

Basic Principles and Web Designing (Sem - I)
INTRODUCTION TO SCRIPTING LANGUAGE

Subject Code: UCMWDE1004

MCQs: 2, 500

Date of Examination: 09.12.2023

Time: 3 Hrs.

Max. Marks: 40

INSTRUCTIONS TO CANDIDATES

1. The paper is divided into two parts: Part A (MCQs) and Part B (Short Answer Questions). Each part carries 20 marks.
2. Part B contains 48 questions and is divided into two sections: Section I (12 questions) and Section II (36 questions). You have to attempt any FOUR questions.

SECTION - A**1. Answer briefly :**

- a) What is the primary function of the World Wide Web (WWW)?
- b) Distinguish between HTML element and HTML attribute.
- c) State the importance of semantic HTML tags in modern web development.
- d) How do you create internal links within a single web page using HTML?
- e) Define the purpose of the <iframe> tag in HTML and provide an example of its usage.
- f) Name three commonly used multimedia formats for presenting audio and video content on web pages.
- g) What is the role of Cascading Style Sheets (CSS) in web page styling?
- h) Describe the concept of responsive web design and the use of CSS media queries to achieve it.
- i) What is the significance of web page navigation menus and provide examples of different navigation menu styles.
- j) How can HTML forms be employed to gather user input and what are some typical input field types used in forms?

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SECTION - B

1. Discuss the importance of Cascading Style Sheets (CSS) in web development. Explain how CSS styling is used to control the appearance of HTML elements?
2. Describe the concept of the HTML box model. How does it influence the layout and design of web pages? Provide an example to illustrate the box model.
3. Explain the role of HTML tags in page layout and navigation. Discuss how headings, lists and links can be used to improve the structure and usability of a website?
4. Compare and contrast the use of HTML tables and CSS for page layout. When is it appropriate to use each method and what are the advantages and disadvantages of each?
5. How can graphics and images enhance the visual appeal of a website? Discuss best practices for optimizing and including images in web pages.
6. Describe the purpose and benefits of using image maps in web design. Provide an example of how image maps can be implemented to create interactive regions on a webpage?

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Total No. of Questions : 05

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Total No. of Pages: 01

B.Voc.(Beauty Therapy and Aesthetics)/BA(J&MC)/BBA/BBA(SIM)/
B.Com. Hons./BCA/BHMCT/B.Sc.(Honours)/B.Sc.(Nutrition & Dietetics)/
B.Sc.(AI&ML)/B.Sc. Biotechnology/B.Sc.(FD)/B.Sc.(Graphics & Web
Designing) B.Sc.(IT)/B.Sc.(MLS)/BTTM
(Sem.- 1)

ENGLISH

Subject Code : BTHU103-18

M.Code : 75085

Date of Examination: 01-01-2024

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. All questions are **COMPULSORY**.
2. Q1, Q2 and Q3 carry **TEN** marks each.
3. Q4 and Q5 carry **FIFTEEN** marks each.

- Read the following passage carefully and answer the questions that follow :

Certain people consciously or unconsciously cherish the desire that some part of their work and of their accomplishment will outlive their own individual life. The influence which they have exercised on the world in which they lived, the concern which they have left up, the books which they have written, the work they have laid as a part of some scientific edifice, whose completion they themselves will not live to see all such things inspire the people that some aspect of themselves will outlast their own personal existence, the artist bequeaths his pictures, the scholar his contribution of knowledge while poets and composers are primarily concerned that posterity shall take pleasure in their creations. Statesmen envisage that particular agreement in whose development they themselves had played a crucial part will preserve their names for future generations. Few are not unconcerned for their posthumous reputation. An old person is distinctly preoccupied with this question and keeps a zealous watch to ensure that his achievement is properly quoted and recorded.

1. What do certain people cherish about?
2. What does a statesman envisage?
3. What do old people do?
4. Use "effice" and "bequeaths" in your own sentences.
5. Give a main idea of the passage.
6. Write a letter to your friend about how to prevent youth from addiction to drugs. Discuss specifically what steps the society can take.
7. Draft a report on environmental pollution and how can we save the environment.

