FACULTY OF ENGINEERING & TECHNOLOGY

SYLLABUS

FOR

BACHELOR OF VOCATION (B.VOC.)
WEB DESIGNING & DEVELOPMENT (IT)
(Semester: I – IV)

Session: 2019–20

GURU NANAK DEV UNIVERSITY,
AMRITSAR.

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(ii) Subject to change in the syllabi at any time.
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SCHEME

Eligibility:
A student who has passed +2 Examination of PSEB or any other examination recognized, is eligible for admission to B.Voc Web designing and Development (IT).

Semester-I:

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Subjects</th>
<th>Theory</th>
<th>Practical</th>
<th>Total Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper-I</td>
<td>Programming in C</td>
<td>50</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Paper-II</td>
<td>Fundamentals of Information Technology</td>
<td>50</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Paper-III</td>
<td>Lab Based on Desktop Publishing Tools-I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Adobe Photoshop (CS6))</td>
<td>50</td>
<td>50</td>
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<tr>
<td>Paper-IV</td>
<td>Lab Based on Programming in C</td>
<td></td>
<td></td>
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<tr>
<td>Paper-V</td>
<td>Lab Based on Fundamentals of Information Technology</td>
<td>75</td>
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Skill Component

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Subjects</th>
<th>Theory</th>
<th>Practical</th>
<th>Total Marks</th>
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<tbody>
<tr>
<td>Paper-VI</td>
<td>Communication Skills in English – I</td>
<td>50</td>
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<td>50</td>
</tr>
<tr>
<td>Paper-VII</td>
<td>Punjabi (Compulsory) / <strong>ਪੰਜਾਬੀ ਪੰਜਾਬੀ /</strong> Punjab History &amp; Culture (From Earliest Times to C 320)</td>
<td>50</td>
<td></td>
<td>50</td>
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<tr>
<td>Paper-VIII</td>
<td>* Drug Abuse: Problem, Management and Prevention (Compulsory Paper)</td>
<td>50</td>
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General Education Component

<table>
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<th>Subjects</th>
<th>Theory</th>
<th>Practical</th>
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<tbody>
<tr>
<td>Paper-VI</td>
<td>Communication Skills in English – II</td>
<td>35</td>
<td>15</td>
<td>50</td>
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<tr>
<td>Paper-VII</td>
<td>Punjabi (Compulsory) / <strong>ਪੰਜਾਬੀ ਪੰਜਾਬੀ /</strong> Punjab History &amp; Culture (C 320 TO 1000 B.C.)</td>
<td>50</td>
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<td>Paper-VIII</td>
<td>* Drug Abuse: Problem, Management and Prevention (Compulsory Paper)</td>
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Total 200 200 400

Semester-II:

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Subjects</th>
<th>Theory</th>
<th>Practical</th>
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<tbody>
<tr>
<td>Paper-I</td>
<td>Programming using Python</td>
<td>50</td>
<td>50</td>
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<tr>
<td>Paper-II</td>
<td>Web Designing (HTML, DHTML ,CSS &amp; JAVASCRIPT)</td>
<td>50</td>
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<tr>
<td>Paper-III</td>
<td>Minor Development-I</td>
<td>50</td>
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<td>Paper-IV</td>
<td>Lab Based on Programming using Python</td>
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<tr>
<td>Paper-V</td>
<td>Lab Based on Web designing (HTML, DHTML, CSS &amp; JAVASCRIPT)</td>
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Skill Component

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<th>Paper No.</th>
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<th>Theory</th>
<th>Practical</th>
<th>Total Marks</th>
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<td>Paper-VI</td>
<td>Communication Skills in English – II</td>
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<tr>
<td>Paper-VII</td>
<td>Punjabi (Compulsory) / <strong>ਪੰਜਾਬੀ ਪੰਜਾਬੀ /</strong> Punjab History &amp; Culture (C 320 TO 1000 B.C.)</td>
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<tr>
<td>Paper-VIII</td>
<td>* Drug Abuse: Problem, Management and Prevention (Compulsory Paper)</td>
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General Education Component

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<tbody>
<tr>
<td>Paper-VI</td>
<td>Communication Skills in English – II</td>
<td>35</td>
<td>15</td>
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<tr>
<td>Paper-VII</td>
<td>Punjabi (Compulsory) / <strong>ਪੰਜਾਬੀ ਪੰਜਾਬੀ /</strong> Punjab History &amp; Culture (C 320 TO 1000 B.C.)</td>
<td>50</td>
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<tr>
<td>Paper-VIII</td>
<td>* Drug Abuse: Problem, Management and Prevention (Compulsory Paper)</td>
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</table>

Total 200 200 400

Note: * Marks of this Paper will not be included in the Total Marks.

