Bachelor of Vocation (B.Voc.)  
(Printing Technology) Semester System

Eligibility:
+2 pass in any stream

Scheme of Syllabus

Semester – I:

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Paper</th>
<th>M. Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper–I</td>
<td>Fundamentals of Printing Technology</td>
<td>50</td>
</tr>
<tr>
<td>Paper–II</td>
<td>Introduction to Information Technology</td>
<td>50</td>
</tr>
<tr>
<td>Paper–III</td>
<td>Web Technology</td>
<td>50</td>
</tr>
<tr>
<td>Paper–IV</td>
<td>Lab– I : Typing Skills</td>
<td>75</td>
</tr>
<tr>
<td>Paper–V</td>
<td>Lab–II: Office Automation Tools &amp; Web Technology</td>
<td>75</td>
</tr>
<tr>
<td>Paper–VI</td>
<td>Communication Skills in English – I</td>
<td>50</td>
</tr>
<tr>
<td>Paper–VII</td>
<td>Punjabi (Compulsory) / **ਪੰਜਾਬੀ ਪੰਜਾਬੀ / ** Punjab History &amp; Culture (From Earliest Times to C 320)</td>
<td>50</td>
</tr>
<tr>
<td>Paper–VIII</td>
<td>* Drug Abuse: Problem, Management and Prevention (Compulsory Paper)</td>
<td>50</td>
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Total: 400

Semester – II:

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Paper</th>
<th>M. Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper–I</td>
<td>Multimedia and its Applications</td>
<td>50</td>
</tr>
<tr>
<td>Paper–II</td>
<td>Printing Process &amp; Techniques</td>
<td>50</td>
</tr>
<tr>
<td>Paper–III</td>
<td>Lab–I: Corel Draw</td>
<td>50</td>
</tr>
<tr>
<td>Paper–IV</td>
<td>Lab II: Adobe PageMaker</td>
<td>75</td>
</tr>
<tr>
<td>Paper–V</td>
<td>Lab–III: Printing Process</td>
<td>75</td>
</tr>
<tr>
<td>Paper–VI</td>
<td>Communication Skills in English – II (Th. 35 + Pr. 15)</td>
<td>50</td>
</tr>
<tr>
<td>Paper–VII</td>
<td>Punjabi (Compulsory) / **ਪੰਜਾਬੀ ਪੰਜਾਬੀ / ** Punjab History &amp; Culture (C 320 TO 1000 B.C.)</td>
<td>50</td>
</tr>
<tr>
<td>Paper–VIII</td>
<td>* Drug Abuse: Problem, Management and Prevention (Compulsory Paper)</td>
<td>50</td>
</tr>
</tbody>
</table>

Total: 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)
Bachelor of Vocation (B.Voc.)
(Printing Technology) Semester System

Semester – III:

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Paper</th>
<th>M. Marks</th>
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<tbody>
<tr>
<td>Paper–I</td>
<td>Modern Trends in Printing</td>
<td>50</td>
</tr>
<tr>
<td>Paper–II</td>
<td>Planning &amp; Design for Printing</td>
<td>50</td>
</tr>
<tr>
<td>Paper–III</td>
<td>Tone &amp; Color Analysis</td>
<td>50</td>
</tr>
<tr>
<td>Paper–IV</td>
<td>Copyright &amp; Publishing Ethics</td>
<td>50</td>
</tr>
<tr>
<td>Paper–V</td>
<td>Lab–I: Microsoft Publisher</td>
<td>100</td>
</tr>
<tr>
<td>Paper–VI</td>
<td>Lab–II: Adobe Photoshop &amp; Illustrator</td>
<td>100</td>
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<td><strong>Total:</strong></td>
<td><strong>400</strong></td>
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Semester – IV:

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<tr>
<th>Paper No.</th>
<th>Paper</th>
<th>M. Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper–I</td>
<td>Screen Printing &amp; Gravure</td>
<td>50</td>
</tr>
<tr>
<td>Paper–II</td>
<td>Newspaper &amp; Periodical Publishing</td>
<td>50</td>
</tr>
<tr>
<td>Paper–III</td>
<td>Digital Pre–Press</td>
<td>50</td>
</tr>
<tr>
<td>Paper–IV</td>
<td>Data Communication and Networks</td>
<td>50</td>
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<tr>
<td>Paper–V</td>
<td>Lab–I: Screen printing and Offset Platemaking</td>
<td>100</td>
</tr>
<tr>
<td>Paper–VI</td>
<td>Lab–II: Adobe Indesign</td>
<td>100</td>
</tr>
<tr>
<td>Paper–VII</td>
<td>*Environmental Studies</td>
<td>100</td>
</tr>
<tr>
<td>(ESL-221)</td>
<td></td>
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</tr>
<tr>
<td></td>
<td><strong>Total:</strong></td>
<td><strong>400</strong></td>
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</tbody>
</table>

* Marks of Environmental Studies not included in Total Marks
Bachelor of Vocation (B.Voc.)  
(Printing Technology) Semester System

Semester – V:

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Paper</th>
<th>M. Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper–I</td>
<td>Digital Printing</td>
<td>50</td>
</tr>
<tr>
<td>Paper–II</td>
<td>Book Publishing</td>
<td>50</td>
</tr>
<tr>
<td>Paper–III</td>
<td>E– Publishing</td>
<td>50</td>
</tr>
<tr>
<td>Paper–IV</td>
<td>Lab I: Practical Based on Plotter Printing and Process</td>
<td>75</td>
</tr>
<tr>
<td>Paper–V</td>
<td>Lab II: Practical Based on Binding and Finishing</td>
<td>75</td>
</tr>
<tr>
<td>Paper–VI</td>
<td>Workshop</td>
<td>100</td>
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<td><strong>Total:</strong></td>
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Semester – VI:

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Paper</th>
<th>M. Marks</th>
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</thead>
<tbody>
<tr>
<td>Paper–I</td>
<td>Project Dissertation</td>
<td>400</td>
</tr>
<tr>
<td></td>
<td><strong>Total:</strong></td>
<td><strong>400</strong></td>
</tr>
</tbody>
</table>
Bachelor of Vocation (B.Voc.)
(Printing Technology) Semester – I

Paper–I: Fundamentals of Printing Technology

Time: 3 Hrs. Max. Marks: 50

Instructions for the Paper Setters:-
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section. The student can use only Non–programmable & Non–storage type calculator.

Section A
Concepts in Printing Technology:– Color Separation, Paper Selection and Quality and types of inks, Negative, Typography, Copy Fitting, Plate Making, Negative, Positive, Tracing Output, etc. 8 Hrs

Section B
Basic Operations in Printing: Pre press, press and post press operations. 5 Hrs
Color Separation: Concept, Need for Color Separation, RGB (Red, Green, Blue) Values CMYK (Cyan, Magenta, Yellow, Black) Values 4 Hrs

Section C
Impact And Non– Impact Printing Technologies: Perspective, Plotters, Wire Matrix Printers, other Impact printing technologies, Principles of electro photographic, magneto and ionographic printing, sublimation, thermal, inkjet 14 Hrs
Non Impact printing Technologies Variable data, Variable Graphic printing; Designing and generation of variable contents. 12 Hrs

Section D
Printing Machines and Quality Control: Construction and mechanism of printing, Troubleshooting and remedies, Quality consciousness, quality control devices, Quality control at different stages 12 Hrs
Running Defects: Common Printing faults, causes and their remedies. 5 Hrs

References:–
1. Printing Technology by Adams, Faux, Rieber
2. Introduction to Printing Technology by Hugh M. Speirs
Paper–II: Introduction to Information Technology

Time: 3 Hrs.  Max. Marks: 50

Instructions for the Paper Setters:
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section. The student can use only Non–programmable & Non–storage type calculator.

Section A
An Overview of Computer System:– Anatomy of a Digital computer, Memory Units, Main and Auxiliary Storage Devices, Input devices , Output Devices, Classification of computers, radix Number system: decimal, Binary, Octal, Hexadecimal Numbers and their inter– conversions; Representation of information inside the computers.

15 Hrs

Section B
Operating System Basics: The user interface, Running Programmes, Managing files, Introduction to PC Operating systems: LINUX/Unix, DOS, Windows XP.

12 Hrs

Section C
Internet Basics: Introduction to the basic concepts of Networks and Data Communications, How Internet works, Major Features of Internet, Emails, FTP, Using the internet.

14 Hrs

Section D
Display Devices: CRT Displays– Display adapter CGA, VGA SVGA– Resolutions (Application oriented Discussion)

9 Hrs


10 Hrs

References:
1. Computer Fundamentals by P.K.Sinha
2. Introduction to Computers by Peter Norton, McGraw Hill
Paper III: Web Technology

Time: 3 Hrs.  
Max. Marks: 50

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

The student can use only Non–programmable & Non–storage type calculator.

Section A

Introduction to Web Development
Webpage, Website, Static Website, Dynamic Website, Web Servers, Web Browsers

Introduction to HTML/DHTML

Section B

Introduction to JavaScript:

Section C

Introduction to Dreamweaver

Section D

Purchasing a Domain Name & Web Space
Domain Name & Web Space, Getting a Domain Name & Web Space (Purchase or Free), Uploading the Website to Remote Server.

Suggested Readings / Books:
1. Web Enabled Commercial Application Development HTML (Ivan Bayross)
4. The Essential Guide to Dreamweaver CS4 David Powers
Paper IV: Lab–I: Typing Skills

M.Marks: 75

- Typing in Punjabi, English
- Working With Different Punjabi Fonts & Styles
- Keyboarding techniques for letter Keys & special Keys
- Keyboarding Posture & Finger placement
- Typing skills using typing Tutor Software
- Word Processing: Presentation of documents, inserting a Table, Advanced Table Features, Graph and Data interpretation, Grammar and basic Vocabulary, Mail – Merge, creating Newsletters, Tri–fold brochures, letters, Formatted Text & Pictures.
Bachelor of Vocation (B.Voc.)
(Printing Technology) Semester – I

Paper V: Lab–II: Office Automation Tools & Web Technology

M.Marks: 75

Microsoft Office Word:
Introduction, text formatting, creating tables, page layout

Microsoft Office Excel:
Introduction, Formatting Process Using Formulas & Function, Charts, Datasets & Tables

Microsoft Office Power Point:
Introduction, Creating Presentation using templates, creating outlines, data imports, Presentation design using smart art & Word Art, inserting Images, Videos, audio, Creating Photo Album

Web Technology:
HTML, DHTML, Dreamweaver
PAPER–VI: COMMUNICATION SKILLS IN ENGLISH – I

Time: 3 Hours  Max. Marks: 50

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

The syllabus is divided in four sections as mentioned below:

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

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

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

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

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

Section–D
Resume, memo, notices etc.; outline and revision.