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Total No. of Questions : 07

B.Sc. (H)/ Graphics & Web Designing /BCA (Sem. I)

MATHEMATICS

Subject Code : UGCA1901

M Code : 76961

Date of Examination : 20-12-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1. Attempt the following :

- a) Define Disjoint Set.
- b) If $A = \{1, 2\}$ & $B = \{2, 5\}$, find $A \cup B$.
- c) Define Power set.
- d) Write the negative statement of "Sun rises from east."
- e) Write the truth table for Conjunction.
- f) Define Square Matrix.
- g) If $X = \begin{bmatrix} 2 & 3 \\ -1 & 4 \end{bmatrix}$ & $Y = \begin{bmatrix} 1 & 0 \\ -2 & 3 \end{bmatrix}$, then find $X + Y$.
- h) If $A = \begin{bmatrix} -1 & 2 \\ -3 & 4 \end{bmatrix}$, Find the transpose of A .
- i) Find the fourth term in the sequence 4, 9, 14, Of A.P.
- j) Define Geometric mean.

SECTION - B

2. If $E = \{1, 3, 4, 5, 6, 7, 8, 9\}$, $A = \{1, 2, 7, 8\}$ & $F = \{2, 5, 8, 9\}$, Find $X \cap Y$, $X' \cap Y$, $Y \cap A$, A'

3. Prove that $(p \vee q) \wedge (p \wedge q) \equiv (p \wedge q) \vee (p \vee q)$

4. If $X = \begin{bmatrix} x_1 & x_2 & x_3 \\ 1 & 0 & 6 \\ x_4 & 4 & 7 \end{bmatrix}$ & $Y = \begin{bmatrix} 3 & 2 & 6 \\ 2 & 7 & 1 \\ 5 & 4 & 0 \end{bmatrix}$, then find XY .

5. If $A = \begin{bmatrix} 4 & 2 & 3 \\ 1 & 3 & 6 \\ -5 & 0 & 7 \end{bmatrix}$, $B = \begin{bmatrix} 0 & 2 & 1 \\ 1 & 3 & 0 \\ 5 & 0 & 7 \end{bmatrix}$, then find $4A - 3B$.

6. The 7th term of an A.P. is 20 and its 13th term is 32. Find the A.P.

7. The 3rd and 8th term of a G.P. are 4 and 128 resp. Find the G.P.

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Total No. of Pages : 02

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B.Sc. (IT/ Graphics & Web Designing)/BCA (Sem - I)

FUNDAMENTALS OF COMPUTER AND II

Subject Code : UGCA1902

M Code : 76962

Date of Examination : 22-12-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1) Write briefly :

- What is primary memory?
- What is control panel?
- What is the difference between System and Application software?
- What is the difference between save and save as?
- What is Booting Process?
- Explain system bus.
- Write the name of 5 components that we mostly see on a Motherboard.
- Discuss use of Motherboard.
- What for find and replace is used in Word?
- Define cache memory.

SECTION-B

3. a) What is the difference between primary and secondary memory?
- b) What is the difference between a ROM and RAM?
4. What are the different types of charts in MS-Excel? And write steps to insert chart in Excel Sheet.
5. a) Convert $(A0B4)_{16}$ to $(?)_2$, $(?)_8$, $(?)_{10}$.
- b) Explain the printing mechanism of a laser printer.
6. a) What is the role of IT in education?
- b) Explain input and output devices.
7. **Write short note on :**
 - a) Describe the complete process of Mail Merge.
 - b) What is cell reference? Explain its advantages.
8. Explain Electronic Payment and various methods of electronic payment.

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Total No. of Pages : 02

Total No. of Questions : 07

B.Sc. (Graphics and Web Designing) (Sem. 2)

FUNDAMENTALS OF STATISTICS

Subject Code : UGCA-1907

M.Code : 77728

Date of Examination: 17-11-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1. Attempt all questions :

- a. Scope of statistics
- b. Questionnaire
- c. Rounding off data
- d. Objectives of classification
- e. Pie Chart
- f. Relation between mean, median and mode
- g. Measure of Central Tendency
- h. Limitations of harmonic mean
- i. Merits and demerits of coefficient of variation
- j. How to calculate Mean deviation from mean?

SECTION-B

3. Define Statistics in singular and plural sense. What are the limitations and distrust of statistics?
3. What do you mean by collection of data? Explain various methods of collection of data with their merits and demerits.
4. Graphs are the best way to present the raw information. Do you agree? Also draw various types of graphs with imaginary figures.
5. Calculate Harmonic mean :

x : 10-20	20-30	30-40	40-50	50-60	60-70
f : 6	11	17	9	6	2
6. Calculate standard deviation and coefficient of variation :

x : 100-200	200-300	300-400	400-500	500-600	600-700
f : 16	17	25	34	16	6
7. Discuss various measures of central tendency with their merits and demerits. Also give relevant examples.

