

FACULTY OF ENGINEERING & TECHNOLOGY

**SYLLABUS FOR THE BATCH FROM
YEAR 2021 TO YEAR 2024**

FOR

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

EXAMINATION: 2021-22



**GURU NANAK DEV UNIVERSITY,
AMRITSAR.**

- Note:**
- (i) Copy rights are reserved.
Nobody is allowed to print it in any form.
Defaulters will be prosecuted.**

 - (ii) Subject to change in the syllabi at any time.
Please visit the University website time to time.**

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SCHEME
Semester-I:

Paper No.	Subjects	Theory	Practical	Total Marks
Skill Component				
Paper-I	Programming in C	50		50
Paper-II	Fundamentals of Information Technology	50		50
Paper-III	Lab Based on Desktop Publishing Tools-I (Adobe Photoshop (CS6))		50	50
Paper-IV	Lab Based on Programming in C		75	75
Paper-V	Lab Based on Fundamentals of Information Technology		75	75
General Education Component				
Paper-VI	Communication Skills in English – I (Compulsory Paper)	50	–	50
Paper-VII	Punjabi Compulsory (Compulsory Paper) OR ** ਮੁੱਢਲੀ ਪੰਜਾਬੀ OR ** Punjab History & Culture (From Earliest Times to C 320)	50	–	50
	Total	200	200	400

Semester-II

Paper No.	Subjects	Theory	Practical	Total Marks
Skill Component				
Paper-I	Programming using Python	50		50
Paper-II	Web Designing (HTML, DHTML, CSS & JAVASCRIPT)	50		50
Paper-III	Minor Development-I		50	50
Paper-IV	Lab Based on Programming using Python		75	75
Paper-V	Lab Based on Web designing (HTML, DHTML, CSS & JAVASCRIPT)		75	75
General Education Component				
Paper-VI	Communication Skills in English – II (Compulsory Paper)	35	15	50
Paper-VII	Punjabi Compulsory (Compulsory Paper) OR ** ਮੁੱਢਲੀ ਪੰਜਾਬੀ OR ** Punjab History & Culture (C 320 TO 1000 A.D.)	50	–	50
Paper-VIII	* Drug Abuse: Problem, Management and Prevention (Compulsory Paper)	100		100
	Total	200	200	400

***Special Note:**

- ਜਿਹੜੇ ਵਿਦਿਆਰਥੀ **Domicile/Non-Domicile of Punjab** ਹਨ ਅਤੇ ਉਨ੍ਹਾਂ ਨੇ ਅੱਠਵੀਂ/ਦਸਵੀਂ ਜਮਾਤ ਤੱਕ ਪੰਜਾਬੀ ਵਿਸ਼ਾ ਪੜ੍ਹਿਆ ਹੈ, ਉਹ ਵਿਦਿਆਰਥੀ ਪੰਜਾਬੀ (ਲਾਜ਼ਮੀ) ਪੜ੍ਹਨਗੇ।
- ਜਿਹੜੇ ਵਿਦਿਆਰਥੀ **Non-Domicile of Punjab** ਹਨ ਅਤੇ ਅੱਠਵੀਂ/ਦਸਵੀਂ ਜਮਾਤ ਤੱਕ ਪੰਜਾਬੀ ਵਿਸ਼ਾ ਨਹੀਂ ਪੜ੍ਹਿਆ ਹੈ, ਉਹ ਮੁੱਢਲੀ ਪੰਜਾਬੀ ਜਾਂ ਪੰਜਾਬ ਹਿਸਟਰੀ ਐਂਡ ਕਲਚਰ ਵਿੱਚੋਂ ਕੋਈ ਇੱਕ ਵਿਸ਼ਾ ਚੁਣ ਸਕਦੇ ਹਨ।
- ਜਿਹੜੇ ਵਿਦਿਆਰਥੀ **Domicile of Punjab** ਹਨ, ਪੰਤੂ ਕਿਸੇ ਕਾਰਣ ਪੰਜਾਬ ਤੋਂ ਬਾਹਰ ਪੜ੍ਹੇ ਹਨ ਅਤੇ ਉਨ੍ਹਾਂ ਨੇ ਅੱਠਵੀਂ/ਦਸਵੀਂ ਜਮਾਤ ਤੱਕ ਪੰਜਾਬੀ ਵਿਸ਼ਾ ਨਹੀਂ ਪੜ੍ਹਿਆ ਹੈ, ਉਹ ਮੁੱਢਲੀ ਪੰਜਾਬੀ ਦਾ ਹੀ ਵਿਸ਼ਾ ਪੜ੍ਹਣਗੇ।
- ਜਿਹੜੇ ਵਿਦਿਆਰਥੀ **Domicile of Punjab** ਹਨ ਅਤੇ ਪੰਜਾਬ ਦੇ ਕੇਂਦਰੀ ਵਿਦਿਆਲਿਆ ਜਾਂ ਕਿਸੇ ਹੋਰ ਸਕੂਲ ਵਿੱਚ ਪੜ੍ਹੇ ਹਨ ਅਤੇ ਕਿਸੇ ਕਾਰਣ ਉਨ੍ਹਾਂ ਨੇ ਅੱਠਵੀਂ/ਦਸਵੀਂ ਜਮਾਤ ਤੱਕ ਪੰਜਾਬੀ ਵਿਸ਼ਾ ਨਹੀਂ ਪੜ੍ਹਿਆ ਹੈ, ਉਹ ਮੁੱਢਲੀ ਪੰਜਾਬੀ ਦਾ ਵਿਸ਼ਾ ਹੀ ਪੜ੍ਹਣਗੇ।

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

Semester –III

Paper No.	Subjects	Theory	Practical	Total Marks
Skill Component				
Paper-I	Internet & Networking	50		50
Paper-II	Database Management System	50		50
Paper-III	Lab based on Desktop Publishing Tools-II (Corel Draw x3)		50	50
Paper-IV	Personality Development	50		50
Paper-V	Principles of Management	50		50
Paper-VI	Lab based on Internet & Networking		75	75
Paper-VII	Lab based on Database Management System		75	75
	Total:	200	200	400

