

FACULTY OF ECONOMICS & BUSINESS

Syllabus

For

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

(Semester I - IV)

Session: 2016-17



GURU NANAK DEV UNIVERSITY AMRITSAR

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*Bachelor of Vocation (B.Voc.)
(E-Commerce and Digital Marketing) (Semester System)*

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-I	50	-	50
Paper-VI	Punjabi/Basic Punjabi-I	50	-	50
Total				400

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-II	35	15	50
Paper-VI	Punjabi/Basic Punjabi-II	50	-	50
Total				400

*Bachelor of Vocation (B.Voc.)
(E-Commerce and Digital Marketing) (Semester System)*

Semester-III

Paper No.	Subjects	Max. Marks		Total
		Th.	Pr.	
Paper-I	Consumer Behaviour	50	-	50
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
	* Environmental Studies – I (Compulsory)	50	-	
Total		400		

Semester-IV

Paper No.	Subjects	Max. Marks		Total
		Th.	Pr.	
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
	* Environmental Studies – II (Compulsory)	50	-	
Total		400		

***Note :- This Paper marks are not included in the total marks.**

Paper – I: Fundamentals of Management

Time: 3 Hours

Max. Marks: 75

Note:

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

PART A

Management: Introduction – Meaning, nature and characteristics of Management – Scope and functional areas of management – Management as a science, art or profession Management & Administration – Principles of management – Social responsibility of management and Ethics. Functions of Management.

PART B

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

Note:

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

PART 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.

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.

PART B

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, 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.

UNIT-I

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.

UNIT-II

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

UNIT-III

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.

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

Unit-I

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

Unit-II

Working with Tables

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

Unit-III

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)**

Unit-IV

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

Course Contents:

1. Reading Skills: Reading Tactics and strategies; Reading purposes—kinds of purposes and associated comprehension; Reading for direct meanings; Reading for understanding concepts, details, coherence, logical progression and meanings of phrases/ expressions.

Activities:

- a) Active reading of passages on general topics
- b) Comprehension questions in multiple choice format
- c) Short comprehension questions based on content and development of ideas

2. Writing Skills: Guidelines for effective writing; writing styles for application, resume, personal letter, official/ business letter, memo, notices etc.; outline and revision.

Activities:

- a) Formatting personal and business letters.
- b) Organising the details in a sequential order
- c) Converting a biographical note into a sequenced resume or vice-versa
- d) Ordering and sub-dividing the contents while making notes.
- e) Writing notices for circulation/ boards

Suggested Pattern of Question Paper:

The question paper will consist of five skill-oriented questions from Reading and Writing Skills. Each question will carry 10 marks. The questions shall be phrased in a manner that students know clearly what is expected of them. There will be internal choice wherever possible.

10x5=50 Marks

- i) Multiple choice questions on the language and meanings of an unseen passage.
- ii) Comprehension questions with short answers on content, progression of ideas, purpose of writing etc. of an unseen passage.
- iii) Personal letter and Official/Business correspondence
- iv) Making point-wise notes on a given speech/ technical report OR
Writing notices for public circulation on topics of professional interest
- v) Do as directed (10x1= 10 Marks) (change of voice, narration, combination of 2 simple sentences into one, subject-verb agreement, using appropriate tense, forms of verbs.

Recommended Books:

1. *Oxford Guide to Effective Writing and Speaking* by John Seely.
2. *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