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

Recommended Books:
- *Oxford Guide to Effective Writing and Speaking* by John Seely.
- *English Grammar in Use* (Fourth Edition) by Raymond Murphy, CUP
Bachelor of Vocation (B.Voc.)
(Printing Technology) Semester – I

PAPER-VII: प्राक्तंबरी (प्राक्तंबरी)

पत्र-प्रूढ आउं पत्र-पृष्ठवां

मैवमङ-पै

काम अनुभव (वििता ज्ञान),
(मैं, मुखिया बीव अदि विश्व भव भाषा)
चौथा सार रेखा पृष्ठशिखरी, अभिप्रयास।
(पृष्ठा मात्र) (पृष्ठाः, मात्र)

मैवमङ-भी

दिविगत्व ज्ञान (किदिगत्व लघु-मूलगति)
मैं, मैं, मैं, मैं,
प्राक्तंबरी सार नव, अधिगता। (कैंड 1 ते 6)
(लिखि र हाँ, लिखि-सैली)

मैवमङ-मी

(५) पेड़ा उपजा

(ब) पेड़ा पद्ध बे पृष्ठा दे चूमा।

मैवमङ-झी

(५) प्राक्तंबरी धूती दिख़ित : चूमा भोज, चूँकर मात्र के दिख़ित, महत, दिख़ित, चूँकर-पृष्ठा।

(आ) दलमा दैवतिबांश : दलमा रा द्वारकाशी तुध, दलमा आउं दिख-भाग रा डेट, प्राक्तंबरी दैवतिबांश दे उपजा-दिख़ित।

अंग-संह आउं पत्रबिभाग चतुर उपस्थिता

1. पृष्ठा पृष्ठ दे चम प्रण तरीक। उत प्रण दिख़ित दे पृष्ठा पृष्ठे नाट्टो।
2. दिखिताउँके दे चूँक भूत पृष्ठा बढ़ते रह। उत प्रण दिख़ित दिख पृष्ठा समभी है।
3. उत्तर पृष्ठा दे निद्रा भेष रह।
4. देखिता मैंट बदल लक्ष्मी माध्यम चाहे उं पृष्ठा दी दिख भोज दें दें चाह दूँक-पृष्ठा दिख वह मात्रा हो।
PAPER-VII: भूमिका पताकें
(In lieu of Compulsory Punjabi)

भाषा : 3 पृष्ठ

तथ्य-मूल

मैवाल-डे

पेड़ी गढ़ी, अक्षर बूथ, पेड़ छिंदी देंके तत्त्व अदे पेड़ दिंक पेड़
देंके तत्त्व अदे भन्ने (मूलस्त्र तत्त्व-पहाड़)
सहायता (छिंदी, छिंदी, भाषा) : पदठ अदे इसे

मैवाल-शी

पन्नां मधुर-घटना : मूलस्त्र तत्त्व-पहाड़
(मधुर सत्तर, मधुर तत्तव, भियल सत्तर, भूमि सत्तर, भावोद अदे पियह्या)

मैवाल-मी

हिंदू तत्तव दी पन्नां मधुर-घटना : धारण, धारण, धारण-रुढ़ि, धारण अदे धारण पहिचां भानि तत्तव मधुर-घटना।

मैवाल-जी

उहुँ दे मंडु दिहन दे लग, घरुँ भाभियाँ दे लग, घुंड़ि दे लग, दिचँ दे मे उव विदेशी मधुर दिचँ

चंद-छंद अदे वहीधिवाल खाली उड़ाइहुँं

1. प्रश्न पंड़ूँ दे स्त्र ब्रजा देहुँ। उव ब्रजा दिहन दे प्रश्न पंड़ूँ देंते।
2. दिहिङ्गालपी हे हुँल प्रश्न प्रश्न बतते उठ। उव ब्रजा दिहन दिह प्रश्न हढ़मी है।
प्रश्न प्रश्न दिहे दी हजा दिहे बीड़ ना मधुर है।
3. उत्तर प्रश्न पंड़ूँ दे घड़पर अदे उठा।
4. देरह डैंट बरत दक्ष ने चरें उण प्रश्न पहिचँ दी देंद अदे घंट दे दें चान हिंदी-पुस्तक
हिचँ वह मधुर है।
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:
PAPER – VIII: DRUG ABUSE: PROBLEM, MANAGEMENT AND PREVENTION
(COMPULSORY PAPER)

PROBLEM OF DRUG ABUSE

Time: 3 Hours
Max. Marks: 50

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

Section – A

Meaning of Drug Abuse:

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:

Bachelor of Vocation (B.Voc.)
(Printing Technology) Semester – II

Paper I: Multimedia & Its Applications

Time: 3 Hrs. Max. Marks: 50

Instructions for the Paper Setters:
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.
The student can use only Non–programmable & Non–storage type calculator.

Section A
Multimedia: Introduction, Data and File Formats standards, Conversion of different media types, criteria for designing multimedia presentation.

Section B
Multi–Media Building Blocks: – Text, Graphics, Video capturing, sound capturing, editing.
Basic Design Principle: proximity, visual hierarchy, symmetry/asymmetry, repetition, unity, contrast, dynamics, emphasis.

Section C
Advertisement and Computers: Definition, Concepts, Types, Principles, Objectives, Concepts, Role of computers in advertisement, animation, applications of software’s like Photoshop, CorelDraw, quark–express etc.

Section D

References:
Paper II: Printing Process and Techniques

Time: 3 Hrs.  
Max. Marks: 50

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

The student can use only Non–programmable & Non–storage type calculator.

Section A

Printing Processes: Types of printing processes and their principles, suitability and limitations, Comparative study of all printing processes, Methods of surface preparation, layout, suitability and limitations.