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Total No. of Pages : 02

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B.Sc. (GWD) (Sem - 2)
CONCEPTS OF WEBSITE DESIGNING & DEVELOPMENT

Subject Code : HGWDT903

M Code : 77729

Date of Examination : 21.11.2024

Time : 1 Hr.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES:

1. SECTION A is a COMPREHENSIVE consisting of TEN questions, carrying TWO marks each.
2. SECTION B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1. Write short note on the following :

- a) What does HTTP stand for and how does it relate to the World Wide Web (WWW)?
- b) Explain the role of a web browser in the context of accessing websites.
- c) Describe the difference between static and dynamic websites, providing examples of each.
- d) How do search engines work?
- e) Define the term "cookies" in the context of web technology and discuss their role in maintaining user sessions.
- f) What is the significance of DNS and domain names in web addressing?
- g) What is Search Engine Optimization?
- h) What are the W3C standards and why are they important in web development?
- i) Differentiate between client-server and peer-to-peer communication models on the internet.
- j) What is the difference between HTML and DHTML?

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SECTION B

2. Discuss the importance of web-based philanthropic projects and their impact on society. Provide examples of such projects and how they contribute to various causes?
3. Explain the key components of a Content Management System (CMS) such as Joomla or WordPress. How do they simplify website management for users?
4. Describe the concepts of black hat and white hat SEO in detail. Discuss their strategies, risks and ethical considerations in optimizing websites for search engines.
5. What are the best practices for keyword research and utilization in SEO? How do keywords influence website rankings on search engines?
6. Discuss the parameters and standards of good SEO for websites. How can website owners optimize their content and structure to improve search engine visibility?
7. Explain the inner workings of search engines, including their web crawling, indexing and ranking processes.

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Bachelor of Science (Graphics & Web Designing) (Sem:- 2)

OBJECT ORIENTED PROGRAMMING USING C++

Subject Code : UGCA-1909

M.Code : 77730

Date of Examination: 23-11-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1. Answer briefly :

- a) What is a base class in C++ inheritance?
- b) What is method overloading in C++?
- c) How does C++ support operator overloading?
- d) Explain the four fundamental principles of OOP.
- e) What is a class in C++?
- f) What is polymorphism in C++?
- g) How is data hiding achieved in C++?
- h) What is a destructor in C++?
- i) What is function overloading?
- j) What is direct memory access?

SECTION B

3. What is dynamic polymorphism and how is it implemented using virtual functions?
4. What is encapsulation and why is it important in OOP?
5. Explain the difference between public, private and protected access specifiers with suitable example.
6. What do you understand by inheritance? Give its various types and access mechanisms. What are the advantages of scope resolution & referencing?
7. Write short notes on :
 - a) Storage classes
 - b) Exception handling.
8. Write a program in C++ to overload the +, - operator to find the addition, subtraction of complex numbers.

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B.Sc. (C. & WD) (Sem. II)
ENVIRONMENTAL STUDIES
Subject Code: UVC 102/1B
M Code: 111/34
Date of Examination: 28.11.2023

Time: 3 Hrs.

Max. Marks: 60

INSTRUCTIONS TO CANDIDATES:

1. SECTION A is COMPULSORY, consisting of 10 questions, carrying TWO marks each.
2. SECTION B contains SIX questions, carrying 10 marks each and students have to attempt any FOUR questions.

SECTION A

I. Answer briefly :

- a) Define Environment.
- b) Define ecological succession.
- c) What is meant by food chain?
- d) What are the causes of desertification?
- e) List any two major global effects of air pollution.
- f) What is meant by red data book?
- g) How does acid rain occur?
- h) What are GHGs? Name any four GHGs in the descending order of their global warming potential.
- i) Why is biodiversity important?
- j) What are endemic species?