** (Special Paper in lieu of Punjabi Compulsory)
(For those students who are not domicile of Punjab)
### Semester - III

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Subjects</th>
<th>Theory</th>
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<tbody>
<tr>
<td>Paper-I</td>
<td>Internet &amp; Networking</td>
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<tr>
<td>Paper-II</td>
<td>Database Management System</td>
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<tr>
<td>Paper-III</td>
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<tr>
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<td>Paper-IV</td>
<td>Personality Development</td>
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<tr>
<td>Paper-V</td>
<td>Principles of Management</td>
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<td>Paper-VI</td>
<td>Lab based on Internet &amp; Networking</td>
<td>75</td>
<td>75</td>
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<td>Paper-VII</td>
<td>Lab based on Database Management System</td>
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<td><strong>Total:</strong></td>
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<tbody>
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<td>Paper-I</td>
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<td>Paper-II</td>
<td>Desktop Publishing Tools-III</td>
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<tr>
<td></td>
<td>(Adobe Dreamweaver)</td>
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<tr>
<td>Paper-III</td>
<td>Minor Development-II</td>
<td>50</td>
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<tr>
<td>Paper-IV</td>
<td>Mental Ability &amp; Reasoning</td>
<td>50</td>
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<tr>
<td>Paper-V</td>
<td>Business Etiquettes &amp; Interview Techniques</td>
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<tr>
<td>Paper-VI</td>
<td>Lab based on Core PHP and MySQL</td>
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<tr>
<td>Paper-VII</td>
<td>Lab based on Desktop Publishing Tools-III</td>
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<tr>
<td></td>
<td>(Adobe Dreamweaver)</td>
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<tr>
<td><strong>General Education Component</strong></td>
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<tr>
<td>Paper-VIII</td>
<td>*ESL- 221 : Environmental Studies</td>
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<td><strong>Total:</strong></td>
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*Marks of Paper EVS will not be included in Grand Total.
3
BACHELOR OF VOCATION (B.VOC.)
WEB DESIGNING & DEVELOPMENT (IT) SEMESTER – I

Paper-I: Programming in C

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
Fundamentals: Character set, Identifiers and Key Words, Data types, Constants, Variables,
Expressions, Statements, Symbolic Constants.

Operations and Expressions: Arithmetic operators, Unary operators, Relational Operators,
Logical Operators, Assignment and Conditional Operators, Library functions. Data Input and
Output statements

SECTION–B
Control Statements: Preliminaries, While, Do–while and for statements, Nested loops, If–
else, Switch, Break – Continue statements.

Program Structure Storage Class: Automatic, external and static variables,
multiple programs, more about library functions.

SECTION–C
Functions: Brief overview, defining, accessing functions, passing arguments to function,
specifying argument data types, function prototypes, recursion.

Arrays: Defining, processing an array, passing arrays to a function, multi–dimensional arrays.
Strings: String declaration, string functions and string manipulation

SECTION–D
Structures & Unions: Defining and processing a structure, user defined data types, structures
and pointers, passing structures to functions, self referenced structure, unions.

Pointers: Fundamentals, pointer declaration, passing pointer to a function, pointer and one
dimensional arrays, operation on pointers, pointers & multi–dimensional arrays of pointers,
passing functions, other functions, more about pointer declarations.

References:
1. Balaguruswamy: “Programming in ANSIC”.
2. Scaum Outline Series: “Programming in C”.
3. Dennis & Ritchie: “Programming in C”.

BACHELOR OF VOCATION (B.VOC.)
WEB DESIGNING & DEVELOPMENT (IT) SEMESTER – I

Paper-II: Fundamentals of Information Technology

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

Introduction to computer:
Computer System Characteristics, Hardware - CPU, Memory, Input, Output & Storage devices, Organization of Secondary Storage Media, Software - System & Application, Types of processing Batch and On-line.

SECTION–B

Operating System Concepts:

SECTION–C

MS Word (Word for Windows):

SECTION–D

MS – PowerPoint:
Introduction to MS Power Point, Power Point Elements, Exploring Power Point Menu, Working with Dialog Boxes, Saving Presentation, Printing Slides, Slide View, Slide Sorter view, notes view, outline view, Formatting and enhancing text formatting.