10 hrs

Section B


Handling and storage of paper, printing surfaces, films, chemicals and other printing materials Systems and methods of storage. Precautions in handling, storage, use and care of various printing substrates, materials.

14 hrs

12 hrs

Section C

Pre–Press Techniques: Preparation of artwork and reproduction techniques such as continuous tone tc halftone , dot, screen angle and ruling, color theories, measurement of color, Image setter technology– types, working, principles, advantages, limitations and applications, Proofing techniques and devices.

14 hrs

Section D


10 hrs

References:

1. Operator’s Manual – GATF
4. FlexoPrimer– D. C. Mulvihill, GATF
Bachelor of Vocation (B.Voc.)
(Printing Technology) Semester – II

Paper III: Lab–I: Corel Draw

M.Marks: 50

- Customizing Desktop
- Drawing Rectangles, squares, ellipses, circles, curves
- Manipulating objects, arranging objects
- Draw & edit free hand curves
- Using Text, Bezier Curves, bitmap images
- Creating special objects
- Managing Layers & pages
- Importing & exporting objects
- Using Drawing & Painting tools, eyedropper & clone tools, Retouching tools
- Setting Print options & printing files
Paper IV: – Lab–II: Adobe PageMaker

M.Marks: 75

- Introduction to Page Maker Advantages, Using the Mouse, Components of the Page Maker Window
- Creating a new Document
- Introduction to Creating Frames, Threading and Unthreading Text. Threading additional Text, Threading Text to Different Page, Unthreading Text Blocks, Rethreading Text Blocks
- Introduction to Auto Flow, page maker Plug–Ins, Drop Cap, Change Case, Bullets and Numbering.
- Developing Long Documents
- Spellings: Correcting Misspelled Words, Correcting Duplicate Words, Adding Words to the different Dictionaries, Correcting Duplicate Words, using find Feature, Using the change Feature, using page Maker Help.
Identification of different tools & equipments used in letterpress.
Schematic diagram of different printing processer
Printing of line & half tone block in single & multi color
Schematic diagram of different letter process Printing machines
Study of Running & Printing faults on press machine
Multi color printing of Visiting cards
Multi color print of greeting cards
Multi color print of letter heads
Multi color print of certificates
Multi color print of invitations
Multi color print of Folders
Multi color print of Cover Pages
Multi color print of Photographs.
Different types of industrial standard Size.
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.
PAPER-VII: प्रश्नावली (खण्डभंजी)

पाठ-खण्ड अनुरूप पाठ-प्रमाण

मैत्रम-१

आवाद अवसर (वर्षी धारा).
(आध. मूलभूत धीर अते वितीभ नीति मंजूर)
गस्ता नामक टिंक पुस्तिकारमिती, अभिभाषक।
(विम-समस्त, पाठ चित्रहट)

मैत्रम-२

दिशितमत धारां (दिशितमत लेख-मंजूरी)
मैत्र. म.न.भारत,
पृष्ठविद् पुस्तकर, लघिवार। (लेख 7 दे 12)
(मव, तिथि शैली)

मैत्रम-३

(१) मध्य-पथांच अनुरूप मध्य मार्क : प्रविधान, भूपेन मेवलाप

(२) मध्य भूपेनी

मैत्रम-४

(३) भविष्य उदाहरण

(अ) पुस्तकाचे अनुरूप

अखंड-चौं अनुरूप प्रश्नावली हा उपलब्ध

1. पुस्तक पृष्ठ ने चाव बरा टेकलो। उत बरा दिहिंच दे पुस्तक पृष्ठ लक्ष लक्षेच।
2. दिशितमतांचे हे बऱ्या पृष्ठ पुस्तक लचले उठा। उत बरा दिहिंच दिव पुस्तक खण्डी ने पृष्ठभाग दिव पृष्ठ विमे दी पुस्तक दिव बऱ्या सा मत्स्य त्या।
3. उत्तर पुस्तक ने स्वतंत्र अनुरूप उठा।
4. पैलेट मॅंट बरा देखुक बेलच चाव उंच पुस्तक दी चौंच अनेक में उंच लंग चाव खुल-पृष्ठलं दिल्लू चाव मत्स्य त्या।
PAPER-VII: ਪੰਜਾਬੀ ਪੰਜਾਬੀ
(In lieu of Compulsory Punjabi)

ਸਮਾਨ: 3 ਪੇਟੇ

ਵਿਚਲ ਵੱਖ

ਵਿਚਲਦੇਵ

ਮਹਾਨ ਮੌਜੂਦਾ:
ਪ੍ਰਤਿਆਖਾ ਅਤੇ ਲ਼ਗਣਾ
(ਤਿਕ, ਪ੍ਰਤਿਆਖਾ, ਵਿਚਲਦੇਵ, ਵਿਚਲਦੇਵ, ਵਿਚਲਦੇਵ, ਵਿਚਲਦੇਵ, ਵਿਚਲਦੇਵ, ਵਿਚਲਦੇਵ)