1. **ਗਿਆਨ ਮਾਲਾ** (ਵਿਗਿਆਨਕ ਤੇ ਸਮਾਜ-ਵਿਗਿਆਨਕ ਲੇਖਾਂ ਦਾ ਸੰਗ੍ਰਹਿ),
(ਸੰਪਾ. ਡਾ. ਸਤਿੰਦਰ ਸਿੰਘ, ਪ੍ਰੋ. ਮਹਿੰਦਰ ਸਿੰਘ ਬਨਵੈਤ), ਗੁਰੂ ਨਾਨਕ ਦੇਵ
ਯੂਨੀਵਰਸਿਟੀ, ਅੰਮ੍ਰਿਤਸਰ।
ਲੇਖ : ਪਹੀਆ ਪ੍ਰਦੂਸ਼ਣ, ਭਰੂਣ ਹੱਤਿਆ ਦੇ ਦੇਸ਼ ਵਿਚ, ਨਾਰੀ ਸ਼ਕਤੀ, ਵਾਤਾਵਰਣੀ ਪ੍ਰਦੂਸ਼ਣ
ਅਤੇ ਮਨੁੱਖ, ਏਡਜ਼ : ਇਕ ਗੰਭੀਰ ਸੰਕਟ।
2. **ਆਤਮ ਅਨਾਤਮ** (ਸੰਪ. ਸੁਹਿੰਦਰ ਬੀਰ ਅਤੇ ਵਰਿਆਮ ਸਿੰਘ ਸੰਧੂ)
(ਪ੍ਰੋ. ਮੋਹਨ ਸਿੰਘ, ਅੰਮ੍ਰਿਤਾ ਪ੍ਰੀਤਮ, ਸ਼ਿਵ ਕੁਮਾਰ ਬਟਾਲਵੀ, ਸੁਰਜੀਤ ਪਾਤਰ, ਪਾਸ਼)
ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ, ਅੰਮ੍ਰਿਤਸਰ।
3. **ਪੈਰਾ ਰਚਨਾ**
4. **ਪੈਰਾ ਪੜ੍ਹ ਕੇ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਉੱਤਰ।**
5. (ੳ) **ਪੰਜਾਬੀ ਧੁਨੀ ਵਿਉਂਤ** : ਉਚਾਰਨ ਅੰਗ, ਉਚਾਰਨ ਸਥਾਨ ਤੇ ਵਿਧੀਆਂ, ਸਵਰ, ਵਿਅੰਜਨ,
ਸੁਰ।
(ਅ) **ਭਾਸ਼ਾ ਵੰਨਗੀਆਂ** : ਭਾਸ਼ਾ ਦਾ ਟਕਸਾਲੀ ਰੂਪ, ਭਾਸ਼ਾ ਅਤੇ ਉਪ-ਭਾਸ਼ਾ ਦਾ ਅੰਤਰ, ਪੰਜਾਬੀ
ਉਪਭਾਸ਼ਾਵਾਂ ਦੇ ਪਛਾਣ-ਚਿੰਨ੍ਹ।
6. **ਮਾਤ ਭਾਸ਼ਾ ਦਾ ਅਧਿਆਪਨ**
(ੳ) ਪਹਿਲੀ ਭਾਸ਼ਾ ਦੇ ਤੌਰ ਉੱਤੇ
(ਅ) ਦੂਜੀ ਭਾਸ਼ਾ ਦੇ ਤੌਰ ਉੱਤੇ

ਅੰਕ-ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ:

1. ਕਿਸੇ ਨਿਬੰਧ ਦਾ ਸਾਰ ਜਾਂ ਉਸਦਾ ਵਿਸ਼ਾ ਵਸਤੂ (ਦੋ ਵਿਚੋਂ ਇਕ) । 10 ਅੰਕ
2. **ਆਤਮ ਅਨਾਤਮ** : ਸਾਰ, ਵਿਸ਼ਾ-ਵਸਤੂ, ਪ੍ਰਸੰਗ ਸਹਿਤ ਵਿਆਖਿਆ, ਕਲਾ ਪੱਖ 10 ਅੰਕ
3. ਪੈਰਾ ਰਚਨਾ : ਤਿੰਨ ਵਿਸ਼ਿਆਂ ਵਿਚੋਂ ਕਿਸੇ ਇਕ ਉੱਤੇ ਪੈਰਾ ਲਿਖਣ ਲਈ 05 ਅੰਕ
ਕਿਹਾ ਜਾਵੇ ।
4. ਪੈਰਾ ਦੇ ਕੇ ਉਸ ਬਾਰੇ ਪੰਜ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਉੱਤਰ। 05 ਅੰਕ
5. ਨੰਬਰ 5 ਉੱਤੇ ਦਿੱਤੀ ਵਿਆਕਰਣ ਦੇ ਆਧਾਰ 'ਤੇ ਵਰਣਨਾਤਮਕ ਪ੍ਰਸ਼ਨ। 10 ਅੰਕ
6. ਨੰਬਰ 6 ਵਿਚ ਮਾਤ ਭਾਸ਼ਾ ਦੇ ਪਹਿਲੀ ਭਾਸ਼ਾ ਅਤੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਜੋਂ
ਅਧਿਆਪਨ, ਮਹੱਤਵ ਅਤੇ ਸਮੱਸਿਆਵਾਂ ਬਾਰੇ ਚਾਰ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ,
ਜਿਨ੍ਹਾਂ ਵਿਚੋਂ ਵਿਦਿਆਰਥੀ ਨੇ ਦੋ ਦਾ ਉੱਤਰ ਦੇਣਾ ਹੋਵੇਗਾ। 5×2=10 ਅੰਕ