References:
2. Introduction to Computers – N. Subramanian.
3. Introduction to Computers – Peter Norton Mcgraw Hill.
4. MS–Office _ BPB Publications.
BACHELOR OF VOCATION (B.VOC.)
WEB DESIGNING & DEVELOPMENT (IT) SEMESTER – I

Paper-III: Lab based on Desktop Publishing Tools-I (Adobe Photoshop) (Practical)

Time: 3 Hours
Max. Marks: 50

SECTION–A

Introduction to Graphics, Vector Graphics & Bitmaps, Understanding Image Size & resolution, Relation between resolution, File sizes & output, Using menu & Palettes, Concept of Path (Segment, Anchor, Curved, Closed, Open, Subpath)

SECTION–B

Photoshop Tools (Pen, Pencil, Brush, History, Air, Eraser, Rubber stamp, Smudge, Dodge, Burn, Sponge), Masks & Histogram, Acquiring & Importing Images,

SECTION–C

Concept of Layers, Channels & Path, Filters, Rendering Effects, Transformation, Strokes.

SECTION–D

Image Modes, Canvas & Images, Using navigator & PhotoShop plugins.
BACHELOR OF VOCATION (B.VOC.)
WEB DESIGNING & DEVELOPMENT (IT) SEMESTER – I

Paper-IV: Lab based on Programming in C

(Practical)

Time: 3 Hours
Max. Marks: 75

Practical – Lab based on C Language.
Paper-V: Lab based on Fundamentals of Information Technology

(Practical)

Time: 3 Hours

Max. Marks: 75

Practical – Lab Based on Fundamentals of Information Technology.
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BACHELOR OF VOCATION (B.VOC.)
WEB DESIGNING & DEVELOPMENT (IT) SEMESTER – I

PAPER–VI: COMMUNICATION SKILLS IN ENGLISH – I

Time: 3 Hours

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
BACHELOR OF VOCATION (B.VOC.)
WEB DESIGNING & DEVELOPMENT (IT) SEMESTER – I

PAPER-VII: पंजाबी (खण्डमी)

भागः : 3 पृष्ठ
प्रति-व्यूह अंश: प्रति-प्रमाण

मैवस्थ-दी

आउट कालेम (जिल्हा क्रम),
(यून. औपचारिक वीय अंश भिन्न बिन्न बिन्न)
बांध राहुल रेश गौरिलिबाई, अभिभुकता।
(भूमा मातृवा प्रकाशवर्मा, मात)

मैवस्थ-धी

प्राप्तिस्थल पांव (प्राप्तिस्थल सेंटर-रिजर्व)
मंग. न.न.प्रेमस्वल,
पैसी भारती पुस्तकालय, भूमा मातृवा। (केएस 1 वं 6)
(लिखित देव मात, शिक्षा-गैंली)

मैवस्थ-मी

(इ) पेंटर उच्चारण
(अ) पेंटर पद्ध दे प्रमाणे दे ठेंकन।

मैवस्थ-जी

(इ) पंजाबी पृष्ठी निर्देश : निर्देशात्मक शेषा, निर्देशात्मक समये दे विपरीत, महत्त, विशेषत, मुद्र-पृष्ठात।
(अ) व्यापा टिस्टोमान : व्यापा दा टिस्टोमानी तुभ, व्यापा अंश ध्रुव-भागा दा भूमा, पैसी ध्रुवमाण्डे दे पाठ-चिह्न।

वींवेंच अंश व्यापा मुद्राक्ष माही उग्धिता

1. प्रमाण पात्र दे सर बवा देखा। उद बवा देखा दे प्रमाण पृष्ठ काठवी।
2. प्राप्तिस्थली ह्ये दूरक पृष्ठ प्रमाण बल्के उठ। उद बवा देखा देखा पृष्ठ प्रमाणी दे।
3. पंजाबी पृष्ठी दिमी ही बवा दिमी बीड़ सा मक्का दे।
4. पेंटर मैट वत्तल दला मेल्कट करे उं प्रमाणी दी चिन्ह अंशों पंप दे पंप पंप प्रमाणी दिस वत मक्का दे।
BACHELOR OF VOCATION (B.VOC.)
WEB DESIGNING & DEVELOPMENT (IT) SEMESTER – I