ਵਿਚਲਦੇਵ

ਪੰਜਾਬੀ ਗਾਂਧੀਆਂ:
ਪੰਜਾਬੀ ਸਟਾਈਲ-ਪੰਜਾਬੀ
(ਗ੃ੱਢ ਸਟਾਈਲ ਦਵਾਰਾ, ਮੁੱਖ ਤੌਰ ਤੇ ਇਸ ਪੰਜਾਬੀ ਪੰਜਾਬੀਕਾ ਦਵਾਰਾ)
(ਕ) ਵਿਚਲਦੇਵ ਦਵਾਰਾ, ਪੁਰਾਤਨਾਂ ਦਵਾਰਾ ਅਤੇ ਪੰਜਾਬੀ ਦਵਾਰਾ (ਪੰਜਾਬੀ ਅਤੇ ਲ਼ਗਣਾ)
(ਅ) ਵੀਲੀਂਸਕੀ ਦਵਾਰਾ, ਪੁਰਾਤਨਾਂ ਦਵਾਰਾ ਅਤੇ ਪੰਜਾਬੀ ਦਵਾਰਾ (ਪੰਜਾਬੀ ਅਤੇ ਲ਼ਗਣਾ)

ਵਿਚਲਦੇਵ

ਪੇਸ਼ਤਾ ਤਕਨਾ
ਸੇਵਾ ਤਕਨਾ

ਵਿਚਲਦੇਵ

ਵਿਚਲਦੇਵ (ਪੰਜਾਬੀ ਅਤੇ ਲ਼ਗਣਾ)
ਅਧਾਰ ਅਤੇ ਮੁੱਢਲੇ

ੱਖੋਂੱਖੋਂ ਅਤੇ ਪੰਜਾਬੀ ਪੰਜਾਬੀਕਾ ਉਤਪਨਣਾਂ

1. ਪੰਜਾਬੀ ਪੰਜਾਬੀ ਦੇ ਦੁਆਰਾ ਦਵਾਰਾ ਤੇਲੋਂ। ਉੱਤਰ ਦਵਾਰਾ ਹਿ ਨਿਰੀਕਸ਼ ਦੇ ਪੰਜਾਬੀ ਪੰਜਾਬੀ ਦਵਾਰਾ।
2. ਹਿਊਡਰੇਜ਼ੀ ਦੇ ਦੁਆਰਾ ਪੰਜਾਬੀ ਪੰਜਾਬੀ ਦਵਾਰਾ। ਉੱਤਰ ਦਵਾਰਾ ਹਿ ਪੰਜਾਬੀ ਦਵਾਰਾ।
3. ਲਿੱਖੀ ਪੰਜਾਬੀ ਦੇ ਦੁਆਰਾ ਦਵਾਰਾ।
4. ਮੀਟ ਬਿਲੋਂ ਦੁਆਰਾ ਲਿਖਦਾ ਅਨੁਸਾਰ ਉੱਤਰ ਦੁਆਰਾ ਚਲਾ ਇਚਛਾ-ਪੰਜਾਬੀ ਦਵਾਰਾ।
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)
PAPER – VIII: DRUG ABUSE: PROBLEM, MANAGEMENT AND PREVENTION (COMPULSORY PAPER)

DRUG ABUSE: MANAGEMENT AND PREVENTION

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.

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:

Bachelor of Vocation (B.Voc.)
(Printing Technology) Semester – III

Paper I: Modern Trends in Printing

Time: 3 Hrs.  M. Marks: 50

Instructions for the Paper Setters:-
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.
The student can use only Non–Programmable & Non– storage type calculator.

Part A
Offset: Substrate selection for web offset printing, offset printability, and printing defects. Offset press components, printing units, principles of drying, impression rollers and blankets, automatic plate mounting systems for offset process.

Flexography: Configurations of a Flexo press, 12 hrs

Part B
Application of Flexo: Packaging & Label printing, Conventional & Digital Flexo plate– making, Distortion factors, Flexo printability, closed and open inking systems, functions and Benefits of closed inking systems. 12hrs

Part C
Impression Roller: Function, Elastomers, Properties of covering Materials, Nip width, Electrostatic Assist, Rubber Hardness & its Effects on print quality. 12hrs

Latest Trends: Facsmile Technology, Laser used in pre– press,

Part D
Contemporary Printing: UV printing, Engraving Technologies, Pneumatics & Hydraulics used in different printing processes
Press Environment Logistics: Handling Systems, waste Disposal, Exhaust air purification, cleaning systems pressure, climate requirements, machine maintenance and care. 12 hrs

References:
Bachelor of Vocation (B.Voc.)
(Printing Technology) Semester – III

Paper–II: Planning and Design for Printing

Time: 3 Hrs. M. Marks: 50

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

The student can use only Non–Programmable & Non–storage type calculator.

Part A
Introduction: Importance of a good design, Impact of a design on various target audience. Relationship between design and sale of a product, Graphic designer and his role, Elements and principles of design

Basic Design and letter Forms: Visual ingredients of graphic design, point, line, graphic space, shape, texture, color, scale, balance and contrast. 12 hrs

Part B
Use of Computers in Designing: Introduction to some designing software, Suitability of a design for printing technique and paper surface. Legibility and readability, Monograms and trademarks, Factors to be considered for preparation of a Design 12 hrs

Part C
Design Process: Methods of preparing a design in various stages. Design for books, Magazines, Newspapers, Catalogues, cartoons and commercial stationary. Materials and tools used in preparing layouts and artwork, Copy preparation. Casting– off and Marking up 12hrs

Part D

References:
1. Production Management by Martand T. Telsang, S. Chand Publication
2. Operator’s Manual – GATF
Bachelor of Vocation (B.Voc.)
(Printing Technology) Semester – III

Paper–III: Tone and Color Analysis

Time: 3 Hrs.  M. Marks: 50

Instructions for the Paper Setters:

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

The student can use only Non–Programmable & Non– storage type calculator.

Part A

CIE: Spectral reflectance – CIE color standard, standard observer, tristimulus values Munsell– Munsell Hue circle, CIELAB, CIELUV.

