: Tom Adelstein, Bill Lubanovic, Publisher: O'Reilly Media (2007)

**# Note: Practical Lab based on Linux Server Administration**

**PAPER – IV: CONTENT MANAGEMENT SYSTEM USING OPEN CART  
(PRACTICAL)**

**Time: 3 Hours**

**Max. Marks: 75**

**Note: Practical exam to be conducted by the external examiner.**

- What is Opencart and why use it?
- Theme Installation
- Module Installation & Modification
- Set Permalinks
- Customize contact form.
- Use of payment integration and learn to customize
- Use and customization of Forum & Newsletter plugins.
- Working with the Database (Importing, Exporting, Backups etc.).
- Making a back-up of your site.
- Installing and customizing themes and Modules.
- Clear idea and working with templates.
- Adding SEO friendly, using tags and managing them.
- Opencart URL & Menu Structure.
- Make live new project on server.
- Add Products, Categories using Opencart

**References :**

1. Getting Started with OpenCart Module Development, Rupak Nepali
2. Instant E-commerce with OpenCart: Build a Shop How-to , Murat Yilmaz
3. OpenCart 1. 4 Template Design Cookbook ,Tahsin Hasan

**PAPER V: WEB DESIGNING USING CORELDRAW (PRACTICAL)****Time: 3 Hours****Max. Marks: 50****Note: Practical exam to be conducted by the external examiner.****SECTION-A****Getting Started with CorelDraw**

Corel draw –An overview, menus and tools.

- Explore the CorelDraw X4 Interface
- Customize the Workspace
- Differentiate Between Raster and Vector Graphics

**SECTION-B****Creating Graphical Objects**

Drawing –lines, shapes .inserting-pictures, objects, tables, templates,

**SECTION-C**

Adding special effects, Exporting drawings, outlining &amp; filling objects, inserting symbols &amp; Clip arts.

**SECTION-D**

Working in Corel draw presentation –adjusting the position, resizing, positioning, merging, color shades &amp; shadows .working with advanced effects, special interactive effects.

Creating- business cards, pamphlets, banners, news papers, books. Shortcut keys in Corel draw.

**PAPER-VI: E-COMMERCE WEBSITE DEVELOPMENT (*PRACTICAL*)**

**Time: 3 Hours**

**Max. Marks: 75**

**Note: Practical exam to be conducted by the external examiner.**

**Development of web portal handling E-Commerce operations**

**ESL 221 Environmental Studies (Compulsory Paper)****Time: 3 Hrs.****Max. Marks: 100****Teaching Methodologies**

The Core Module Syllabus for Environmental Studies includes class room teaching and field work. The syllabus is divided into 8 Units [Unit-1 to Unit-VII] covering 45 lectures + 5 hours for field work [Unit-VIII]. The first 7 Units will cover 45 lectures which are class room based to enhance knowledge skills and attitude to environment. Unit-VIII comprises of 5 hours field work to be submitted by each candidate to the Teacher in-charge for evaluation latest by 15 December, 2018.

**Exam Pattern:**           **End Semester Examination- 75 marks**  
**Project Report/Field Study- 25 marks [based on submitted report]**  
**Total Marks- 100**

The structure of the question paper being:

**Part-A, Short answer pattern with inbuilt choice – 25 marks**

Attempt any five questions out of seven distributed equally from Unit-1 to Unit-VII. Each question carries 5 marks. Answer to each question should not exceed 2 pages.

**Part-B, Essay type with inbuilt choice – 50 marks**

Attempt any five questions out of eight distributed equally from Unit-1 to Unit-VII. Each question carries 10 marks. Answer to each question should not exceed 5 pages.