PAPER-VII: प्रेक्षकी पृष्ठांक (In lieu of Compulsory Punjabi)

भाषा: 3 पेपर
मान: 50

पृष्ठ-वृत्त

मैथिली-ढंग

पृष्ठी समय, समय कूप, पृष्ठ हिन्दी दर्ज अव दर्ज हिंदी दर्ज अव अनुभूत (पृष्ठी सार-भाषा)
स्थापत्य (प्रश्री, टिप्पणी, अंश) : पृष्ठी अव दर्ज अव

मैथिली-सी

पृष्ठी समय-स्थल: पृष्ठी सार-भाषा
(सारांश समय, समय स्थल, समय स्थल, समय स्थल, समय स्थल, समय स्थल, समय स्थल)

मैथिली-भी

हिंदी दर्ज दी पृष्ठी समय-स्थल: घटाय, घटाय, विरुद्ध-ढंग, पृष्ठी अव उद्द यिस्टिंग आड़ि रात मैथिली।

मैथिली-ढी

उड़िंग दे मंड पिंड दे लं, लंच प्रत्येक दे हं, लंच दे लं, दिच दे मंड उद यिस्टिंग स्थल दिच भुग-बुग अव बहीस्टिंग लंड कृपया उड़िंग सार

1. पृष्ठी सार दे चल ज जा देंगी। उड़ डांग हिंदी दे पृष्ठी ढंड दर्ज की।
2. हिंदीअंबी दे लंच पृष्ठी सार चल देंगी। उड़ डांग हिंदी दे चल ज जा देंगी।
3. एंड सार पृष्ठी दे एंड सार देंगी।
4. दिच दे मंड दि चल सार चल दे ज जा देंगी की ढंड अव ढंड दे चल चल दिच-पृष्ठी दि चल फाट दे।
PAPER–VII: Punjab History & Culture (From Earliest Times to C 320)
(Special Paper in lieu of Punjabi Compulsory)
(For those students who are not domicile of Punjab)

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.

Section–C
5. Social, Religious and Economic life during Rig Vedic Age.

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

Suggested Readings:
 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:

Section – B

Consequences of Drug Abuse for:
- 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.
Paper-I: Programming Using Python

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
Introduction to Python: Process of Computational Problem Solving, Python Programming Language
Data and Expressions: Literals, Variables and Identifiers, Operators, Expressions, Statements and Data Types
Control Structures: Boolean Expressions (Conditions), Logical Operators, Selection Control, Nested conditions, Debugging

SECTION -B
Lists: List Structures, Lists (Sequences) in Python, Iterating Over Lists (Sequences) in Python
Functions: Fundamental Concepts, Program Routines, Flow of Execution, Parameters & Arguments
Iteration: While statement, Definite loops using For, Loop Patterns, Recursive Functions, Recursive Problem Solving, Iteration vs. Recursion

SECTION -C
Dictionaries: Dictionaries and Files, Looping and dictionaries, Advanced text parsing
Files: Opening Files, Using Text Files, String Processing, Exception Handling
Objects and Their Use: Introduction to Object Oriented Programming

SECTION -D
Modular Design: Modules, Top-Down Design, Python Modules
Using Databases and SQL: Database Concepts, SQLite Manager Firefox Add-on, SQL basic summary, Basic Data modeling, Programming with multiple tables

References:
1. Python for Informatics, Charles Severance, version 0.0.7
Paper-II: Web Designing (HTML, DHTML, CSS & JAVASCRIPT)

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

SECTION-B

SECTION-C
Introduction to CSS: Concept of CSS, Creating Style Sheet, CSS Properties, CSS Styling(Background, Text Format, Controlling Fonts), Working with block elements and objects, Working with Lists and Tables, CSS Id and Class, CSS Advanced(Grouping, Dimension, Display, Positioning, Floating, Align, Pseudo class, Navigation Bar, Image Sprites, Attribute sector) CSS Color, Creating page Layout and Site Designs.