Memory Color: color management, Introduction, WYSWYG 14 hrs

Part B

Functions of color managements: color management module, color engine, functions of CMM, principle of color calibration.

Scanning: Introduction, basic elements of scanners, principles of electronic scanning, Basic of electronic scanning, pixels, binary resolution, AM, FM screening, digital halftones 14 hrs

Part C

Basic scanner types, pantone, focal tone, trumatch, special/spot color, application of special color, digital images, sampled images, bitmap, raster, vector graphics.

Types of Originals: The ideal transparencies, principles of separation, screen angles and juxtaposition of Dots, Direct, indirect methods 16 hrs

Part D

Color Manipulation: color separation, color correction, need for color correction, masking, integral color masking.

Color Printing: using standard inks, digital color separation, ink color sequence, brief intro to manual retouching, masking for color correction, types of masking, positive masking, negative masking, double overlay masking, integral color masking. 16hrs

References:

Paper–IV: Copyright and Publishing Ethics

Time: 3 Hrs.                                                                                                        M. Marks: 50

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

The student can use only Non–Programmable & Non–storage type calculator.

Part A
Copyright Basics: Copyright introduction, Copyright and National Origin of the Work, What Works Are Protected and What Is Not Protected by Copyright, How to Secure a Copyright, Publication, Notice of Copyright, Transfer of Copyright, International Copyright Protection, Copyright Registration procedures. 14hrs

Part B
The Publishing Value Chain: Publishing Across the Digital Landscape. Publishers’ Responsibilities in Negotiating Agreements, Managing Primary Rights, Grant of rights and specification, Commissioned works, Delivery and publication dates, Acceptability, Warranties and indemnities, Payments to authors and other creators, Other publisher issues, Concluding an agreement Managing Intellectual Property in the Book Publishing Industry. 14hrs

Part C
Managing Secondary and Third–Party Rights: Operating a secure permissions system, Text excerpts, Illustrations and web content, drawn artwork, Photographs, Fine art, Picture acknowledgements, Web content. 14 hrs

Part D
Business Models: Payment to Authors, Permissions and Subsidiary Rights i.e: Payment to Authors, Fee–based payment, Royalty payment, Permissions, Text material, Subsidiary Rights, Text extracts, Illustrations, Adaptations and exploitations. 14hrs

Reference:
Copyright Basics by Copyright United States Copyright office
Paper-V: Lab-I: Microsoft Publisher

- New Features for Microsoft Publisher
- Creating Your Own Publisher Projects
- Adding Borders to Publisher Projects
- Inserting Pictures into Publisher Projects
- Inserting Textboxes into Publisher Projects
- Inserting Tables into Publisher Projects
- Publishing Your Own Website
- Printing and Saving Your Microsoft Publisher
- Page Layout Tips
- Manipulating Graphics and Other Objects
- Sending E-Mail Publications
- Useful Keyboard Shortcuts for Microsoft Publisher
Introduction to Photoshop; Tools, Navigation, drawing tools, Layers, Selections Tools, Selection Manipulation, Basic Image Editing, Layer Blending Modes, Bringing Color into B&W images, Color to B&W, Quick Mask Mode, Intro to Masks, Type Tool, Auto Align tool, Filters, Smart Filters, Prepare Images for Web

Introduction to Adobe Illustrator, Basic shapes, manipulate shapes, export and illustration, Applying Basic color, stroke Options, Eyedropper tool, Working with drawing paths, working with Text, Layers, Fills and colors, Adjusting Typography, Animation tools, converting Raster images to Vector art, Print and Color specification
Bachelor of Vocation (B.Voc.)
(Printing Technology) Semester – IV

Paper–I: Screen Printing and Gravure

Time: 3 Hrs. M. Marks: 50

Instructions for the Paper Setters:-
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.
The student can use only Non–Programmable & Non– storage type calculator.

Part A


14hrs

Part B

Screen Printing Press: Screen Printing Automatic press. Choosing a printing process; Letter Press Lithography, photogravure; Screen printing collo type, How to build a screen process press dying equipment, constructing specialty equipment

14hrs

Part C


14hrs

Part D

Packaging Gravure Presses: Folding carton presses.

Flexible packaging presses, Label presses, product Gravure.

Stencil Gravure Presses: Process in stencil printing, Types of stencil Printing and Modern Types of Stencil Printing

14 hrs

References:
1. Printing Technology by Adams, Faux, Rieber
2. Screen Printing Preview by Babette Magee
3. Screen Printing by John Stephens
Paper-II: Newspaper and Periodical Publishing

Time: 3 Hrs.  M. Marks: 50

Instructions for the Paper Setters:-
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.
The student can use only Non–Programmable & Non–storage type calculator.

Part A


Part B

Basic Design: Achieving symmetry/ asymmetry, balance/off– balance, use of colour, placement of various elements in design. Attracting attention
Newspaper Layout & Designing:–Difference between design and layout,The various Kinds of layout Flow of stories into a newspaper office

Part C

Basic determinants of News: impact, unusual and prominent: Additional determinants of news; conflict, proximity, timeliness, currency, The various sources and copy for each page, Reporters, correspondents, agencies, syndicates, columnists, readers. Facsimile copy & photographs

Part D

Editorial Organization and Newspaper Publishing: Editorial content and news. The OP–ED Page, The Gatekeeping Function, Editorial and opinion columns, sports and photo production; editing Manuscript editing, creative and substantive editing, technical editing, editing conference proceeding, editing a successful journal

References:
1. News Reporting and Writing – Melvin Mecher
2. The Journalist; Handbook – M. V. Kamath
3. Editing; A Handbook for Journalists – TJS George
Time: 3 Hrs.                     M. Marks: 50

Instructions for the Paper Setters:-

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

The student can use only Non–Programmable & Non– storage type calculator.