**Project Report / Internal Assessment:****Part-C, Field work – 25 marks [Field work equal to 5 lecture hours]**

The candidate will submit a hand written field work report showing photographs, sketches, observations, perspective of any topic related to Environment or Ecosystem. The exhaustive list for project report/area of study are given just for reference:

1. Visit to a local area to document environmental assets: River / Forest/ Grassland / Hill / Mountain / Water body / Pond / Lake / Solid Waste Disposal / Water Treatment Plant / Wastewater Treatment Facility etc.
2. Visit to a local polluted site – Urban / Rural / Industrial / Agricultural
3. Study of common plants, insects, birds
4. Study of tree in your areas with their botanical names and soil types
5. Study of birds and their nesting habits
6. Study of local pond in terms of wastewater inflow and water quality
7. Study of industrial units in your area. Name of industry, type of industry, Size (Large, Medium or small scale)
8. Study of common disease in the village and basic data from community health centre
9. Adopt any five young plants and photograph its growth
10. Analyze the Total dissolved solids of ground water samples in your area.
11. Study of Particulate Matter (PM<sub>2.5</sub> or PM<sub>10</sub>) data from Sameer website. Download from Play store.
12. Perspective on any field on Environmental Studies with secondary data taken from Central Pollution Control Board, State Pollution Control Board, State Science & Technology Council etc.

**Unit-I****The multidisciplinary nature of environmental studies**

Definition, scope and importance, Need for public awareness

**(2 lectures)****Unit-II****Natural Resources: Renewable and non-renewable resources:**

Natural resources and associated problems.

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

- (b) Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems.
- (c) Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies.
- (d) Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies.
- (e) Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources, case studies.
- (f) 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.

**(8 Lectures)****Unit-III****Ecosystems**

- 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, characteristic features, structure and function of the following ecosystem: Forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystems (ponds, streams, lakes, rivers, ocean estuaries)

**(6 Lectures)****Unit-IV****Biodiversity and its conservation**

- Introduction – Definition: genetic, species and ecosystem diversity
- Biogeographical classification of India
- Value of biodiversity: consumptive use, productive use, social, ethical aesthetic and option values
- Biodiversity at global, national and local levels
- India as a mega-diversity nation
- Hot-spots of biodiversity
- Threats to biodiversity: habitat loss, poaching of wildlife, man wildlife conflicts
- Endangered and endemic species of India
- Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity

**(8 Lectures)****Unit-V****Environmental Pollution****Definition**

- Causes, effects and control measures of Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution, Nuclear pollution
- 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

**(8 Lectures)****Unit-VI****Social Issues and the Environment**

- From unsustainable to sustainable development
- Urban problems and 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 solutions
- Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies.

- Wasteland reclamation
- Consumerism and waste products
- Environmental Protection Act, 1986
- Air (Prevention and Control of Pollution) Act, 1981
- Water (Prevention and control of Pollution) Act, 1974
- Wildlife Protection Act
- Forest Conservation Act
- Issues involved in enforcement of environmental legislation
- Public awareness

**(7 Lectures)****Unit-VII****Human Population and the Environment**

- Population growth, variation among nations
- Population explosion – Family Welfare Programmes
- 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

**(6 Lectures)****Unit-VIII****Field Work**

- Visit to a local area to document environmental assets  
river/forest/grassland/hill/mountain
- Visit to a local polluted site – Urban / Rural / Industrial / Agricultural
- Study of common plants, insects, birds
- Study of simple ecosystems-pond, river, hill slopes, etc

**(Field work equal to 5 lecture hours)****References:**

1. Bharucha, E. 2005. Textbook of Environmental Studies, Universities Press, Hyderabad.
2. Down to Earth, Centre for Science and Environment, New Delhi.
3. Heywood, V.H. &Waston, R.T. 1995. Global Biodiversity Assessment, Cambridge House, Delhi.
4. Joseph, K. &Nagendran, R. 2004. Essentials of Environmental Studies, Pearson Education (Singapore) Pte. Ltd., Delhi.
5. Kaushik, A. & Kaushik, C.P. 2004. Perspective in Environmental Studies, New Age International (P) Ltd, New Delhi.
6. Rajagopalan, R. 2011. Environmental Studies from Crisis to Cure. Oxford University Press, New Delhi.
7. Sharma, J. P., Sharma. N.K. & Yadav, N.S. 2005. Comprehensive Environmental Studies, Laxmi Publications, New Delhi.
8. Sharma, P. D. 2009. Ecology and Environment, Rastogi Publications, Meerut.
9. State of India's Environment 2018 by Centre for Sciences and Environment, New Delhi
10. Subramanian, V. 2002. A Text Book in Environmental Sciences, Narosa Publishing House, New Delhi.