Semester-IV

Paper No.	Subjects	Theory	Practical	Total Marks
Skill Component				
Paper-I	Core PHP and MySQL	50		50
Paper-II	Desktop Publishing Tools-III (Adobe Dreamweaver)	50		50
Paper-III	Minor Development-II		50	50
Paper-IV	Mental Ability & Reasoning	50		50
Paper-V	Business Etiquettes & Interview Techniques	50		50
Paper-VI	Lab based on Core PHP and MySQL		75	75
Paper-VII	Lab based on Desktop Publishing Tools-III (Adobe Dreamweaver)		75	75
General Education Component				
Paper-VIII	*ESL- 221 : Environmental Studies (Compulsory Paper)	100		
	Total:	200	200	400

***Marks of Paper EVS will not be included in Grand Total.**

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

Semester-V

Paper No.	Subjects	Theory	Practical	Total Marks
501	Word Press Framework	50		50
502	Web Technology using ASP.NET	50		50
503P	Lab based on Desktop Publishing Tools-IV (Adobe Flash, Front Page)		50	50
504	Cyber Forensics, Cyber Crimes, Cyber Security & Cyber Law	50		50
505	Human Rights and Value Education	50		50
501P	Lab based on Word Press Framework		75	75
502P	Lab based on Web Technology using ASP.NET		75	75
	Total	200	200	400

Semester –VI

Paper No.	Subjects	Total Marks
601P	Major Project (Industrial Training and Project Development in latest Web Technologies)	400
	Total	400

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

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

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

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".
4. Stephen G. Kochar: "C Programming".

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

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:

Role of an Operating System, Types of operating systems, Booting procedure and its types, Fundamentals and typical instructions of Windows & Non-Windows based Operating Systems.

SECTION–C

MS Word (Word for Windows):

Overview, creating, saving, opening, importing, exporting and inserting files, formatting pages, paragraphs and sections, indents and outdents, creating lists and numbering. Headings, styles, fonts and font size. Editing, positioning and viewing texts, Finding and replacing text, inserting page breaks, page numbers, book marks, symbols and dates. Using tabs and tables, header, footer and printing. Headers and Footers, Mail merge, macros, tables.

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

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:

1. Computer Fundamentals – P.K. Sinha.
2. Introduction to Computers – N. Subramanian.
3. Introduction to Computers – Peter Norton McGraw Hill.
4. MS–Office _ BPB Publications.
5. Windows Based Computer Courses Gurvinder Singh & Rachpal Singh, Kalyani Pub.

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

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 System) Batch from Year 2021 to Year 2024

SEMESTER-I
PAPER-IV: LAB BASED ON PROGRAMMING IN C
(PRACTICAL)

Time: 3 Hours

Max. Marks: 75

Practical – Lab based on C Language.

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-I

PAPER-V: LAB BASED ON FUNDAMENTALS OF INFORMATION TECHNOLOGY
(PRACTICAL)

Time: 3 Hours

Max. Marks: 75

Practical – Lab Based on Fundamentals of Information Technology.

**BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024**

**SEMESTER-I
PAPER–VI: COMMUNICATION SKILLS IN ENGLISH–I
(THEORY)**

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.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-I
PAPER-VII : ਪੰਜਾਬੀ (ਲਾਜ਼ਮੀ)

ਸਮਾਂ : 3 ਘੰਟੇ

ਕੁਲ ਅੰਕ : 50

ਅੰਕ-ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ

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

ਪਾਠ-ਕ੍ਰਮ ਅਤੇ ਪਾਠ-ਪੁਸਤਕਾਂ

ਸੈਕਸ਼ਨ-ਏ

ਸਰਵੋਤਮ ਪੰਜਾਬੀ ਸਾਹਿਤ (ਸੰਪਾ. ਡਾ. ਰਮਿੰਦਰ ਕੌਰ, ਡਾ. ਮੇਘਾ ਸਲਵਾਨ)
(ਕਵਿਤਾ ਅਤੇ ਕਹਾਣੀ ਭਾਗ)
(ਕਵਿਤਾ ਦੀ ਪ੍ਰਸੰਗ ਸਹਿਤ ਵਿਆਖਿਆ/ਸਾਰ) (ਕਹਾਣੀ ਦਾ ਵਿਸ਼ਾ-ਵਸਤੂ/ਸਾਰ)

ਸੈਕਸ਼ਨ-ਬੀ

ਇਤਿਹਾਸਕ ਯਾਦਾਂ
(ਜੀਵਨੀ 1 ਤੋਂ 6 ਤੱਕ)
ਵਿਸ਼ਾ-ਵਸਤੂ ਅਤੇ ਸਾਰ

ਸੈਕਸ਼ਨ-ਸੀ

(ੳ) ਪੈਰਾ ਰਚਨਾ
(ਅ) ਪੈਰਾ ਪੜ੍ਹ ਕੇ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਉੱਤਰ

ਸੈਕਸ਼ਨ-ਡੀ

ਭਾਸ਼ਾ ਵੰਨਗੀਆਂ :
ਭਾਸ਼ਾ ਦਾ ਟਕਸਾਲੀ ਰੂਪ, ਭਾਸ਼ਾ ਅਤੇ ਉਪਭਾਸ਼ਾ ਵਿਚਲਾ ਅੰਤਰ,
ਪੰਜਾਬੀ ਉਪਭਾਸ਼ਾਵਾਂ ਦੇ ਪਛਾਣ ਚਿੰਨ੍ਹ, ਪੰਜਾਬੀ ਭਾਸ਼ਾ - ਨਿਕਾਸ ਤੇ ਵਿਕਾਸ