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

ਸਮਾਂ : 3 ਘੰਟੇ

ਕੁਲ ਅੰਕ: 50

ਪਾਠ-ਕ੍ਰਮ

1. ਪੈਂਤੀ ਅੱਖਰੀ; ਪੈਰ ਬਿੰਦੀ ਵਾਲੇ ਵਰਣ ਅਤੇ ਪੈਰ ਵਿਚ ਪੈਣ ਵਾਲੇ ਵਰਣ, ਲਗਾਂ ਮਾਤਰਾਂ
2. ਲਗਾਖਰ (ਬਿੰਦੀ, ਟਿੱਪੀ, ਅੱਧਕ)
3. (ੳ) ਵਿਸ਼ਰਾਮ ਚਿੰਨ੍ਹਾਂ ਦੀ ਵਰਤੋਂ,
(ਅ) ਨਾਂਵ, ਪੜਨਾਂਵ, ਕਿਰਿਆ, ਵਿਸ਼ੇਸ਼ਣ, ਲਿੰਗ ਅਤੇ ਵਚਨ

ਅੰਕ ਵੰਡ ਤੇ ਪੇਪਰ ਸੈਟਰ ਲਈ ਹਦਾਇਤਾਂ

1. ਪੈਂਤੀ ਅੱਖਰੀ ਦੀ ਬਣਤਰ ਅਤੇ ਤਰਤੀਬ ਨਾਲ ਸੰਬੰਧਿਤ ਪ੍ਰਸ਼ਨ। 10 ਅੰਕ
(ਦੋ ਪ੍ਰਸ਼ਨਾਂ ਵਿੱਚੋਂ ਇੱਕ ਕਰਨਾ ਹੋਵੇਗਾ)
ਕਵਰਗ, ਚਵਰਗ, ਤਵਰਗ, ਟਵਰਗ ਆਦਿ ਸੰਬੰਧੀ ਪ੍ਰਸ਼ਨ ਪੁੱਛਿਆ ਜਾ ਸਕਦਾ ਹੈ। ਪੈਰ ਵਿਚ ਪੈਣ ਵਾਲੇ ਵਰਣ ਅਤੇ ਲਗਾਂ ਮਾਤਰਾਂ ਦੀ ਵਰਤੋਂ ਨਾਲ ਸੰਬੰਧਿਤ ਪ੍ਰਸ਼ਨ (ਦੋ ਵਿੱਚੋਂ ਇੱਕ ਕਰਨਾ ਹੋਵੇਗਾ) 10 ਅੰਕ
2. ਬਿੰਦੀ, ਟਿੱਪੀ ਅਤੇ ਅੱਧਕ ਦੀ ਵਰਤੋਂ ਸੰਬੰਧੀ ਪ੍ਰਸ਼ਨ 10 ਅੰਕ
3. (ੳ) ਵਿਸ਼ਰਾਮ ਚਿੰਨ੍ਹਾਂ ਦੀ ਵਰਤੋਂ ਸੰਬੰਧੀ ਪ੍ਰਸ਼ਨ 10 ਅੰਕ
(ਅ) ਨਾਂਵ ਪੜਨਾਂਵ, ਕਿਰਿਆ, ਵਿਸ਼ੇਸ਼ਣ ਅਤੇ ਲਿੰਗ ਵਚਨ ਸੰਬੰਧੀ ਮੁੱਢਲੀ ਕਿਸਮ ਦੇ ਪ੍ਰਸ਼ਨ (ਦੋ ਵਿੱਚੋਂ ਇੱਕ ਕਰਨਾ ਹੋਵੇਗਾ) 10 ਅੰਕ

Paper – I: Marketing Management

Time: 3 Hours

Max. Marks: 75

Theory: 50

Practical: 25

Note:

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

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

PART B

Market Segmentation: Concept and importance of Market Segmentation, Bases of market segmentation, Concept of Market Targeting and Positioning. 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. Marchannd & B.Vardharajan: An introduction to Marketing, Vikas Publishing House, 5 Ansari 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

Note:

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

UNIT-I

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 up Networking (connecting to internet), audio on internet, internet addressing (DNS) and IP addresses).

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.

UNIT-II

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),

UNIT-III

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.

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

Note:

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

UNIT-I

Basic Concepts of Database Management (Database, Database System, why database, Data independence) 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.

UNIT-II

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.

UNIT-III

Relational Data Model: Relational model concepts, relational constraints

UNIT-IV

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

UNIT-V

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

Unit I

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

Unit II

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

Time: 3 Hours

Max. Marks: 50

Theory Marks: 35

Practical Marks: 15

Course Contents:

1. Listening Skills: Barriers to listening; effective listening skills; feedback skills. Attending telephone calls; note taking.

Activities:

- a) Listening exercises – Listening to conversation, News and TV reports
- b) Taking notes on a speech/lecture

2. 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.

The study of sounds of English, stress

Situation based Conversation in English

Essentials of Spoken English

Activities:

- a) Making conversation and taking turns
- b) Oral description or explanation of a common object, situation or concept
- c) Giving interviews

Suggested Pattern of Question Paper:

The question paper will consist of seven questions related to speaking and listening Skills. Each question will carry 5 marks. The nature of the questions will be as given below:-

Two questions requiring students to give descriptive answers.