Part A


Digital Screening Process: RT Screening, Super cells, irrational screening, output options

15 Hrs

Part B

Quality requirement – Input and Out put resolution Transferable tonal range – Dot shape tonal value influence in printing dot gain print characteristics curve.

Digital Photography: Origin, Image scanning with digital camera, Demands on the resolution special features – tone value quantization, focal length of lenses, aspect ratio, link up to a computer. Digital photography and color management.

15 hours

Part C

Digitalizing Originals: scanner design & models– scanner technology – Digitalizing & re-Digitalizing scanner operation and image processing sheet assembly and imposition – page make up & sheet assembly, full sheet output, full sheet production in the work flow, imposition through sheet work, imposition sheet & imposition layout

16 hours

Part D


14 hours

References:
Bachelor of Vocation (B.Voc.)
(Printing Technology) Semester – IV

Paper–IV: – Data Communication and Networks

Time: 3 Hrs. M. Marks: 50

Instructions for the Paper Setters:-
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.
The student can use only Non–Programmable & Non– storage type calculator.

Part A
Introduction: Data Communication, Networks, Internet & WWW, Intranet and Extranet, Basic Components of a Network, Network types and topologies, Uses of Computer Networks.

Transmission Media: Coaxial cable, twisted pair cable, fiber optics & satellites. 14 Hrs

Part B

Introduction to Analog and Digital Transmission: Telephone system, Modems, Types of modems, pulse code modulation. 14 Hrs

Part C
Multiplexing and Switching Elements: Multiplexing, FDM; STDM; i.e. Synchronous and Statistical Time Division Multiplexing, Switching and its various elements.

Network Security and Privacy: Brief Introduction to Cryptography, Firewalls 14 Hrs

Part D
Network Services: File transfer, Access & Management, Electronic Mail, Remote login

Malicious software and Internet Security: Viruses and related threats, virus Countermeasures, denial of service attacks, Introduction to Hacking, Security policies and plan, Strategies for a secure network 14 Hrs

References:
Study of various types of screen materials

Screen stretching techniques.

Operating of automatic machine

Study of various types of Screen Materials

Make ready for Screen Printing – Printing of Letterheads and Visiting Card.

Printing on various substrates – wood, leather, textile, acrylic, metal, paper & paper products, plastic

Screen printing on Irregular Surfaces – Bottles, Ceramics, Glass

Screen printing on printed circuit boards (PCB)

Screen Reclamation

Types of planning and layout preparation

Sheet work film assembly

Half sheet work film assembly

Planning for irregular images

Film assembly for color work

Study of exposing processing and punching systems

Exposure optimization and standardization

Repeatability tests on Printing down frame

Wipe–on plate processing and standardization
Introduction to Adobe InDesign; Tools, Navigator Panel, multimedia tools, Layers, Selection Tools, Different types of Selection Manipulation tools, Curves, Create a basic shapes, Blending Model and Auto contrast, using different types of plug-in/brushes, Mask Mode, Formatting, using manipulate shapes, import and export, making a different types of formats, Working with drawing path tool, Typography, Layers, using for different types of color pallets, RGB Mode, CMYK mode, using for raster/vector, manipulate the different types of layout and standards.
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-1 to Unit-VII. Each question carries 5 marks. Answer to each question should not exceed 2 pages.

Part-B, Essay type with inbuilt choice – 50 marks
Attempt any five questions out of eight distributed equally from Unit-1 to Unit-VII. Each question carries 10 marks. Answer to each question should not exceed 5 pages.

Project Report / Internal Assessment:

Part-C, Field work – 25 marks [Field work equal to 5 lecture hours]
The candidate will submit a hand written field work report showing photographs, sketches, observations, perspective of any topic related to Environment or Ecosystem. The exhaustive list for project report/area of study are given just for reference:

1. Visit to a local area to document environmental assets: River / Forest/ Grassland / Hill / Mountain / Water body / Pond / Lake / Solid Waste Disposal / Water Treatment Plant / Wastewater Treatment Facility etc.
2. Visit to a local polluted site – Urban / Rural / Industrial / Agricultural
3. Study of common plants, insects, birds
4. Study of tree in your areas with their botanical names and soil types
5. Study of birds and their nesting habits
6. Study of local pond in terms of wastewater inflow and water quality
7. Study of industrial units in your area. Name of industry, type of industry, Size (Large, Medium or small scale)
8. Study of common disease in the village and basic data from community health centre
9. Adopt any five young plants and photograph its growth
10. Analyze the Total dissolved solids of ground water samples in your area.
11. Study of Particulate Matter (PM2.5 or PM10) 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.
Bachelor of Vocation (B.Voc.)
(Printing Technology) Semester – IV

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)
Bachelor of Vocation (B.Voc.)
(Printing Technology) Semester – IV

Unit-V

Environmental Pollution:
Definition:
- Causes, effects and control measures of Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution, Nuclear pollution
- Solid waste management: Causes, effects and control measures of urban and industrial wastes.
- Role of an individual in prevention of pollution
- Pollution case studies
- Disaster management: floods, earthquake, cyclone and landslides (8 Lectures)