ਸਹਾਇਕ ਪੁਸਤਕਾਂ

1. ਰਮਿੰਦਰਪਾਲ ਸਿੰਘ ਬਰਾੜ, ਪੰਜਾਬੀ ਕਵਿਤਾ ਦਾ ਇਤਿਹਾਸ, ਪੰਜਾਬੀ ਅਕਾਦਮੀ, ਦਿੱਲੀ।
2. ਬ੍ਰਹਮਜਗਦੀਸ਼ ਸਿੰਘ, ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਕਾਵਿ ਸਿਧਾਂਤ, ਇਤਿਹਾਸ ਅਤੇ ਪ੍ਰਵਿਰਤੀਆਂ, ਵਾਰਿਸ ਸ਼ਾਹ ਫਾਊਂਡੇਸ਼ਨ, ਅੰਮ੍ਰਿਤਸਰ।
3. ਬਲਦੇਵ ਸਿੰਘ ਧਾਲੀਵਾਲ, ਪੰਜਾਬੀ ਕਹਾਣੀ ਦਾ ਇਤਿਹਾਸ, ਪੰਜਾਬੀ ਅਕਾਦਮੀ, ਦਿੱਲੀ।
4. ਸਤਿੰਦਰ ਸਿੰਘ, ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਵਾਰਤਕ ਦਾ ਇਤਿਹਾਸ, ਪੰਜਾਬੀ ਅਕਾਦਮੀ, ਦਿੱਲੀ।
5. ਡਾ. ਰਮਿੰਦਰ ਕੌਰ, ਪੰਜਾਬੀ ਕਹਾਣੀ ਦਾ ਸਫ਼ਰ ਤੇ ਸ਼ਾਸਤਰ ਭਾਗ-1, ਸਿੰਘ ਬ੍ਰਦਰਜ਼, ਅੰਮ੍ਰਿਤਸਰ।
6. ਹਰਕੀਰਤ ਸਿੰਘ, ਭਾਸ਼ਾ ਤੇ ਭਾਸ਼ਾ ਵਿਗਿਆਨ, ਲਾਹੌਰ ਬੁੱਕ ਸ਼ਾਪ, ਲੁਧਿਆਣਾ।
7. ਹਰਕੀਰਤ ਸਿੰਘ ਤੇ ਗਿਆਨੀ ਲਾਲ ਸਿੰਘ, ਕਾਲਜ ਪੰਜਾਬੀ ਵਿਆਕਰਣ, ਪੰਜਾਬ ਯੂਨੀਵਰਸਿਟੀ, ਚੰਡੀਗੜ੍ਹ।
8. ਬੁਟਾ ਸਿੰਘ ਬਰਾੜ, ਪੰਜਾਬੀ ਵਿਆਕਰਣ : ਸਿਧਾਂਤ ਤੇ ਵਿਹਾਰ, ਚੇਤਨਾ ਪ੍ਰਕਾਸ਼ਨ, ਲੁਧਿਆਣਾ।
9. ਮਿੰਨੀ ਸਲਵਾਨ, ਪੰਜਾਬੀ ਵਿਆਕਰਣ : ਮੁੱਢਲੇ ਸੰਕਲਪ, ਰਵੀ ਸਾਹਿਤ ਪ੍ਰਕਾਸ਼ਨ, ਅੰਮ੍ਰਿਤਸਰ।
10. ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਬੋਧ, ਕਸਤੂਰੀ ਲਾਲ ਐਂਡ ਸੰਨਜ਼, ਅੰਮ੍ਰਿਤਸਰ।

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-I
PAPER-VII: ਮੁੱਢਲੀ ਪੰਜਾਬੀ
((In lieu of Compulsory Punjabi)
(For those students who are not domicile of Punjab)

ਸਮਾਂ : 3 ਘੰਟੇ

ਕੁਲ ਅੰਕ: 50

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

ਪਾਠ-ਕ੍ਰਮ
ਸੈਕਸ਼ਨ-ਏ

- ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਤੇ ਗੁਰਮੁਖੀ ਲਿਪੀ
- (ੳ) ਨਾਮਕਰਣ ਤੇ ਸੰਖੇਪ ਜਾਣ-ਪਛਾਣ : ਗੁਰਮੁਖੀ ਵਰਣਮਾਲਾ, ਅਖਰ ਕ੍ਰਮ, ਸਵਰ ਵਾਹਕ (ੳ ਅ ਏ), ਲਗਾਂ-ਮਾਤਰਾਂ, ਪੈਰ ਵਿਚ ਬਿੰਦੀ ਵਾਲੇ ਵਰਣ, ਪੈਰ ਵਿਚ ਪੈਣ ਵਾਲੇ ਵਰਣ, ਬਿੰਦੀ, ਟਿਪੀ, ਅਧਕ।
- (ਅ) ਸਿਖਲਾਈ ਤੇ ਅਭਿਆਸ

ਸੈਕਸ਼ਨ-ਬੀ

ਗੁਰਮੁਖੀ ਆਰਥੋਗ੍ਰਾਫੀ ਅਤੇ ਉਚਾਰਨ : ਸਵਰ, ਵਿਅੰਜਨ : ਮੁਢਲੀ ਜਾਣ-ਪਛਾਣ ਅਤੇ ਉਚਾਰਣ, ਮੁਹਾਰਨੀ, ਲਗਾਂ-ਮਾਤਰਾਂ ਦੀ ਪਛਾਣ।

ਸੈਕਸ਼ਨ-ਸੀ

ਪੰਜਾਬੀ ਸ਼ਬਦ ਜੋੜ : ਮੁਕਤਾ (ਦੋ ਅਖਰਾਂ ਵਾਲੇ ਸ਼ਬਦ, ਤਿੰਨ ਅਖਰਾਂ ਵਾਲੇ ਸ਼ਬਦ), ਸਿਹਾਰੀ ਵਾਲੇ ਸ਼ਬਦ, ਬਿਹਾਰੀ ਵਾਲੇ ਸ਼ਬਦ, ਔਕੜ ਵਾਲੇ ਸ਼ਬਦ, ਦੁਲੈਕੜ ਵਾਲੇ ਸ਼ਬਦ, ਲਾਂ ਵਾਲੇ ਸ਼ਬਦ, ਦੁਲਾਵਾਂ ਵਾਲੇ ਸ਼ਬਦ, ਹੋੜੇ ਵਾਲੇ ਸ਼ਬਦ, ਕਨੌੜੇ ਵਾਲੇ ਸ਼ਬਦ।

ਸੈਕਸ਼ਨ-ਡੀ

ਲਗਾਖਰ (ਬਿੰਦੀ, ਟਿਪੀ, ਅਧਕ ਵਾਲੇ ਸ਼ਬਦ)
ਸੁਧ, ਅਸੁਧ (ਪੈਰੇ ਵਿਚ ਲਿਖੇ ਅਸੁਧ ਸ਼ਬਦਾਂ ਨੂੰ ਸੁਧ ਕਰਨਾ)