Three questions in the form of practical exercises requiring students to give an appropriate response to a question, a proposal, a proposition, an invitation etc. For example, the paper setter may give a proposition and ask the students to agree or disagree with it or introduce a character giving invitations and ask the students to accept or refuse it etc.

Two questions requiring students to transcribe simple words in IPA symbols, marking stress.

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 of 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

1. **ਗਿਆਨ ਮਾਲਾ** (ਵਿਗਿਆਨਕ ਤੇ ਸਮਾਜ-ਵਿਗਿਆਨਕ ਲੇਖਾਂ ਦਾ ਸੰਗ੍ਰਹਿ)
(ਸੰਪ. ਡਾ. ਸਤਿੰਦਰ ਸਿੰਘ, ਪ੍ਰੋ. ਮਹਿੰਦਰ ਸਿੰਘ ਬਨਵੈਤ), ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ, ਅੰਮ੍ਰਿਤਸਰ, 2007
ਲੇਖ : ਸਾਹਿਤ ਤੇ ਲੋਕ ਸਾਹਿਤ, ਅੱਖਾਂ, ਅਚੇਤਨ ਦਾ ਗੁਣ ਤੇ ਸੁਭਾਅ, ਕੰਪਿਊਟਰ ਅਤੇ ਇੰਟਰਨੈੱਟ, ਮਨੁੱਖੀ ਅਧਿਕਾਰ।
2. **ਆਤਮ ਅਨਾਤਮ** (ਸੰਪ. ਸੁਹਿੰਦਰ ਬੀਰ ਅਤੇ ਵਰਿਆਮ ਸਿੰਘ ਸੰਧੂ) (ਕਹਾਣੀਆਂ)
ਪਠਾਣ ਦੀ ਧੀ (ਸੁਜਾਨ ਸਿੰਘ), **ਸਾਂਝੀ ਕੰਧ** (ਸੰਤੋਖ ਸਿੰਘ ਧੀਰ), **ਉਜਾੜ** (ਕੁਲਵੰਤ ਸਿੰਘ ਵਿਰਕ), **ਘੋਟਣਾ** (ਮੋਹਨ ਭੰਡਾਰੀ), **ਦਲਦਲ** (ਵਰਿਆਮ ਸਿੰਘ ਸੰਧੂ)
ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ, ਅੰਮ੍ਰਿਤਸਰ।
3. **ਸ਼ਬਦ-ਬਣਤਰ ਅਤੇ ਸ਼ਬਦ ਰਚਨਾ** : ਪਰਿਭਾਸ਼ਾ, ਮੁੱਢਲੇ ਸੰਕਲਪ
4. **ਸ਼ਬਦ ਸ਼੍ਰੇਣੀਆਂ**
5. **ਪੈਰ੍ਹਾ ਰਚਨਾ**
6. **ਪੈਰ੍ਹਾ ਪੜ੍ਹ ਕੇ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਉੱਤਰ**
7. **ਮੁਹਾਵਰੇ ਅਤੇ ਅਖਾਣ**

ਅੰਕ-ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ:

1. ਕਿਸੇ ਨਿਬੰਧ ਦਾ ਸਾਰ ਜਾਂ ਉਸਦਾ ਵਿਸ਼ਾ ਵਸਤੂ (ਦੋ ਵਿਚੋਂ ਇਕ) । 10 ਅੰਕ
2. **ਆਤਮ ਅਨਾਤਮ** : ਸਾਰ, ਵਿਸ਼ਾ ਵਸਤੂ, ਪਾਤਰ ਚਿਤਰਣ, ਸਾਹਿਤ ਨੂੰ ਦੇਣ 10 ਅੰਕ
- 3-4. 3-4 ਨੰਬਰ ਉੱਤੇ ਦਿੱਤੀ ਵਿਆਕਰਣ ਦੇ ਆਧਾਰ ਤੇ ਵਰਣਨਾਤਮਕ ਪ੍ਰਸ਼ਨ। 10 ਅੰਕ
5. ਪੈਰ੍ਹਾ ਰਚਨਾ : ਤਿੰਨ ਵਿਸ਼ਿਆਂ ਵਿਚੋਂ ਕਿਸੇ ਇਕ ਉੱਤੇ ਪੈਰ੍ਹਾ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇ । 05 ਅੰਕ
6. ਪੈਰ੍ਹਾ ਦੇ ਕੇ ਉਸ ਬਾਰੇ ਪੰਜ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਉੱਤਰ 05 ਅੰਕ
7. ਨੰਬਰ 7 ਵਿਚ ਅੱਠ ਅਖਾਣ ਅਤੇ ਅੱਠ ਮੁਹਾਵਰੇ ਪੁੱਛੇ ਜਾਣਗੇ, ਜਿਨ੍ਹਾਂ ਵਿਚੋਂ ਵਿਦਿਆਰਥੀ ਨੇ ਪੰਜ-ਪੰਜ ਨੂੰ ਵਾਕਾਂ ਵਿਚ ਵਰਤ ਕੇ ਅਰਥ ਸਪੱਸ਼ਟ ਕਰਨੇ ਹੋਣਗੇ।