SECTION-D
Introduction to JavaScript: JavaScript Variables, Data Types, Event Handlers, Functions, Loops, Decision Making, Form Validation.
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BACHELOR OF VOCATION (B.VOC.)
WEB DESIGNING & DEVELOPMENT (IT) SEMESTER – II

Paper-III: Minor Development-I

Time: 3 Hours  Max. Marks: 50

1. Student will submit a soft copy of implementation using Python in the concerned Department of the College.
2. Implementation will be evaluated by External Examiner appointed by Guru Nanak Dev University, Amritsar.
Paper-IV: Lab based on Programming using Python
(Practical)

Time: 3 Hours
Max. Marks: 75

Practical: Lab based on Python language.
BACHELOR OF VOCATION (B.VOC.)
WEB DESIGNING & DEVELOPMENT (IT) SEMESTER – II

Paper-V: Lab based on Web Designing
(HTML, DHTML, CSS & JAVASCRIPT)
(Practical)

Time: 3 Hours
Max. Marks: 75

- **Practical**: Lab based on Web Designing (HTML, DHTML, CSS & JAVASCRIPT)
BACHELOR OF VOCATION (B.VOC.)
WEB DESIGNING & DEVELOPMENT (IT) SEMESTER – II

PAPER–VI: 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.
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BACHELOR OF VOCATION (B.VOC.)
WEB DESIGNING & DEVELOPMENT (IT) SEMESTER – II

PAPER-VII: वेब डिजाइनिंग और विकास (बी. वी. के.)

भाग : 3 पृष्ठ

बहुत-बहुत अधि बहु-बहुमूड़वां

मैसूर-पे

आउट आउट (जागरण जाना).
(मेक. मूलिका शीत अधि विद्याभ किंव मंत्र)
तुम्हारे ताब्य टेंड पृथिवितक्षण, आंधुकमाद।
(विषम-प्रभु, वाज वित्तल)

मैसूर-ची

डिसिडियल जाना (डिसिडियल शेष-मंगल)
मैक. म.म.अलिया,
वेबक्षी महिलाम भूमि, भविष्यज्ञ। (हेतु 7 वे 12)
(माव, सघसत मेली)

मैसूर-मी

(१) मघन-घठन अधि मघन उदाहरण : परनिकाम, भूः लक्ष शीतलञ

(अ) मघन मूर्ति

मैसूर-ही

(२) मणिज्ञ उदाहरण

(अ) भुजाधृत अधि भाषाक

अंग-चौं अधि विलिविल क्षण उत्पन्निका

1. भूमि भूवल दे चाह भाजा टेंडजो। उत भाजा डिचैं दे भूमि भूवल लड़खो।
2. विलिविल अधि है बुध यौन भूमि चाहे उठ। उत भाजा डिचैं दित्र भूमि लहान डै।
3. उपलब भूमि दे वर्षाव भंग उठ।
4. पृथिवि मैं विल एवं विल सेवाए उं भूमि चौं डैंड अमो डै डैंड चतुर विल-भूमि डिच वत मजता डै।
PAPER-VII: ਪੰਜਾਬੀ ਪੰਜਾਬੀ
(In lieu of Compulsory Punjabi)

ਸਮੂਹ: 3 ਪ੍ਯੋਟੇ  
ਤੁਲ ਅਂਕ: 50

ਪ੍ਰਾਰਥਨਾ

ਮੈਸੂਰਦਿੱਚ

ਮਹਾਤਮਾ ਗੀਤੀੰਕਰ ਪ੍ਰਾਰਥਨਾ: ਪੰਜਾਬ ਅਂਦੇ ਦਰੰਦਰ
(ਕੰਡ, ਪੰਜਾਬੀ ਵਿਕਾਸ, ਵਿਦਿਆ, ਵਿਦਿਆਰਥੀ ਵਿਦਾਸ਼ਟ, ਮੰਜਿਲਾਂ, ਸੋਚਾਂ ਅਤੇ ਵਿਦਿਆਰਥੀ)

ਮੈਸੂਰਦਿੱਚ

ਪੰਜਾਬੀ ਦਾਤਾ ਪ੍ਰਾਰਥਨਾ: ਪੰਜਾਬੀ ਨਾਂ-ਪ੍ਰਾਰਥਨਾ
(ਹਾਂ) ਸਾਧਣਾ ਦਵਾਨ, ਸੈਲਬਡ ਦਵਾਨ ਅਤੇ ਵਿਦਿਆਰਥੀ ਦਵਾਨ (ਪੰਜਾਬ ਅਂਦੇ ਦਰੰਦਰ)
(ਸੂਰਤ) ਫ਼ੈਲਾਵੀ ਦਵਾਨ, ਪੰਜਾਬੀ ਦਵਾਨ ਅਤੇ ਗੁਜ਼ਾਰੀ ਦਵਾਨ (ਪੰਜਾਬ ਅਂਦੇ ਦਰੰਦਰ)