ਸਹਾਇਕ ਪੁਸਤਕਾਂ

1. ਬ੍ਰਹਮਜਗਦੀਸ਼ ਸਿੰਘ, ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਅਤੇ ਗੁਰਮੁਖੀ ਲਿਪੀ, ਵਾਰਿਸ ਸ਼ਾਹ ਫਾਉਂਡੇਸ਼ਨ, ਅੰਮ੍ਰਿਤਸਰ।
2. ਪ੍ਰੋ. ਸ਼ੈਰੀ ਸਿੰਘ, ਪ੍ਰੋ. ਬ੍ਰਹਮਜਗਦੀਸ਼ ਸਿੰਘ, ਭਾਸ਼ਾ ਵਿਗਿਆਨ : ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਤੇ ਗੁਰਮੁਖੀ ਲਿਪੀ, ਵਾਰਿਸ ਸ਼ਾਹ ਫਾਉਂਡੇਸ਼ਨ, ਅੰਮ੍ਰਿਤਸਰ।
3. ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਬੋਧ, ਕਸਤੂਰੀ ਲਾਲ ਐਂਡ ਸੰਨਜ਼, ਅੰਮ੍ਰਿਤਸਰ।
4. ਮਿੰਨੀ ਸਲਵਾਨ, ਪੰਜਾਬੀ ਵਿਆਕਰਨ : ਮੁਢਲੇ ਸੰਕਲਪ, ਰਵੀ ਸਾਹਿਤ ਪ੍ਰਕਾਸ਼ਨ, ਅੰਮ੍ਰਿਤਸਰ।

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-I

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.
4. The Indo-Aryans: Original home and settlements in Punjab.

SECTION- C

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

SECTION- D

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

Suggested Readings

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

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-II
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

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

References:

1. Python for Informatics, Charles Severance, version 0.0.7
2. Introduction to Computer Science Using Python: A Computational Problem-Solving Focus, Charles Dierbach, Wiley Publications, 2012, ISBN: 978-0-470-91204-1
3. Introduction To Computation And Programming Using Python, GUTTAG JOHN V, PHI, 2014, ISBN-13: 978-8120348660

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-II

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

Introduction to HTML & DHTML: HTML Documents, Basic structure of an HTML document, Creating an HTML document, Mark up Tags, Heading-Paragraphs, Line Breaks, HTML Tags. Elements of HTML, Working with Text, Working with Lists, Tables and Frames, Working with Hyperlinks, Images and Multimedia, Working with Forms and controls.

SECTION-B

Introduction to DHTML: DHTML Overview, Dynamic Images, Image Rollovers, Slide Shows, Dueling DOMs, The Document Object Model, Creating the Core DHTML Library, The Custom Object Technique, Adding Methods to a Custom Object, Adding Secondary Methods and Properties & Active Element Object, Moving Elements on the Page, Moving in Geometric Shapes

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 selector) 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.

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

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.

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-II
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 System) Batch from Year 2021 to Year 2024

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 System) Batch from Year 2021 to Year 2024

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.

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-II
PAPER-VII: ਪੰਜਾਬੀ (ਲਾਜ਼ਮੀ)

ਸਮਾਂ : 3 ਘੰਟੇ

ਕੁਲ ਅੰਕ : 50

ਅੰਕ-ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ

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

ਪਾਠ-ਕ੍ਰਮ ਅਤੇ ਪਾਠ-ਪੁਸਤਕਾਂ

ਸੈਕਸ਼ਨ-ਏ

ਸਰਵੋਤਮ ਪੰਜਾਬੀ ਸਾਹਿਤ (ਸੰਪਾ. ਡਾ. ਰਮਿੰਦਰ ਕੌਰ, ਡਾ. ਮੇਘਾ ਸਲਵਾਨ)
(ਨਿਬੰਧ ਅਤੇ ਰੇਖਾ ਚਿੱਤਰ)
ਨਿਬੰਧ ਦਾ ਸਾਰ/ਵਿਸ਼ਾ-ਵਸਤੂ
ਰੇਖਾ ਚਿੱਤਰ ਦਾ ਨਾਇਕ ਬਿੰਬ/ਵਿਸ਼ਾ ਵਸਤੂ

ਸੈਕਸ਼ਨ-ਬੀ

ਇਤਿਹਾਸਕ ਯਾਦਾਂ
(ਜੀਵਨੀ 7 ਤੋਂ 12 ਤੱਕ)
ਵਿਸ਼ਾ-ਵਸਤੂ ਅਤੇ ਸਾਰ

ਸੈਕਸ਼ਨ-ਸੀ

(ੳ) ਸ਼ਬਦ ਬਣਤਰ ਅਤੇ ਸ਼ਬਦ ਰਚਨਾ, ਪਰਿਭਾਸ਼ਾ, ਮੁਢਲੇ ਸੰਕਲਪ
(ਅ) ਸ਼ਬਦ ਸ਼੍ਰੇਣੀਆਂ

ਸੈਕਸ਼ਨ-ਡੀ

ਦਫ਼ਤਰੀ ਚਿੱਠੀ ਪੱਤਰ
ਮੁਹਾਵਰੇ ਅਤੇ ਅਖਾਣ

ਸਹਾਇਕ ਪੁਸਤਕਾਂ

1. ਸਤਿੰਦਰ ਸਿੰਘ, ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਵਾਰਤਕ ਦਾ ਇਤਿਹਾਸ, ਪੰਜਾਬੀ ਅਕਾਦਮੀ, ਦਿੱਲੀ।
2. ਪ੍ਰੋ. ਪਿਆਰਾ ਸਿੰਘ, ਪੰਜਾਬੀ ਵਾਰਤਕ : ਸਿਧਾਂਤ ਇਤਿਹਾਸ ਪ੍ਰਵਿਰਤੀਆਂ, ਨਿਊ ਬੁੱਕ ਕੰਪਨੀ, ਜਲੰਧਰ।
3. ਇੰਦਰਪ੍ਰੀਤ ਸਿੰਘ ਧਾਮੀ, ਪੰਜਾਬੀ ਰੇਖਾ ਚਿੱਤਰ : ਰੂਪ ਤੇ ਪ੍ਰਕਾਰਜ, ਰਵੀ ਸਾਹਿਤ ਪ੍ਰਕਾਸ਼ਨ, ਅੰਮ੍ਰਿਤਸਰ।
4. ਬਲਬੀਰ ਸਿੰਘ ਦਿਲ, ਪੰਜਾਬੀ ਨਿਬੰਧ : ਸਰੂਪ, ਸਿਧਾਂਤ ਅਤੇ ਵਿਕਾਸ, ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ, ਪਟਿਆਲਾ।
5. ਹਰਕੀਰਤ ਸਿੰਘ ਤੇ ਗਿਆਨੀ ਲਾਲ ਸਿੰਘ, ਕਾਲਜ ਪੰਜਾਬੀ ਵਿਆਕਰਨ, ਪੰਜਾਬ ਯੂਨੀਵਰਸਿਟੀ, ਚੰਡੀਗੜ੍ਹ।
6. ਡਾ. ਅਮਰ ਕੋਮਲ (ਸੰਪਾ.), ਚੋਣਵੇਂ ਪੰਜਾਬੀ ਨਿਬੰਧ (ਭੂਮਿਕਾ), ਨੈਸ਼ਨਲ ਬੁੱਕ ਟਰਸਟ, ਇੰਡੀਆ।
7. ਅਬਨਾਸ ਕੌਰ, ਪੰਜਾਬੀ ਰੇਖਾ ਚਿੱਤਰ, ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ, ਪਟਿਆਲਾ।
8. ਮਿੰਨੀ ਸਲਵਾਨ, ਪੰਜਾਬੀ ਵਿਆਕਰਨ : ਮੁੱਢਲੇ ਸੰਕਲਪ, ਰਵੀ ਸਾਹਿਤ ਪ੍ਰਕਾਸ਼ਨ, ਅੰਮ੍ਰਿਤਸਰ।
9. ਬੂਟਾ ਸਿੰਘ ਬਰਾੜ, ਪੰਜਾਬੀ ਵਿਆਕਰਨ : ਸਿਧਾਂਤ ਤੇ ਵਿਹਾਰ, ਚੇਤਨਾ ਪ੍ਰਕਾਸ਼ਨ, ਲੁਧਿਆਣਾ।