5+5=10 ਅੰਕ

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

ਸਮਾਂ: 3 ਘੰਟੇ

ਕੁਲ ਅੰਕ: 50

ਪਾਠ - ਕ੍ਰਮ

- | | | |
|----|--|--------|
| 1. | ਪੰਜਾਬੀ ਸ਼ਬਦ-ਬਣਤਰ
ਸੰਯੁਕਤ ਅਤੇ ਮਿਸ਼ਰਤ ਸ਼ਬਦ
ਨਿੱਤ ਵਰਤੋਂ ਦੀ ਪੰਜਾਬੀ ਸ਼ਬਦਾਵਲੀ | 20 ਅੰਕ |
| 2. | ਭਾਸ਼ਾ ਅਤੇ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਮੁੱਢਲੀ ਜਾਣ ਪਛਾਣ
ਗੁਰਮੁਖੀ ਲਿਪੀ ਦੀਆਂ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ | 15 ਅੰਕ |
| 3. | ਪੰਜਾਬੀ ਵਾਕ ਬਣਤਰ
ਸਾਧਾਰਨ ਵਾਕ: ਕਿਸਮਾਂ
ਸੰਯੁਕਤ ਵਾਕ: ਕਿਸਮਾਂ
ਮਿਸ਼ਰਤ ਵਾਕ: ਕਿਸਮਾਂ
ਪੰਜਾਬੀ ਵਾਕਾਂ ਦੀ ਵਰਤੋਂ ਦੇ ਵਿਭਿੰਨ ਸਮਾਜਿਕ ਪ੍ਰਸੰਗ | 15 ਅੰਕ |

ਯੂਨਿਟ ਅਤੇ ਥੀਮ

- ਪੰਜਾਬੀ ਸ਼ਬਦ ਬਣਤਰ:** ਸੰਯੁਕਤ ਸ਼ਬਦ; ਸਮਾਸੀ ਸ਼ਬਦ (ਜਿਵੇਂ ਲੋਕ ਸਭਾ); ਦੋਹਰੇ ਸ਼ਬਦ / ਦੁਹਰਰੁਕਤੀ (ਜਿਵੇਂ ਧੂੜ ਧਾੜ / ਭਰ ਭਰ), ਮਿਸ਼ਰਤ ਸ਼ਬਦਾਂ ਦੀ ਬਣਤਰ/ਸਿਰਜਨਾ; ਅਗੇਤਰਾਂ ਰਾਹੀਂ (ਜਿਵੇਂ ਉਪ ਭਾਸ਼ਾ), ਪਿਛੇਤਰਾਂ ਰਾਹੀਂ (ਜਿਵੇਂ ਰੰਗਲਾ), ਪੰਜਾਬੀ ਸ਼ਬਦ ਰਚਨਾ: ਪੜਨਾਵੀਂ ਰੂਪ, ਕਿਰਿਆ/ਸਹਾਇਕ ਕਿਰਿਆ ਦੇ ਰੂਪ; ਨਿੱਤ ਵਰਤੋਂ ਦੀ ਪੰਜਾਬੀ ਸ਼ਬਦਾਵਲੀ: ਰੁੱਤਾਂ, ਮਹੀਨਿਆਂ, ਮੌਸਮਾਂ, ਗਿਣਤੀ ਨਾਲ ਸੰਬੰਧਿਤ।
- ਭਾਸ਼ਾ ਅਤੇ ਮਾਤ ਭਾਸ਼ਾ ਦੇ ਮਹੱਤਵ ਸੰਬੰਧੀ ਪ੍ਰਸ਼ਨ
 - ਗੁਰਮੁਖੀ ਲਿਪੀ ਦੀਆਂ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ ਸੰਬੰਧੀ ਪ੍ਰਸ਼ਨ
- ਪੰਜਾਬੀ ਵਾਕ ਬਣਤਰ:** ਕਰਤਾ ਕਰਮ ਕਿਰਿਆ; ਸਾਧਾਰਨ ਵਾਕ, ਬਿਆਨੀਆ, ਪ੍ਰਸ਼ਨਵਾਚਕ, ਆਗਿਆਵਾਚਕ, ਸੰਯੁਕਤ ਅਤੇ ਮਿਸ਼ਰਤ ਵਾਕਾਂ ਦੀਆਂ ਕਿਸਮਾਂ; ਸੁਤੰਤਰ ਅਤੇ ਅਧੀਨ ਉਪਵਾਕ; ਸਮਾਨ (ਤੇ/ਅਤੇ) ਅਤੇ ਅਧੀਨ (ਜੋ/ਕਿ) ਯੋਜਕਾਂ ਦੀ ਵਰਤੋਂ; ਪੰਜਾਬੀ ਵਾਕਾਂ ਦੀ ਵਰਤੋਂ: ਵਿਭਿੰਨ ਸਮਾਜਕ/ਸਭਿਆਚਾਰਕ ਪ੍ਰਸੰਗ; ਘਰ ਵਿਚ, ਬਾਜ਼ਾਰ ਵਿਚ, ਮੇਲੇ ਵਿਚ, ਸ਼ੋਪਿੰਗ ਮਾਲ/ਸਿਨੇਮੇ ਵਿਚ, ਵਿਆਹ ਵਿਚ, ਧਾਰਮਿਕ ਸਥਾਨਾਂ ਵਿਚ, ਦੋਸਤਾਂ ਨਾਲ ਆਦਿ।