**PAPER – I: FUNDAMENTALS OF ENTREPRENEURSHIP****Time: 3 Hours****Max. Marks: 75****Note:**

- 1. The paper setter is required to set eight questions in all and the candidates will be required to attempt any five questions out of these eight questions. All questions will carry equal marks.**
- 2. The student can use only Non-programmable & Non-storage type Calculator.**

**PART A**

**Concept of Entrepreneurship:** The Entrepreneur: Definition, nature, and characteristics of entrepreneurship. Emergence of entrepreneurial class including women entrepreneurs. Theories of entrepreneurship; Socio-economic environment and the entrepreneur. The concepts of joint stock company, public company, private company, Government Company, Partnership Company, Hindu undivided family.

Characteristics of Entrepreneur Leadership risk taking, decision making and business planning. Innovation and entrepreneurship, entrepreneurial behavior and motivation.

**PART B**

**Entrepreneurial Development Programmes-**Relevance and achievements, Role of government in organizing such programmes. Critical Evaluation.

**Modern technology for entrepreneurship:** concept, significance, benefits & avenues; websites, e-portals, wallet, blogs, social networking sites

**Suggested Readings**

- Hisrich, Robert D and Peters, Michael P, “*Entrepreneurship*”, 2012, Tata McGraw Hill, Delhi.
- Srivastava, S.B., “A Practical Guide to Industrial Entrepreneurs”, 1980, Sultan Chand & Sons, New Delhi.
- Kumar, A. et al., Entrepreneurial Development, New Age International Publisher, New Delhi.

**Note:** *Latest edition of suggested books may be considered.*

**PAPER-II: CONCEPTS OF SOCIAL MEDIA MARKETING****Time: 3 hrs.****Max. Marks:-75****Th: 50****Pr: 25****Note:**

- 1. In theory eight questions are to be set in all. The candidates are required to attempt five of them. All questions are to be of equal marks. The maximum marks of the paper are 50.**
- 2. The student can use only Non-programmable & Non-storage type Calculator.**
- 3. Practical exam to be conducted by the external examiner.**

**Introduction to Digital Marketing**

Key Concepts of Digital Marketing, Traditional Marketing vs. Digital Marketing, The Opportunity of Digital Marketing, Characteristics of Digital Marketing, Implications of Digital Marketing, Strategies in Digital Marketing

**Google Webmaster Tool**

Introduction to Webmaster Tools, Start with the fundamentals, Get your site working on Webmaster Tools, Refine personal and site settings, Manage, monitor and maintain your site, Use the reports and features, Remove Content from Google, Search Traffic & Search Appearance, Google Index & Crawl, HTML Improvements, Sitemaps, Crawl Rate, Crawl Errors and Crawl Stats, Blocked URL's and Fetch as Google, Add and verify your new site to Webmaster Tools

**Google Analytics**

Introduction to Google Analytics, How Google analytics works?

Understanding Google Analytics Account Structure, Starting with Google analytics, How to set up analytics account, How to add analytics code in website, Understanding goals and conversions, How to setup goals?

Understanding different types of goals, Understanding bounce & bounce rate, Difference between exit rate & bounce rate, How to reduce bounce rate?

Understanding filters & segments? How to set up filters & segments? How to view customized reports?

Monitoring traffic sources, Monitoring traffic behaviour

**SMO (Social Media Optimization) –Facebook, Twitter, YouTube**

Introduction to Social Media, Types of Social Media, How Social Media is affecting Google Search, How to choose right social media, Integrating social media into your website and blogs, Facebook Marketing, Introduction to Facebook, Difference between Profiles, Places, Groups and Pages, Social media and communications strategy, Facebook Connect (Like, Share, Comment), Facebook pages (Creating, Managing, Retention), Pages (Dos & Don'ts), Facebook Apps, Measuring and Monitoring, Sponsored Stories, Latest trends, Advantages and Challenges

**Twitter Marketing**

Introduction to Micro blogging and Twitter, Twitter Demographics, Use for reputation, promotion, sales, conversing, Who to follow, Tweeting, Searching tweets and users, Measuring Influence, Tools, Tracking Code, Twitter Account Promotion, How to Shorten and Measure your URLs

**Google + Marketing**

What is Google Plus, Features, Tools & Techniques, Creating Profiles & Pages, Social Strategies and Tactics for Google+, Integration with your site, Google Plus : Circles | Hangouts | Stream, Google +1, Google Plus for Businesses, Photo Sharing Social Network : Picasa, Video Sharing Social Network : YouTube