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-II

PAPER-VII: ਮੁੱਢਲੀ ਪੰਜਾਬੀ

(In lieu of Compulsory Punjabi)

(For those students who are not domicile of Punjab)

ਸਮਾਂ: 3 ਘੰਟੇ

ਕੁਲ ਅੰਕ: 50

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

ਪਾਠ-ਕ੍ਰਮ

ਸੈਕਸ਼ਨ-ਏ

ਪੰਜਾਬੀ ਸ਼ਬਦ ਬਣਤਰ : ਧਾਤੂ, ਵਧੇਤਰ (ਅਗੇਤਰ, ਮਧੇਤਰ, ਪਿਛੇਤਰ), ਪੰਜਾਬੀ ਕੋਸ਼ਗਤ ਸ਼ਬਦ ਅਤੇ ਵਿਆਕਰਣਿਕ ਸ਼ਬਦ

ਸੈਕਸ਼ਨ-ਬੀ

(ੳ) ਸੰਯੁਕਤ ਸ਼ਬਦ, ਸਮਾਸੀ ਸ਼ਬਦ, ਦੇਜਾਤੀ ਸ਼ਬਦ, ਦੇਹਰੇ/ਦੁਹਰਕਤੀ ਸ਼ਬਦ ਅਤੇ ਮਿਸ਼ਰਤ ਸ਼ਬਦ

(ਅ) ਸਿਖਲਾਈ ਤੇ ਅਭਿਆਸ

ਸੈਕਸ਼ਨ-ਸੀ

ਇਕ-ਵਚਨ, ਬਹੁ-ਵਚਨ, ਲਿੰਗ-ਪੁਲਿੰਗ, ਬਹੁ-ਅਰਥਕ ਸ਼ਬਦ, ਸਮਾਨ-ਅਰਥਕ ਸ਼ਬਦ, ਬਹੁਤੇ ਸ਼ਬਦਾਂ ਲਈ ਇਕ ਸ਼ਬਦ, ਸ਼ਬਦ ਜੋੜ, ਵਿਰੋਧਆਰਥਕ ਸ਼ਬਦ।

ਸੈਕਸ਼ਨ-ਡੀ

ਨਿਤ ਵਰਤੋਂ ਦੀ ਪੰਜਾਬੀ ਸ਼ਬਦਾਵਲੀ : ਖਾਣ-ਪੀਣ, ਸਾਕਾਦਾਰੀ, ਰੁਤਾਂ, ਮਹੀਨਿਆਂ, ਗਿਣਤੀ, ਮੌਸਮ, ਮਾਰਕੀਟ/ਬਾਜ਼ਾਰ, ਵਪਾਰ, ਧੰਦਿਆਂ ਆਦਿ ਨਾਲ ਸੰਬੰਧਿਤ।

ਸਹਾਇਕ ਪੁਸਤਕਾਂ

1. ਜੋਤੀ ਸ਼ਰਮਾ, ਪੰਜਾਬੀ ਵਿਆਕਰਨ, ਵਾਰਿਸ ਸ਼ਾਹ ਫਾਉਂਡੇਸ਼ਨ, ਅੰਮ੍ਰਿਤਸਰ।
2. ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਬੋਧ, ਕਸਤੂਰੀ ਲਾਲ ਐਂਡ ਸੰਨਜ਼, ਅੰਮ੍ਰਿਤਸਰ।
3. ਮਿੰਨੀ ਸਲਵਾਨ, ਪੰਜਾਬੀ ਵਿਆਕਰਨ : ਮੁਢਲੇ ਸੰਕਲਪ, ਰਵੀ ਸਾਹਿਤ ਪ੍ਰਕਾਸ਼ਨ, ਅੰਮ੍ਰਿਤਸਰ।
4. ਰੰਜੂ ਬਾਲਾ, ਅਰਥ ਵਿਗਿਆਨ, ਆਰਸੀ ਪਬਲਿਸ਼ਰਜ਼, ਦਿਲੀ।

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-II

PAPER–VII: Punjab History & Culture (C 320 to 1000 A.D.)

(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)
2. L.M. Joshi and Fauja Singh (ed.), *History of Punjab* , Vol.I, Punjabi University, Patiala, 1977.
3. Budha Parkash, *Glimpses of Ancient Punjab*, Patiala, 1983.
4. B.N. Sharma: *Life in Northern India*, Delhi. 1966.

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-II

PAPER-VIII: DRUG ABUSE: PROBLEM, MANAGEMENT AND PREVENTION
(COMPULSORY PAPER)

Time: 3 Hours

Max. Marks: 100

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:

- 1) Meaning, Nature and Extent of Drug Abuse in India and Punjab.
- 2) Consequences of Drug Abuse for:
Individual : Education, Employment, Income.
Family : Violence.
Society : Crime.
Nation : Law and Order problem.

Section – B

Management of Drug Abuse:

- (i) Medical Management: Medication for treatment and to reduce withdrawal effects.
- (ii) Psychiatric Management: Counselling, Behavioural and Cognitive therapy.
- (iii) Social Management: Family, Group therapy and Environmental Intervention, Rehabilitation.