ਅੰਕ-ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ

- ਪਹਿਲੇ ਯੂਨਿਟ ਵਿੱਚੋਂ ਪੰਜਾਬੀ ਸ਼ਬਦ ਬਣਤਰ ਅਤੇ ਸ਼ਬਦ ਰਚਨਾ ਨਾਲ ਸੰਬੰਧਿਤ 5-5 ਅੰਕਾਂ ਦੇ ਤਿੰਨ ਵਿਹਾਰਕ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ। ਅੰਕਾਂ ਦੀ ਵੰਡ ਅੱਗੋਂ ਇਕ-ਇਕ ਜਾਂ ਦੋ-ਦੋ ਅੰਕਾਂ ਦੇ ਛੋਟੇ ਪ੍ਰਸ਼ਨਾਂ ਵਿਚ ਕੀਤੀ ਜਾ ਸਕਦੀ ਹੈ। ਨਿੱਤ ਵਰਤੋਂ ਦੀ ਸ਼ਬਦਾਵਲੀ ਨਾਲ ਸੰਬੰਧਿਤ ਇਕ-ਇਕ ਅੰਕ ਦੇ ਪੰਜ (ਆਬਜੈਕਟਿਵ) ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ।
20 ਅੰਕ
- ਦੂਸਰੇ ਯੂਨਿਟ ਵਿੱਚ ਭਾਸ਼ਾ ਅਤੇ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਮੁੱਢਲੀ ਜਾਣ ਪਛਾਣ ਨਾਲ ਸੰਬੰਧਿਤ 5-5 ਅੰਕਾਂ ਦੇ ਤਿੰਨ ਵਿਹਾਰਕ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ। ਅੰਕਾਂ ਦੀ ਵੰਡ ਅੱਗੋਂ ਇਕ-ਇਕ ਜਾਂ ਦੋ-ਦੋ ਅੰਕਾਂ ਦੇ ਛੋਟੇ ਪ੍ਰਸ਼ਨਾਂ ਵਿੱਚ ਕੀਤੀ ਜਾ ਸਕਦੀ ਹੈ।
15 ਅੰਕ
- ਤੀਜੇ ਯੂਨਿਟ ਵਿੱਚ ਪੰਜਾਬੀ ਵਾਕ-ਬਣਤਰ ਨਾਲ ਸੰਬੰਧਿਤ 5-5 ਅੰਕਾਂ ਦੇ ਦੋ ਵਿਹਾਰਕ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ। ਅੰਕਾਂ ਦੀ ਵੰਡ ਅੱਗੋਂ ਇਕ-ਇਕ ਜਾਂ ਦੋ-ਦੋ ਅੰਕਾਂ ਦੇ ਛੋਟੇ ਪ੍ਰਸ਼ਨਾਂ ਵਿਚ ਕੀਤੀ ਜਾ ਸਕਦੀ ਹੈ। ਪੰਜਾਬੀ ਵਾਕਾਂ ਦੀ ਵਿਹਾਰਕ ਵਰਤੋਂ ਨਾਲ ਸੰਬੰਧਿਤ 5 ਅੰਕਾਂ ਦਾ ਇਕ ਪ੍ਰਸ਼ਨ ਪੁੱਛਿਆ ਜਾਵੇਗਾ, ਜਿਸ ਵਿਚ ਵਿਦਿਆਰਥੀ ਨੂੰ ਕਿਸੇ ਸਮਾਜਿਕ/ਸਭਿਆਚਾਰਕ ਪ੍ਰਸੰਗ ਵਿਚ ਵਰਤੋਂ ਜਾਂਦੇ ਪੰਜ ਵਾਕ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ।
15 ਅੰਕ