**Email Marketing**

Introduction to Email Marketing, How Email Marketing Works, Sending Email

**PAPER – III: E-COMMERCE-LAW AND PRACTICES****Time: 3 Hours****Max. Marks: 75****Note:**

- 1. The paper setter is required to set eight questions in all and the candidates will be required to attempt any five questions out of these eight questions. All questions will carry equal marks.**
- 2. The student can use only Non-programmable & Non-storage type Calculator.**

**PART A**

**The Indian Contract Act, 1872** Contract – Meaning, Characteristics and kinds, Essentials of valid contract – Offer and acceptance, Discharge of contract – Modes of discharge Breach of Contracts and its remedies. Contract of Indemnity and Guarantee

**The Sale of Goods Act, 1930** Contract of sale, meaning and difference between sale and agreement to sell., Conditions and warranties, Performance of contract of sale ,Unpaid seller – meaning and rights of an unpaid seller against the goods and the buyer.

**PART B**

**Cyber Laws (Information Technology) Act 2000**

a) Definition b. Digital signature c) Electronic governance d) Attribution, acknowledgement and dispatch of electronic records e) Regulation of certifying authorities f) Digital signatures certificates g) Duties of subscribers h) Penalties and adjudication i) Appellate Tribunal j) Offences

**Consumer Protection Act:** Definitions, objectives, redressal machineries

**Suggested Readings**

- Kapoor, N.D., “Mercantile Law”, 21<sup>st</sup> Edition, Sultan Chand & Sons.
- Tulsian, P. C., “Business Laws’ 2<sup>nd</sup> Edition (2000), Tata McGraw Hill.

*Note: Latest edition of suggested books may be considered.*

**PAPER-IV: PROGRAMMING IN JAVA****Time: 3 Hours****Max. Marks: 75****50 (TH)****25 (Pr.)****Note:**

**1. In theory eight questions are to be set in all. The candidates are required to attempt five of them. All questions are to be of equal marks. The maximum marks of the paper is 50.**

**2. The student can use only Non-programmable & Non-storage type Calculator.**

**Note: Practical exam to be conducted by the external examiner.**

**UNIT-I**

**Introduction to JAVA:** Object Orientation Concepts, Platform Independence & Cross Platform Computing, Control statements, Operators & Data types.

**UNIT-II**

Classes & Methods, constructors, Inheritance & Polymorphism. Packages & Interfaces, Multithreading in Java.

**UNIT-III**

Exception Handling, String handling in Java & Input/output in Java, Java Servlets.

**References:**

1. "Java-The Complete Reference", HurbertSchildt, Tata MacGraw Hill.
2. "Introduction to Java Programming", Y. Daniel Mliang, Pearsons Publications.
3. "Beginning Web Programming with HTML, XHTML, and CSS", Jon Duckett, John Wiley & Sons, 06 Aug. 2004.

**PAPER-V: DIGITAL MARKETING DEVELOPMENT (PRACTICAL)**

**Time: 3 Hours**

**Max. Marks: 100**

**Note: Practical exam to be conducted by the external examiner.  
Planning and Implementing a Digital marketing campaign**

**PAPER-I: SUPPLY CHAIN MANAGEMENT****Time: 3 Hours****Max. Marks: 75****Note:**

- 1. The paper setter is required to set eight questions in all and the candidates will be required to attempt any five questions out of these eight questions. All questions will carry equal marks.**
- 2. The student can use only Non-programmable & Non-storage type Calculator.**

**PART A**

SCM- Definition- Objectives- Evolution- need- Issues involved in developing SCM Framework- Types. SCM activities- Constituents- Organisation.

Forecasting- Importance, Different kinds of Forecasting Techniques in Estimating Demands, Methods used to Determine accuracy of forecast, Sourcing and vendor selection, Routing and route Sequencing.

**PART B**

Inventory Management, EOQ, Minimum Level and Safety Stock, Reordering level, Maximum level, Rational of Discounts of Bulk Purchase, Uncertainty and Inventory management, Lead Time Uncertainty and Product availability. Innovations in Supply chain management.