ਮੈਸੂਰਦਿੱਚ

ਪ੍ਰਥਮਤ ਰੂਪਾਂ
ਸਾਹਿਤ ਪੰਜਾਬੀ

ਮੈਸੂਰਦਿੱਚ

ਚੌਦੀ ਪ੍ਰਾਰਥਨਾ (ਪੰਜਾਬੀ ਅਂਦੇ ਦਰੰਦਰ)
ਆਧਾਰ ਅਤੇ ਮੁਹਾਦਰਾ

ਆਹਨ-ਹਨਦ ਅਤੇ ਪੰਜਾਬੀਆਂ ਸ਼ਟੀ ਉਪਗਿਣਾਂ

1. ਪੰਜਾਬ ਪ੍ਰਾਰਥਨਾ ਦਾ ਵਾਂਤ ਸਾਡਾ ਮੈਠੋ। ਉਹ ਕਾਨ ਹਿਚੇ ਦੇ ਪੰਜਾਬ ਹੁੱਂਦੇ ਸਾਰੇ।
2. ਵਿਦਿਆਰਥੀ ਦੇ ਤੁਣ੍ਹ ਪੰਜਾਬ ਮੁ਼ਨੂ ਸਰਦੇ ਉਥਾ। ਉਦ ਕਰਾ ਹਿਚੇ ਹਿਚ ਪੰਜਾਬ ਸਾਰੇ ਹੈ।
ਪੰਜਾਬ ਦੇ ਤੁਣ੍ਹ ਦੀ ਕਾਨ ਹਿਚੇ ਹੀ ਮੁਝੋ ਸਾ ਮੁਰਮਰਾ ਹੈ।
3. ਵੋਚੇਂ ਪੰਜਾਬ ਦੇ ਵਰਤਣ ਅਂਦੇ ਉਥਾ।
4. ਪੰਜਾਬ ਮੈਠ ਬਹਦ ਦਰਸਾਉ ਸਵਾਗਤ ਕਰੋ ਉਂ ਪੰਜਾਬ ਦੀ ਹੈਦ ਅਤੇ ਹੇਡ ਉੱ ਹੇਡ ਚਰ ਫ਼ੁਕ-ਪੰਜਾਬ ਹਿਚ ਵਾਂਤ ਮੁਰਮਰਾ ਹੈ।
BACHELOR OF VOCATION (B.VOC.)
WEB DESIGNING & DEVELOPMENT (IT) SEMESTER – II

PAPER–VII: Punjab History & Culture (C 320 to 1000 B.C.)
(Special Paper in lieu of Punjabi compulsory)
(For those students who are not domicile of Punjab)

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 7th 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 (3rd Edition)
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

References:

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 effect 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.

SECTION-B
E-Mail Basic Introduction, advantage and disadvantage, structure of an email message, working of e-mail (sending and receiving messages), managing email (creating new folder, deleting messages, forwarding messages, filtering messages, implementation of outlook express.

SECTION-C
Internet protocol Introduction, tile 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), web designing using FFTML, DTTML with programming techniques.

SECTION-D
Search engine: About search engine, component of search engine, working of search engine, difference between search engine and web directory.
Internet and extranet: Introduction, application of intranet, business value of intranet, working of intranet, role of extranet, working of extranet, difference between intranet and extranet.

References:
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**

Introduction to data, field, record, file, database, database management system. Structure of database system, Advantage and disadvantage, levels of database system, Relational model, hierarchical model, network model, comparison of these models, E–R diagram, different keys used in a relational system, SQL.

**SECTION-B**

DBA, responsibilities of DBA, Relational form like INF, 2NF, 3NF, BCNF, 4th NF, 5th NF, DBTG, concurrency control and its management, protection, security, recovery of database.

**SECTION-C**

SQL: Introduction to SQL–DDL, DML, DCL, Join methods & sub query, Union Intersection, Minus, Tree Walking, Built in Functions, Views, Security amongst users, Sequences, Indexing.

**SECTION-D**

PL/SQL: Cursors– Implicit & Explicit, Procedures, Functions & Packages Database Triggers.

**Big Data:** Introduction to Big Data and Analytics, Introduction to NoSQL

**References:**

1. Introduction to Database System By C.J. Date.
2. Database Management System By B.C. Desai.
3. Database Concept by Korth.
4. Simplified Approach to DBMS– Kalyani Publishers
7. Introduction to NoSQL (Ebook), NoSQL Seminar 2012 @ TUT, Arto Salminen
SECTION A
Concepts of vector graphics, Color palate, Pasteboard & Print Page.