Unit-VI

Social Issues and the Environment
- From unsustainable to sustainable development
- Urban problems and related to energy
- Water conservation, rain water harvesting, watershed management
- Resettlement and rehabilitation of people; its problems and concerns. Case studies.
- Environmental ethics: Issues and possible solutions
- Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies.
- Wasteland reclamation
- Consumerism and waste products
- Environmental Protection Act, 1986
- Air (Prevention and Control of Pollution) Act, 1981
- Water (Prevention and control of Pollution) Act, 1974
- Wildlife Protection Act
- Forest Conservation Act
- Issues involved in enforcement of environmental legislation
- Public awareness (7 Lectures)

Unit-VII

Human Population and the Environment
- Population growth, variation among nations
- Population explosion – Family Welfare Programmes
- Environment and human health
- Human Rights
- Value Education
- HIV / AIDS
- Women and Child Welfare
- Role of Information Technology in Environment and Human Health
- Case Studies (6 Lectures)
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.
Bachelor of Vocation (B.Voc.)
(Printing Technology) Semester – V

Paper–I: Digital Printing

Time:3 Hrs. M. Marks: 50

Instructions for the Paper Setters:–

Note:
1. In theory eight questions are to be set in all. The candidates are required to attempt five of them. All questions are to be of equal marks.
2. The student can use only Non–Programmable & Non–storage type calculator.

Digital Printing: Introduction to digital printing fundamentals Pixel image, Digital image, Digitazation, half toning colour reproduction. color jumps, resolution and its qualities., Electrophotography, Ionography, Thermography, Electrography, Photography, X–graphy, Hybrid Printing systems. 16 hrs

AC Quiring: Scanning of different original, Selection of technology of programme. Transfer of digital photographs. 08 hrs

Documentations: Image file formats TIFF, EPS JPEG files text files and past discriptions languages. 08 hrs


References:
1. Demand Printing – Howard M. Fenten, Frank J. Romano
Time: 3 Hrs.  
M. Marks: 50

Instructions for the Paper Setters:

1. In theory eight questions are to be set in all. The candidates are required to attempt five of them. All questions are to be of equal marks.

2. The student can use only Non–Programmable & Non–storage type calculator.

Book Publishing: Definition and concept, parts of a book, basic steps in book publishing, areas of publishing—general publishing, educational publishing, professional publishing and reference publishing.  

Editorial Process and Development: copy, editing, Page makeup, Proofs, Discussion with the author, editing educational material, editorial techniques: stylesheet, reference aids, authors and his manuscripts, writing text books for children.

Publishing–House—the role of commissioning editor, the desk editor, the designer, the production manager, the sale/marketing manager, the publicity manager, the warehouse or distribution department.


References:
Instructions for the Paper Setters:–.

Note:

1. In theory eight questions are to be set in all. The candidates are required to attempt five of them. All questions are to be of equal marks.
2. The student can use only Non–Programmable & Non–storage type calculator.


Choosing a Publishing Program: Paperless magazines, The impact of electronic publishing on your career. Footloose wordsmiths. 04 hrs


Output on digital devices and printers, computer control system for digital work flow, Electronic Ink –display technology, working principle, impact on newspaper industry, Practical tools for writers. Reducing the hassless in OCR and scanning. 15 hrs

References:

3. Paperless Publishing by Colin Haynes McGraw–Hill, USA
4. Electronic Printing and Publishing by Michael B. Spring, Marcel Dek
Paper–IV: Lab I: Practical Based on Plotter Printing and Process

M. Marks: 75

- Plotter printing and process with print campaign using any Graphics Software (Corel Draw, Adobe Photoshop etc.) submit any seven assignments.
Paper–V: Lab II: Practical Based on Binding and Finishing

M. Marks: 75

Finishing Techniques and principles.
Adhesives for finishing and packaging.
Lamination techniques and UV curing.
Integrated machines for finishing, Knowing the tools, equipments and machines in department, knowing and handling the materials.

**Preparation of the following types of bindings:**
2. Full Bound Books.
3. Perfect Binding.
4. Loose–Leaf Binding.

**Preparation of:**
a) Saddle/side stitched Booklets.
b) Saddlegiat sewing of Booklets, magazines.
c) Receipt Book
d) Quarter Bound Note Book – flush sewing.

A/c books sewing on tapes. Binding of Half Bound A/c Book – constructive aspects through durability will be obtained. Binding of full bound, case bound, Publishers. Book emphasis will be given on decoration – Print finishing operation – Gold blocking, embossing, edge decoration, etc.

**Preparation of:**
a) Court case file,
b) Tag binder,
c) Portfolio,
d) Loose leaf book,
e) Cheque book
f) Perfect Bind binding
g) Preparing of old books.
Bachelor of Vocation (B.Voc.)
(Printing Technology) Semester – V

Paper–VI: – Workshop

M.Marks:100

Offset printing and Digital Printing
Raster Graphics and Vector Graphics, Principles of Graphics, Graphics Tool, Navigator Panel,
Colour Pallets, 3D printing
Basic photography, Shutter Angles, Shutter Speed and Page Layout Designing

Project:

- Catalogue Designing
- T–Shirt Designing by using Screen printing
- DVD Cover / Sticker Designing
- Logo designing using Plotter
- Pamphlets Designing and Printing
- Magazine/Book Title Designing
- Product Designing
- Indoor/Outdoor Poster designing
- Flexography designing and Printing
- Portfolio Designing and Printing
General Instructions:


The evaluation of the work shall be done by the following panel of examiners prior to the theory examination:

(a). Internal Examiner

(b). Head/ Head Nominee of coordinating department of the college for this UGC scheme

(c). External Examiner (to be appointed by the University)