Procurement and Outsourcing: Outsourcing, Benefits and Risks, Framework for make/ buy decision, E -Procurement, Framework of E -procurement. Dimension of Customer Value, Conformance of Requirement, Product Selection, Price and Brand, Value added Services, Strategic Pricing, Smart Pricing, Customer Value Measures.

**Books for reference:**

- Supply Chain Management, Kulkarni Sarika& Sharma Ashok
- Supply Chain Management concept and cases, Rahul V

***Note: Latest edition of suggested books may be considered.***

**PAPER-II: CUSTOMER RELATIONSHIP MANAGEMENT****Time: 3 Hours****Max. Marks: 75****Note:**

- 1**The paper setter is required to set eight questions in all and the candidates will be required to attempt any five questions out of these eight questions. All questions will carry equal marks.
- 2.** The student can use only Non-programmable & Non-storage type Calculator.

**PART A**

Customer Relationship Management: Definition, meaning and scope, attracting and retaining customers. Building loyalty, developing loyalty program. Types of relationship marketing. Customer lifecycle.

**CRM:** overview and evolution of the concept, CRM and relationship marketing, CRM strategy, importance of customer divisibility in CRM, customer mental process, customer satisfaction Index.

**PART B**

**Building customer value:** satisfaction and loyalty, total customer satisfaction, cultivating customer relationship, rural customer relations, sales force automation, contact management, concept, enterprise marketing management, core beliefs, CRM in India.

**Value chain:** concept, integration business management, benchmarks and metrics, culture change, alignment with customer Eco system, vendor selection. Establishing customer relationship on the internet, technology issues in CRM implementation.

**Suggested Readings:**

- CRM Paul Green Berg(1997)- Tata Mc Graw Hill.
- Marketing Management : Philip Kotler (2002), Prentice hall, 2013.

**Note:** *Latest edition of suggested books may be considered.*

**PAPER-III: ANDROID APPLICATION DEVELOPMENT****Time: 3 Hours****Max. Marks: 75****50 (Th)****25 (Pr)****Note:**

- 1. In theory eight questions are to be set in all. The candidates are required to attempt five of them. All questions are to be of equal marks. The maximum marks of the paper are 50.**
- 2. The student can use only Non-programmable & Non-storage type Calculator.**
- 3. Practical exam to be conducted by the external examiner.**

**Part A****Introduction to Android**

A little Background about mobile technologies

Overview of Android - An Open Platform for Mobile development Open Handset Alliance

What does Android run On – Android Internals? Why to use Android for mobile development?

**Developing for Android: My First Android****Application**How to setup Android Development

Environment. Android development Framework -

Android-SDK

Eclipse Emulators – What is an Emulator / Android AVD?

Creating &amp; setting up custom Android emulator

Android Project Framework

My First Android Application

**Android Activities and UI Design**

Understanding Intent, Activity, Activity Lifecycle and Manifest Creating

Application and new Activities

Expressions and Flow control, Android Manifest Simple UI -Layouts and Layout

Properties, Fundamental Android UI Design

Introducing Layouts, Creating new Layouts, Drawable Resources

Resolution and density independence (px,dip,dp,sip,sp)

XML Introduction to GUI objects viz.

Push Button, Text / Labels, Edit Text, Toggle Button, Weight Sum Padding, Layout Weight

**Advanced UI Programming**

Event driven Programming in Android (Text Edit, Button clicked etc.)

Creating a splash screen Event driven Programming in Android

Android Activity Lifecycle

Creating threads for gaming requirement

Understanding the Exception handler

**Toast, Menu, Dialog, List and Adapters**

What is Menu?

Custom vs. System Menus

Creating and Using Handset menu Button (Hardware)

What is Android Themes What is Dialog? How to create an Alter Dialog?

What is Toast in Android?

List & Adapters

Manifest.xml File Update

**Part B****Multimedia Programming using Android**

Multimedia audio formats - Creating and Playing

Multimedia audio formats - Kill / Releasing (Memory Management) How to associate audio in any application

How to associate video playback with an event

**Database - SQLite**

Introducing SQLite

SQLite Open Helper and creating a database Opening and closing a database

Working with cursors Inserts, updates, and deletes

**Notifications**

Notification Manager

Pending Intent Notifications (Show and Cancel)

**How to develop your own custom made Web Browser**

How to use Webview object in XML Permission for using theInternet

Methods for associated with 'Go', 'Back', 'Forward' etc.