Section – C

Prevention of Drug abuse:

- (i) Role of family: Parent child relationship, Family support, Supervision, Shaping values, Active Scrutiny.
- (ii) School: Counselling, Teacher as role-model. Parent-teacher-Health Professional Coordination, Random testing on students.

Section – D

Controlling Drug Abuse:

- (i) Media: Restraint on advertisements of drugs, advertisements on bad effects of drugs, Publicity and media, Campaigns against drug abuse, Educational and awareness program
- (ii) Legislation: NDPs act, Statutory warnings, Policing of Borders, Checking Supply/Smuggling of Drugs, Strict enforcement of laws, Time bound trials.

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

References:

1. Ahuja, Ram (2003), *Social Problems in India*, Rawat Publication, Jaipur.
2. Extent, Pattern and Trend of Drug Use in India, Ministry of Social Justice and Empowerment, Government of India, 2004.
3. Inciardi, J.A. 1981. *The Drug Crime Connection*. Beverly Hills: Sage Publications.
4. Kapoor. T. (1985) *Drug epidemic among Indian Youth*, New Delhi: Mittal Pub.
5. Kessel, Neil and Henry Walton. 1982, *Alcoholism*. Harmond Worth: Penguin Books.
6. Modi, Ishwar and Modi, Shalini (1997) *Drugs: Addiction and Prevention*, Jaipur: Rawat Publication.
7. National Household Survey of Alcohol and Drug abuse. (2003) New Delhi, Clinical Epidemiological Unit, All India Institute of Medical Sciences, 2004.
8. Ross Coomber and Others. 2013, *Key Concept in Drugs and Society*. New Delhi: Sage Publications.
9. Sain, Bhim 1991, *Drug Addiction Alcoholism, Smoking obscenity* New Delhi: Mittal Publications.
10. Sandhu, Ranvinder Singh, 2009, *Drug Addiction in Punjab: A Sociological Study*. Amritsar: Guru Nanak Dev University.
11. Singh, Chandra Paul 2000. *Alcohol and Dependence among Industrial Workers*: Delhi: Shipra.
12. Sussman, S and Ames, S.L. (2008). *Drug Abuse: Concepts, Prevention and Cessation*, Cambridge University Press.
13. Verma, P.S. 2017, “*Punjab’s Drug Problem: Contours and Characteristics*”, Economic and Political Weekly, Vol. LII, No. 3, P.P. 40-43.
14. World Drug Report 2016, United Nations office of Drug and Crime.
15. World Drug Report 2017, United Nations office of Drug and Crime.

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-III

PAPER-I: INTERNET & NETWORKING

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 : 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:

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

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-III
PAPER-II: DATABASE MANAGEMENT SYSTEM

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 1NF, 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
5. Oracle – Developer – 2000 by Ivan Bayross.
6. Database System concepts & Oracle (SQL/PLSQ) – AP Publishers.
7. Introduction to NoSQL (Ebook), NoSQL Seminar 2012 @ TUT, Arto Salminen

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-III

PAPER-III: LAB BASED ON DESKTOP PUBLISHING TOOLS-II (COREL DRAW X3)
(PRACTICAL)

Time: 3 Hrs.

Max. Marks: 50

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, Welding, Intersection of Objects, Snapping,

SECTION–D

Using Object Manager, Giving effects, (Envelope, Adding Perspective, Contours, and Blending Image)

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-III

PAPER-IV: PERSONALITY DEVELOPMENT

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

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.
2. Covey Sean, Seven Habits of Highly Effective Teens, New York, Fireside Publishers, 1998.
3. Carnegie Dale, How to win Friends and Influence People, New York: Simon & Schuster, 1998

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-III

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

OVERVIEW OF MANAGEMENT: Definition - Management - Role of managers - Evolution of Management thought - Organization and the environmental factors – Trends and Challenges of Management in Global Scenario.

PLANNING: Nature and purpose of planning - Planning process - Types of plans – Objectives - - Managing by objective (MBO) Strategies - Types of strategies - Policies - Decision Making - Types of decision - Decision Making Process - Rational Decision Making

SECTION–B

ORGANIZING : Nature and purpose of organizing - Organization structure - Formal and informal groups Iorganization - Line and Staff authority - Departmentation - Span of control - Centralization and Decentralization - Delegation of authority - Staffing - Selection and Recruitment - Orientation - Career Development - Career stages – Training - - Performance Appraisal.

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.

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

References:

1. Hellriegel, Slocum & Jackson, 'Management - A Competency Based Approach', Thomson South Western, 10th edition, 2007.
2. Harold Koontz, Heinz Weihrich and Mark V Cannice, 'Management - A global

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-III

PAPER-VI: LAB BASED ON INTERNET & NETWORKING
(PRACTICAL)

Time: 3 Hrs.

Max. Marks: 75

Practical - Lab based on Internet & Networking.

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-III

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 System) Batch from Year 2021 to Year 2024

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, SQInjection , database, Joins, Types of Joins.

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

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
4. Beginning PHP and MySQL From Novice to Professional by W. Jason Gilmore, Apress.

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-IV

PAPER-II: DESKTOP PUBLISHING TOOLS-III (ADOBE DREAMWEAVER)

Time: 3 Hours

Max. Marks: 50

SECTION-A

Getting Acquainted with Dreamweaver - The Dreamweaver Interface ,The Document Window ,The Objects Panel , The Property Inspector ,The Launcher Bar, The Menu Bar , The Status Bar , Creating a Web Site , Creating a New Site , Defining a New Site , Making New Web Pages , Playing with Text Inserting Images , Creating Links, Internal and External Links ,Named Anchors , E-mail Address Links Loading Your Web Site Online.

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

Using Graphics, Adding Great Graphics, Understanding Web Graphics, Inserting Images into your Web Site , Aligning Images , Changing Text Wrapping for an Image , Setting a Background Image for your Web Page , Using a Clear GIF Image as a Spacer , Creating Image Maps.

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

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-IV
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 System) Batch from Year 2021 to Year 2024

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:

1. Aggarawal. R.K., A Modern Approach to Verbal and Non-Verbal Reasoning.

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

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

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

References:

1. Dahlstrom, Harry, THE JOB HUNTING HANDBOOK, Dahlstrom & Co. 2003.
2. Resource: Barksdale, Karl and Michael Rutter, ONLINE RESUME AND JOB SEARCH, South-Western Educational Publishing, 2000.