Paper – I: Consumer Behavior

Time: 3 Hours

Max. Marks: 50

Note:

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

PART – A

Introduction to Consumer Behaviour; Consumer Behaviour and Marketing Strategy. Consumer Motivation: Nature of motivation; Types of consumer needs and motives; Dynamics of motivation; Need conflict; Need Hierarchy Theory of Motivation and its applications; Measurement of Motives. Personality and Consumer Behaviour: Definition of personality; Theories of personality; Personality and consumer diversity; Self concept and self image. Consumer Perception: Elements of perception; Dynamics of perception, Perceptual process; Perception and marketing strategy; Perceived risk.

PART – B

Consumer Learning: Elements of consumer learning; Behavioural theories and Cognitive theories of learning. Consumer Attitude Formation: Definition of attitudes; Structural models of attitudes; Attitude Theories; Attitude formation; Strategies of attitude change; Measuring Attitude. Reference Group and Family Influences: Power of reference groups; Types of consumer related reference groups; Celebrity and other reference group appeals; Family decision making and consumption related roles; Family life cycle.

Suggested Readings:

- Loudon and Bitta, “*Consumer Behaviour*”, 4th edition, Tata Mc Graw
- Bennet and Kassarian, “*Consumer Behaviour*”, Prentice Hall of India
- Batra and Kazmi, “*Consumer Behaviour*”, *Text & cases*, Excel Books
- Schiffman and Kannak, “*Consumer Behaviour*”, Pearson Education

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

Note:

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

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

PART – B

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. 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

Note:

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

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

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

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

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

Note:

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

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

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

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,

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.

Unit-I

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

Unit-II

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

Unit-III

Painting and Drawing Tool: Brushes, Strokes, Work Path, Painting Tools

Working with Channels & Action: Working with Channels, Creating Actions, Save New Action Group

Unit-IV

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 & 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

ESL–221: ENVIRONMENTAL STUDIES–I (COMPULSORY)

Time: 3 Hrs.

Max. Marks: 50

Theory Lectures: 1½ Hours/ Week

Section–A: (15 Marks): It will consist of five short answer type questions. Candidates will be required to attempt three questions, each question carrying five marks. Answer to any of the questions should not exceed two pages.

Section–B: (20 Marks): It will consist of four essay type questions. Candidates will be required to attempt two questions, each question carrying ten marks. Answer to any of the questions should not exceed four pages.

Section–C: (15 Marks): It will consist of two questions. Candidate will be required to attempt one question only. Answer to the question should not exceed 5 pages.

1. The Multidisciplinary Nature of Environmental Studies:

- Definition, scope & its importance.
- Need for public awareness.

2. Natural Resources:

- Natural resources and associated problems:
 - a) Forest Resources:** Use of 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, change caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problem, salinity, case studies.
 - e) Energy Resources:** Growing of energy needs, renewable and non-renewable energy resources, use of alternate energy sources, case studies.
 - f) Land Resources:** Land as a resource, land degradation, soil erosion and desertification.
- Role of an individual in conservation of natural resources.
- Equitable use of resources for sustainable lifestyles.

3. Ecosystem:

- 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 ecosystems:
 - a. Forest ecosystem
 - b. Grassland ecosystem
 - c. Desert ecosystem
 - d. Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)

4. Social Issues and Environment:

- 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 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:
 - Air (prevention and Control of Pollution) Act.
 - Water (prevention and Control of Pollution) Act.
 - Wildlife Protection Act.
 - Forest Conservation Act.
- Issues involved in enforcement of environmental legislation.
- Public awareness.

5. National Service Scheme

- **Introduction and Basic Concepts of NSS:** History, philosophy, aims & objectives of NSS; Emblem, flag, motto, song, badge etc.; Organizational structure, roles and responsibilities of various NSS functionaries.
- **Health, Hygiene & Sanitation:** Definition, needs and scope of health education; Food and Nutrition; Safe drinking water, water borne diseases and sanitation (Swachh Bharat Abhiyan); National Health Programme; Reproductive health.