SECTION B
Using ruler unit's etc... , Corel Tools (Pick, Shape, Knife, Eraser, Zoom, Freehand, Natural Pen, Dimensions, Ellipse, Polygon etc.).

SECTION C
Transformations, Trimming, Wielding, Intersection of Objects, Snapping,

SECTION D
Using Object Manager, Giving effects, (Envelope, Adding Perspective, Contours, and Blending Image)
Paper-IV: Personality Development

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
SELF ANALYSIS : SWOT Analysis, Who am I, Attributes, Importance of Self Confidence, Self Esteem.

SECTION- B
CREATIVITY: Out of box thinking, Lateral Thinking.
ATTITUDE: Factors influencing Attitude, Challenges and lessons from Attitude, Etiquette.

SECTION- C
MOTIVATION: Factors of motivation, Self talk, Intrinsic & Extrinsic Motivators.

SECTION- D
GOAL SETTING : Wish List, SMART Goals, Blue print for success, Short Term, Long Term, Life Time Goals. Time Management Value of time, Diagnosing Time Management, Weekly Planner to do list, Prioritizing work. Extempore

References:
1. SOFT SKILLS, 2015, Career Development Centre, Green Pearl Publications.
Paper-V: Principles of Management

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

SECTION-B

SECTION-C
DIRECTING: Creativity and Innovation - Motivation and Satisfaction - Motivation Theories - Leadership Styles - Leadership theories - Communication - Barriers to effective communication - Organization Culture - Elements and types of culture - Managing cultural diversity.

SECTION-D
CONTROLLING: Process of controlling - Types of control - Budgetary and non-budgetary control Q techniques - Managing Productivity - Cost Control - Purchase Control, Maintenance Control - Quality Control - Planning operations.

References:
2. Harold Koontz, Heinz Weihrich and Mark V Cannice, 'Management - A global
Paper-VI: Lab based on Internet & Networking
(Practical)

Time: 3 Hrs.                                Max. Marks: 75

Practical - Lab based on Internet & Networking.
Paper-VII: Lab based on Database Management System (Practical)

Time: 3 Hrs.                                      Max. Marks: 75

Practical - Lab of DBMS based on Microsoft SQL and PL/SQL.
BACHELOR OF VOCATION (B.VOC.)
WEB DESIGNING & DEVELOPMENT (IT) SEMESTER – IV

Paper-I: Core PHP and MySQL

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
Introduction to PHP: Intro to different kinds of Languages, Intro to PHP for Web Development, History, & Future Scope of PHP Advantage of PHP over JSP, Installation of Important tools for Working in PHP like WAMP, XAMPP.

Language Basics: Variables, Language Construct, Type Juggling, Deleting a Variable, Operators, Comment, echo, print, if-else, Loops (for, while), switch

Datatypes: What is Datatype, Types of Datatype, Type Casting, Garbage Value

SECTION- B
Arrays: What is an Array, Types of Array, print r(), foreach, Important Built-in functions of array, Multi-dimensional Arrays

Functions: What is a function?, Types of Function, return statement, How to call a function, Function without parameters, Function with parameters, Static Variable, Difference between Call By Value and Call By Reference, Important Built-in functions of array

SECTION- C
Working with Forms: What is a Form?, Important HTML Tags, Super-Global Variable, Different ways to carry form data (GET, POST), isset() isEmpty()

Regular Expression: What is Regular Expression?, Important Symbols used in regular expression with explanation, Validations

Session: What is a Session?, Creating a Session, Use of Session, Destroying a Session, Login/Logout

SECTION- D
My SQL: Uploading Multiple Files to MySQL, Retrieve Image or File from MySQL, Uploading Image or File to MySQL, Getting nth Value from Table, Getting Highest Value from Table, rename, rollback, commit, revoke, grant, drop, alter, truncate, select, update, delete, insert, Creating a Table, Creating a Database, Connecting PHP with MySQL, Different kinds of Datatypes used in MySQL, SQLInjection, database, Joins, Types of Joins.