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-IV
PAPER-VI: LAB BASED ON CORE PHP AND MYSQL
(PRACTICAL)

Time: 3 Hours

Max. Marks: 75

Practical -Lab based on Core PHP and MySQL.

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-IV
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)

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-IV

PAPER VIII : ESL-221 : Environmental Studies (Compulsory Paper)

Time: 3 Hrs.

Max. Marks: 100

Teaching Methodologies

The Core Module Syllabus for Environmental Studies includes class room teaching and field work. The syllabus is divided into 8 Units [Unit-1 to Unit-VII] covering 45 lectures + 5 hours for field work [Unit-VIII]. The first 7 Units will cover 45 lectures which are class room based to enhance knowledge skills and attitude to environment. Unit-VIII comprises of 5 hours field work to be submitted by each candidate to the Teacher in-charge for evaluation latest by 15 December, 2021.

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.

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

11. Study of Particulate Matter (PM_{2.5} 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.

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)

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

Unit-IV

Biodiversity and its conservation

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

(8 Lectures)

Unit-V

Environmental Pollution

Definition

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

(8 Lectures)

Unit-VI

Social Issues and the Environment

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

(7 Lectures)

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

Unit-VII

Human Population and the Environment

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

(6 Lectures)

Unit-VIII

Field Work

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

(Field work equal to 5 lecture hours)

ADVISORY FOR PUSHPA GUJRAL SCIENCE CITY, KAPURTHALA :

The Under Graduate students studying Environmental Studies (Compulsory Paper for All UG College Courses) may be taken to Pushpa Gujral Science City, Kapurthala in lieu of Field study report of 25 marks.

Although students will submit a hand written reports with pictures/ graphs/ tables related to biodiversity, ecology, health, biotechnology, energy, water etc. in about 10 pages to the teacher in-charge.

Above advisory is issued to promote scientific temperament in undergraduate classes and is optional. Further, the report will only be considered if there will be a minimum strength of 25 students along with deputed teacher by the college.

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

References:

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

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-V

PAPER-501: WORD PRESS FRAMEWORK

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

Installing Word Press: Uploading Word Press to your web server, Installing Word Press, Database Connectivity, Theme Customization

SECTION-B

Configuring Word Press: Using the Word Press dashboard, Managing content in the Word Press dashboard, Types of users, The Word Press settings panel, Reading and writing settings, Permalinks and RSS feeds, Creating and managing posts, Setting up post categories, Creating and managing pages, Managing comments, Installing and updating plug-ins, Customizing Word Press themes, Word Press theme options

SECTION-C

Advanced Topics: Word Press Security / backup / domain transfers, Migration from Different Platforms, Optimization of Word Press Website

SECTION-D

Word Press SEO: On Page SEO, SEO Plug-in

References:

1. Professional Word Press (Wrox Programmer to Programmer) by Hal Stern, David Damstra and Brad Williams (Apr 5, 2010)
2. Word Press for Beginners: A Visual Step-by-Step Guide Dr. Andy Williams
3. Word Press All-in-One for Dummies: Lisa-Sabin-Wilson
4. Professional Word Press: Design and Development, Brad Williams, David Damstra, Hal Stern, Wrox Publications

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-V
PAPER-502: WEB TECHNOLOGY USING ASP.NET

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

Standard Controls: Display information, Accepting user input, Submitting form data, displaying images, using the panel control, using the hyperlink control.

Validation Controls: Using the required field validation control, using the range validation control using the compare validation control, using the regular expression validation control, using the custom validation control, using the validation summary controls.

SECTION-B

Rich Controls: Accepting file uploads, displaying a calendar, Displaying advertisement, displaying different page views, displaying a wizard.

Designing Website with Master Pages: Creating master pages, Modifying master page content, and Loading master page dynamically.

SECTION-C

SQL Data Source Control: Creating database connections, Executing database commands, Using ASP.NET parameters with the SQL data source controls, programmatically executing SQL data source commands, Caching database data with the SQL data Source controls.

List Controls: Dropdown list control, Radio button list controls, list box controls, bulleted list controls, custom list controls.

SECTION-D

Grid View Controls: Grid view control fundamentals, using field with the grid view control, working with grid view control events extending the grid view control.

Building Data Access Components with ADO.NET: Connected the data access, disconnected data access, Executing a synchronous database commands, Building data base objects with the .NET framework

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

References:

1. ASP.NET 3.5: Stephen Walther, Pearson Education, 2005.
2. Jeffery C Jackson, “Web Technology- A Computer Science Perspective”, Pearson Education, 2007.
3. Chris Bates, “Web Programming- Building Internet Applications”, Wiley India, 2006.
4. Achyut S Godbole and Atul Kahate, “Web Technologies”, Tata McGraw Hill

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-V
PAPER-503P: LAB BASED ON DESKTOP PUBLISHING TOOLS-IV
(ADOBE FLASH, FRONT PAGE)

Time: 3 Hours

Max. Marks: 50

SECTION-A

Introduction to Flash, Getting Started, Working with Graphics, Creating and Editing Symbols, Creating and Managing Content

SECTION-B

Managing Website Content, The Timeline, Motion Presets, Animation Techniques, Action Script & Behaviors, Using sound and video.

SECTION-C

Front Page:

Introduction to Front page: FrontPage window, various toolbar of FrontPage, Creating a web page using wizard, creating a web page using template.

Themes: Creating your own theme, selecting a color scheme, selecting graphics, selecting text.

SECTION-D

Forms: Creating form using wizard, adding text boxes, adding radio buttons, adding check box, adding drop-down menus, adding pushbutton & pictures.

Web page designing: Adding shared borders to the page, Giving title to a page, selecting a background for page, adding text to page, Hyperlink, Turing text to heading, adding picture to the page, adding a clipart, adding navigation bars, Publishing your web page, making your web page searchable.