References/Books:

1. Agarwal, K. C. 2001. Environmental Biology, Nidhi Publications Ltd. Bikaner.
2. Bharucha, E. 2005. Textbook of Environmental Studies, Universities Press, Hyderabad.
3. Down to Earth, Centre for Science and Environment, New Delhi.
4. Jadhav, H. & Bhosale, V. M. 1995. Environmental Protection and Laws. Himalaya Pub.
5. Joseph, K. and Nagendran, R. 2004. Essentials of Environmental Studies, Pearson Education (Singapore) Pte. Ltd., Delhi.
6. Kaushik, A. & Kaushik, C. P. 2004. Perspective in Environmental Studies, New Age International (P) Ltd, New Delhi.
7. Miller, T. G. Jr. 2000. Environmental Science, Wadsworth Publishing Co.
8. Sharma, P. D. 2005. Ecology and Environment, Rastogi Publications, Meerut.
9. Booklet on Safe Driving. Sukhmani Society (Suvidha Centre), District Court Complex, Amritsar
10. Kanta, S., 2012. Essentials of Environmental Studies, ABS Publications, Jalandhar.

Paper – I: Retailing

Time: 3 Hours

Max. Marks: 50

Note:

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

PART A

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

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.

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

PART B

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.

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**

Note:

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

PART 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.

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

PART B

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.

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*, 61h edition, Tata McGraw Hill Co., 2003.
- Batra, Rajeev, John G. Myers and David A. Aakers, *Adverlising Management*, 5th 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

Note:

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

Unit I

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

Unit II

Creating Graphical Objects

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

Unit III

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

Unit IV

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

Unit V

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–222: ENVIRONMENTAL STUDIES–II (COMPULSORY)

Time: 3 Hrs.

Max. Marks: 50

Theory Lectures: 1½ Hours/ Week

Section–A: (15 Marks): It will consist of five short answer type questions. Candidates will be required to attempt three questions, each question carrying five marks. Answer to any of the questions should not exceed two pages.

Section–B: (20 Marks): It will consist of four essay type questions. Candidates will be required to attempt two questions, each question carrying ten marks. Answer to any of the questions should not exceed four pages.

Section–C: (15 Marks): It will consist of two questions. Candidate will be required to attempt one question only. Answer to the question should not exceed 5 pages.

1. Biodiversity and its Conservation:

- Definition: Genetic, species and ecosystem diversity.
- Biogeographical classification of India.
- Value of Biodiversity: Consumptive use; productive use, social, ethical, aesthetic and option values.
- Biodiversity of global, National and local levels.
- India as mega-diversity nation.
- Hot-spots of biodiversity.
- Threats to Biodiversity: Habitat loss, poaching of wild life, man wildlife conflicts.
- Endangered and endemic species of India.
- Conservation of Biodiversity: In situ and Ex-situ conservation of biodiversity.

2. Environmental Pollution:

- Definition, 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
 - h) Electronic Waste
- 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.

3. Human Population and the Environment

- Population growth, variation among nations.
- Population explosion-Family welfare programme.

*Bachelor of Vocation (B.Voc.)
(E-Commerce and Digital Marketing) (Semester-IV)*

- 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.
- Road Safety Rules & Regulations: Use of Safety Devices while Driving, Do's and Don'ts while Driving, Role of Citizens or Public Participation, Responsibilities of Public under Motor Vehicle Act, 1988, General Traffic Signs.
- Accident & First Aid: First Aid to Road Accident Victims, Calling Patrolling Police & Ambulance.

4. National Service Scheme

- **Entrepreneurship Development:** Definition & Meaning; Qualities of good entrepreneur; Steps/ ways in opening an enterprise; Role of financial and support service Institutions.
- **Civil/Self Defense:** Civil defense services, aims and objectives of civil defense; Needs for self defense training.

5. Field Visits:

- 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.
- Contribution of the student to NSS/any other social cause for service of society.

Note: In this section the students will be required to visit and write on the environment of an area/ ecosystem/village industry/disaster/mine/dam/agriculture field/waste management/ hospital etc. with its salient features, limitations, their implications and suggestion for improvement.

References/Books:

1. Agarwal, K. C. 2001. Environmental Biology, Nidhi Publications Ltd. Bikaner.
2. Bharucha, E. 2005. Textbook of Environmental Studies, Universities Press, Hyderabad.
3. Down to Earth, Centre for Science and Environment, New Delhi.
4. Jadhav, H. & Bhosale, V. M. 1995. Environmental Protection and Laws. Himalaya Pub.
5. Joseph, K. and Nagendran, R. 2004. Essentials of Environmental Studies, Pearson Education (Singapore) Pte. Ltd., Delhi.
6. Kaushik, A. & Kaushik, C. P. 2004. Perspective in Environmental Studies, New Age International (P) Ltd, New Delhi.
7. Miller, T. G. Jr. 2000. Environmental Science, Wadsworth Publishing Co.
8. Sharma, P. D. 2005. Ecology and Environment, Rastogi Publications, Meerut.
9. Booklet on Safe Driving. Sukhmani Society (Suvidha Centre), District Court Complex, Amritsar
10. Kanta, S., 2012. Essentials of Environmental Studies, ABS Publications, Jalandhar.