**Android Development using other Tools**

Other ways to Develop Android Applications

Graphics / Game development using Adobe CS5.5 Flash How to render .apk file from Adobe Flash

**Testing and Debugging Android Application**

Role and Use of Dalvik

Debug Monitor Server (DDMS) How to debug android application

Use of Step Filters, Breakpoints, Suspend and Resume

How to use LogCat (Verbose, Debug, Info, Warn, Error, Assert) Use of Perspectives

**Installation of .apk**

How to install .apk into your Android Mobile.

**References:**

1. Android Programming: The Big Nerd Ranch Guide (Big Nerd Ranch Guides),2013 by Bill Phillips and BrianHardy
2. Professional Android 4 Application Development, 2012 by RetoMeier
3. Android Application Development in 24 Hours, Sams Teach Yourself (4th Edition),2015 by Carmen Delessio and LaurenDarcey.

**PAPER-IV: SEARCH ENGINE OPTIMIZATION****Time: 3hrs.****Max. Marks: 75****Theory:50****Practical:25**

- 1. The paper setter is required to set eight questions in all and the candidates will be required to attempt any five questions out of these eight questions. All questions will carry equal marks.**
- 2. The student can use only Non-programmable & Non-storage type calculator.**

**Note: Practical exam to be conducted by the external examiner.****Part-A****Understanding SEO:** Search engine basics, creating an SEO Plan**Search strategies :** Building your site for SEO, keywords and your website, Pay-per-click and SEO, Maximizing Pay-per-click strategies, increasing keyword success, understanding and using campaign targeting, managing keyword and pay-per-click campaigns, keyword tools and services, tagging your website, understanding the role of links and linking.**Optimizing Search Strategies:** Adding your site to directories, pay-for-inclusion services, robots, spiders and crawlers, adding social media optimization, plugging in to SEO, automated optimization**Part-B****Maintaining SEO**

What is SEO, What are Search Engines, Introduction to SERP, How Search Engine work?, What are Keywords & Different types of keywords, Keywords Research & Analysis, Keywords Research Tool (Google Keyword Planner), Search Operator, Punctuation & Symbols, On page optimization, Keywords Optimization, Contents Optimization, Understand Your audience for content planning, Website Navigation, Title, Meta Description Tags, Alt Tag, Meta Robot Tags, Robot.txt, Using Google Webmaster Tool & Website Verification, Sitemap Creation and Submission in Webmaster Tool, Off-Site Optimization, Directory, Book marketing, Article & Press Release submissions, Blog & Forum Postings

**SEM (Search Engine Marketing)**

Key Concepts of SEM, SEO vs. SEM, AdWords and AdSense, What is pay-per-click, Google AdWords Account Structure, Benefits and Features of AdWords, Keywords Research & Planning, Match Types: Broad, Phrase, Exact & Negative Match, Cost-Per-Click, Impression, Click through Rate, quality score, Ad Rank, Ad Extensions: Location, Site Links, call etc., Creating a Campaign, Setting Bids and Budgets, Campaign Management, Google Search and Display Network, Language & Location Targeting, Mobile Targeting, Keyword Targeting, Placement Targeting, Text Ads, Image Ads, Video Ads, Mobile Ads, Writing Ad Copy, Shopping Campaign Setup, Google Merchant Centre, Reporting and Analysis, Google Ad Words Tools, Display Planner, Ad Preview and Diagnosis, My Client Centre

**References:**

- 1. Search Engine Optimization Bible, Jerri L. Ledford, Wiley Publishing**

**PAPER-V: PROJECT****Max. Marks: 100****Note: Practical exam to be conducted by the External Examiner.****General Instructions:**

1. A software module based on the work done in the entire course is to be developed.
2. The soft copy of the module shall be submitted to the College/Institute till April 30 of the respective semester.
3. The software module shall be developed in groups, consisting of at most two students in a group.
4. The respective college shall depute guide(s)/supervisor(s) under whose supervision the software module shall be developed. The guide/supervisor shall clarify that the work done is original & authenticated. The certificate found to be incorrect at any stage shall attract the proceedings against all the stakeholders, as per the University rules.
5. The evaluation of the module shall be done as per the common ordinance of UG/PG w.e.f. 2012–2013 under semester system.