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

REFERENCES:-

1. Adobe Flash Professional CS6 Classroom in a Book: Paperback Edition, Adobe Press, Pearson
2. Adobe Flash Professional CS5 Digital Classroom, Wiley Publisher, FIRST Edition, AGI Creative Team
3. Special Edition using Microsoft Office FrontPage 2003: FIRST Edition, Jim Cheshire, Paul Colligan, Que Publishing.
4. Microsoft Office FrontPage 2003 Inside Out: Jim Buyens, Microsoft Press Publisher

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-V

PAPER-504: CYBER FORENSICS, CYBER CRIMES, CYBER SECURITY & CYBER LAW

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

Computer and Cyber Forensic Basics- Introduction to Computers, Computer History, Software, Hardware, Classification, Computer Input-Output Devices, Basic Computer Terminology, Internet, Networking, Computer Storage, Cell Phone / Mobile Forensics, Computer Ethics and Application Programs, Cyber Forensic Basics- Introduction to Cyber Forensics, Storage Fundamentals, File System Concepts, Data Recovery, Operating System Software and Basic Terminology

Data and Evidence Recovery- Introduction to Deleted File Recovery, Formatted Partition Recovery, Data Recovery Tools, Data Recovery Procedures and Ethics, Preserve and safely handle original media, Document a “Chain of Custody”, Complete time line analysis of computer files based on file creation, file modification and file access, Recover Internet Usage Data, Recover Swap Files/Temporary Files/Cache Files, Introduction to Encase Forensic Edition, Forensic Tool Kit (FTK) etc, Use computer forensics software tools to cross validate findings in computer evidence-related cases.

SECTION- B

Cyber Crimes and Cyber Laws- Introduction to IT laws & Cyber Crimes – Internet, Hacking, Cracking, Viruses, Virus Attacks, Pornography, Software Piracy, Intellectual property, Legal System of Information Technology, Social Engineering, Mail Bombs, Bug Exploits, and Cyber Security etc.

SECTION-C

Cyber Forensics Investigation- Introduction to Cyber Forensic Investigation, Investigation Tools, Discovery, Digital Evidence Collection, Evidence Preservation, E-Mail Investigation, E-Mail Tracking, IP Tracking, E-Mail Recovery, Encryption and Decryption methods, Search and Seizure of Computers, Recovering deleted evidences, Password Cracking

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SECTION-D

Cyber Security- Introduction to Cyber Security, Implementing Hardware Based Security, Software Based Firewalls, Security Standards, Assessing Threat Levels, Forming an Incident Response Team, Reporting Cyber crime, Operating System Attacks, Application Attacks, Reverse Engineering & Cracking Techniques and Financial Fraud.

References:

1. Cyber Law & Cyber Crimes By Advocat Prashant Mali; Snow White publications, Mumbai
2. Cyber Law in India by Farooq Ahmad; Pioneer Books
3. Information Technology Law and Practice by Vakul Sharma; Universal Law Publishing Co. Pvt. Ltd.
4. The Indian Cyber Law by Suresh T. Vishwanathan; Bharat Law House New Delhi 5. Guide to Cyber and E – Commerce Laws by P.M. Bukshi and R.K. Suri; Bharat Law House, New Delhi

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-V

PAPER-505: HUMAN RIGHTS AND VALUE EDUCATION

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

Concept of Human Values, Value Education Towards Personal Development: Aim of education and value education; Evolution of value oriented education; Concept of Human values; types of values; Components of value education.

Personal Development: Self analysis and introspection; sensitization towards gender equality, physically challenged, intellectually challenged. Respect to - age, experience, maturity, family members, neighbors, co-workers. Character Formation towards Positive Personality: Truthfulness, Constructivism, Sacrifice, Sincerity, Self Control, Altruism, Tolerance, Scientific Vision.

SECTION-B

Impact of Global Development on Ethics and Values: Conflict of cross-cultural influences, mass media, cross-border education, materialistic values, professional challenges and compromise. Modern Challenges of Adolescent Emotions and behavior; Sex and spirituality: Comparison and competition; positive and negative thoughts.

SECTION-C

Therapeutic Measures : Control of the mind through

- a) Simplified physical exercise
- b) Meditation – Objectives, types, effect on body, mind and soul
- c) Yoga – Objectives, Types, Asana
- d) **Activities:**
 - (i) Moralization of Desires
 - (ii) Neutralization of Anger
 - (iii) Eradication of Worries
 - (iv) Benefits of Blessings

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SECTION-D

Human Rights 1: Concept of Human Rights – Indian and International Perspectives a. Evolution of Human Rights b. Definitions under Indian and International documents 2. Broad classification of Human Rights and Relevant Constitutional Provisions a. Right to Life, Liberty and Dignity b. Right to Equality c. Right against Exploitation d. Cultural and Educational Rights e. Economic Rights f. Political Rights g. Social Rights

Human Rights of Women and Children a. Social Practice and Constitutional Safeguards (i) Female Feticide and Infanticide (ii) Physical assault and harassment (iii) Domestic violence (iv) conditions of Working Women 4. Institutions for Implementation a. Human Rights Commission b. Judiciary 5. Violations and Redressal a. Violation by State b. Violation by Individuals c. Nuclear Weapons and terrorism d. Safeguards.

References:

1. Bajaj, M. (2012). Schooling for Social Change: The Rise and Impact of Human Rights Education in India. New York: Bloomsbury
2. Value Education and Education for Human Rights: Hardcover Edition by V.C Pandey, Isha Books Publisher
3. Human Rights and Value Education: Dr. Inder Dev Singh Nandra, Edition 2017, Twenty First Century Publications (Bookman).
4. Value Education and Human Rights: R.P Shukla, Sarup Book Publishers (2004)

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-V
PAPER-501P: LAB BASED ON WORD PRESS FRAMEWORK
(PRACTICAL)

Time: 3 Hours

Max. Marks: 75

Practical -Lab based on Word Press Framework.

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-V
PAPER-502P: LAB BASED ON WEB TECHNOLOGY USING ASP.NET
(PRACTICAL)

Time: 3 Hours

Max. Marks: 75

Practical – Lab based on ASP.NET.

BACHELOR OF VOCATION (B.VOC.) WEB DESIGNING & DEVELOPMENT (IT)
(Semester System) Batch from Year 2021 to Year 2024

SEMESTER-VI
PAPER- 601P: MAJOR PROJECT

(Industrial Training and Project Development In Latest Web Technologies)

Time: 3 Hours

Max. Marks: 400

General Instructions:

1. Candidates have to submit only one hard copy and CD of documentation which shall be kept with the course supervisor/guide in the college only. Further, supervisor/guide OR Principal of college shall forward two copies of DVD (Digital Versatile Disk) containing all the documentation files of the students (file name to be saved as Rollno_of_the_student.pdf) to the concerned branch of the University. Covering letter (duly signed by the principal/Head of the college/institute) should contain the following information. Candidate name, Candidate Roll no, Project Title of the student and .pdf file name of his project documentation.
2. The assignment shall be evaluated by a board of three examiner (two (02) External examiners and one (01) internal examiner) as approved by the BOS.