References:
1. PHP and MySQL Web Development by Luke Weiling and Laura Thomson, Developer’s Library
2. Learning PHP and MySQL by Michele Davis, Jon Phillips
3. Learning PHP, MySQL & JavaScript by Robin Nixon, O'Reilly
SECTION-A

SECTION-B
Planning Your Web Site Layout, Preparing Your Layout, Managing Links, Changing and Moving Links, Making Sitewide Changes to a Link, Finding and Fixing Broken Links, Generating Site Reports, Synchronizing Local and Remote Sites, Basic Rules of Web Design, Using Text, In the Beginning - Understanding the HTML Font Tag, Applying Font Attributes to Selected Text, Creating Your Own HTML Styles, CSS vs. HTML Styles & The Limitations of HTML Styles

SECTION-C

SECTION-D
Using HTML Tables, Creating Tables in Layout View, Editing Tables in Layout View, Table Options, Cell Options, Formatting Tables, Aligning Table Columns, Importing External Table Data, Using Tables for Spacing and Alignment, Using Tables for Forms, Aligning a Navigation Bar Table, Merging and Splitting Table Cells, Aligning Cell Contents Vertically and Horizontally, Nesting Tables.
Paper-III: Minor Development-II (Practical)

Time: 3 Hours  Max. Marks: 50

1. Student will submit a soft copy of implementation using Core PHP and MySQL in the concerned Department of the College.
2. Implementation will be evaluated by External Examiner appointed by Guru Nanak Dev University, Amritsar.
BACHELOR OF VOCATION (B.VOC.)
WEB DESIGNING & DEVELOPMENT (IT) SEMESTER – IV

Paper-IV: Mental Ability and Reasoning

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
Mental Ability
Analogy, Classification, series, Coding-Decoding, blood relations, Direction Sense Test, Logical Venn diagrams, Alphabet Test, Sitting Arrangement,

SECTION -B
Mathematical Operations, Arithmetic Reasoning, Inserting the Missing Character, Number, Ranking, time and time sequence test, eligibility test

SECTION -C
Logical Reasoning
Syllogism, Statements and arguments, statements and assumptions, statement of course of action, statements and conclusion, deriving conclusions

SECTION -D
Assertion and reason, punch lines, situation reaction test, cause and effect, analytical reasoning.

References:
BACHELOR OF VOCATION (B.VOC.)
WEB DESIGNING & DEVELOPMENT (IT) SEMESTER – IV

Paper-V: Business Etiquettes & Interview Techniques

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
Overview: A Marketing Strategy, Self-Audit: Knowing the Product, Job Audit: Knowing the
Market, The Person/job fit
Self-Assessment Basics: Functional/transferable skills checklist, Major strengths identification
worksheet, Dimensions of occupational needs checklist, Professional goals, Selecting traits,
skills and abilities for emphasis

SECTION-B
Job Analysis: Position Requirements, Employment opportunities, Current employer-emphasized
job requirement, Other variables
Application Letter / Cover Letter: Types: solicited and unsolicited, Résumé/application letter
relationships, Organizational patterns, Criteria for content selection, Evidence and interpretation,
Writing/readability guidelines on style, Format considerations

SECTION-C
Follow-up Correspondence: Types and functions, Content, Organization
The Job Interview: Five stages, Types of interviews, Forms of interviews, Pre-Interview: what
employers look for, What applicants need to find out, Eight deadly sins of job interviews,
Negatives leading to rejection, Professional image guidelines, Ten most frequently asked
interview questions, Handling the “suicide question”, Handling illegal or inappropriate
questions, Elements of interview etiquette, Salary negotiations, Interview close, Post-Interview
debriefing

SECTION-D
On-line Searches: Employer databases, Electronic portfolios, Salary databases, Current research
among employers

References:
2. Resource: Barksdale, Karl and Michael Rutter, ONLINE RESUME AND JOB SEARCH,
BACHELOR OF VOCATION (B.VOC.)
WEB DESIGNING & DEVELOPMENT (IT) SEMESTER – IV

Paper-VI: Lab based on Core PHP and MySQL
(Practical)

Time: 3 Hours

Practical - Lab based on Core PHP and MySQL.
Paper-VII: Lab based on Desktop Publishing Tools-III (Adobe Dreamweaver)

Time: 3 Hours

Max. Marks: 75

Practical – Lab based on Desktop Publishing Tools-III (Adobe Dreamweaver)
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, 2019.

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-I 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-I 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$_{2.5}$ or PM$_{10}$) 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)
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

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

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
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:

2. Down to Earth, Centre for Science and Environment, New Delhi.
9. State of India’s Environment 2018 by Centre for Sciences and Environment, New Delhi