SECTION B

1. How would you explain environmental studies as a multidisciplinary subject? Discuss the case study of a polluted site which you have created improving your point.
2. Sketch and explain the types of ecological pyramids. Discuss the 10% rule.
3. Discuss the uses, functions and values of forest resources. List the causes and effects of its degradation.
4. List and contrast between renewable and non-renewable energy sources. Discuss the economic and environmental viability.
5. **Write notes on :**
 - a) Rising Sea Levels and associated global disasters
 - b) Nuclear hazards and health risks.
6. Enumerate the importance of the following in environmental management
 - a) Public awareness
 - b) Environmental studies

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Bachelor of Science (Graphics & Web Designing) (Sem.- 3)

ELEMENTS OF DESIGN

Subject Code : UGWD 1905

M.Code : 78472

Date of Examination: 08-12-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

I. Write briefly :

- a) Visual Perception
- b) Lines
- c) Rhythm
- d) Focal Point
- e) Transformation
- f) Form
- g) Visual Weight
- h) Radial Balance
- i) Warm Colors
- j) Color Schemes.

SECTION-B

2. What is the principle of balance in design composition and how can it be achieved?
3. How does the use of color impact the overall composition of a design?
4. What is the principle of contrast and how can it be used effectively in design?
5. What is the difference between symmetrical and asymmetrical balance in design?
6. How can the use of lines in a design impact its composition?
7. What is the principle of unity and how it can be achieved in design composition?

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Total No. of Questions : 07

B.Sc. (Graphics and Web Design) (Sem.-3)

IMAGE EDITING & PHOTOGRAPHY

Subject Code : UGWD1907

M.Code : 78477

Date of Examination : 13-12-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A IS COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION A

1. Write briefly :

- Prime Lens
- F-stop
- Hard Light
- ISO
- Portrait Image
- Rule of thirds
- Angle of vision
- OSS
- RGB
- PNG

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SECTION B

2. What is a DSLR camera? Describe its structure.
3. What are the different shooting modes available in modern digital cameras?
4. Discuss the concept of low and high key studio sessions.
5. Classify the different types of lenses as per their usage, focal length and aperture.
6. How would you design an engaging composition?
7. Discuss some of the image editing techniques to fix glitches in image.

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B.Sc. (G&WD) (Sem.-3)
DATABASE MANAGEMENT SYSTEMS

Subject Code : UGCA-1922

M.Code : 78473

Date of Examination : 21-12-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION A

1. Answer briefly :

- a) What is a Database Management System (DBMS) and how does it differ from a traditional file-based system?
- b) Define the term "relation" in the context of a relational database and describe its properties.
- c) Provide examples of SQL commands for selecting data from a table, inserting records and updating records.
- d) What are the three levels of data abstraction in a DBMS?
- e) How do various levels of Data Abstraction relate to one another?
- f) What are the steps involved in the Entity-Relationship Diagram (ERD) modelling process?
- g) Define a database transaction and discuss the properties of the ACID (Atomicity, Consistency, Isolation and Durability).
- h) State process of database normalization and the normal forms (1NF, 2NF, 3NF, etc.).
- i) When is denormalization appropriate?
- j) What is Role Based Access Control (RBAC) in a database, and how does it enhance security?

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SECTION B

2. Discuss the differences between the SQL SELECT and SQL UPDATE statements, highlighting their syntax and purposes.
3. Describe the role of aggregate functions in SQL, such as COUNT, SUM and AVG and provide an example query that utilizes them.
4. Given a denormalized database, explain the process and benefits of converting it into a normalized form.
5. How does the two-phase commit (2PC) protocol work; and what is its role in distributed database systems?
6. Explain the differences between a logical schema and a physical schema in the context of database design.
7. Discuss the pros and cons of using surrogate keys *versus* natural keys in database tables.

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Total No. of Questions : 07

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B.Sc. (G & WD / IT) / BCA (Sem.-3)

DATA STRUCTURES

Subject Code : UGCA1915

M.Code : 78181

Date of Examination : 23-12-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1. Write briefly :

- a) Flowchart
- b) Dynamic memory allocation
- c) Strings
- d) Multiple stack
- e) Priority queue
- f) Circular linked list
- g) AVL tree
- h) Graph
- i) Quick sort
- j) Hashing.

SECTION-B

2. a) What do you mean by data structure? Explain complexity of an algorithm.
b) What do you mean by an Array? How a multi-dimensional array differs from one dimensional array?
3. Define Stack. What operations are performed on a stack? Write applications of a stack.
4. What is linked list? Discuss the various operations on linked list. How single linked list is different from doubly linked list?
5. What is a binary tree? How it is traversed? How a binary search tree is different from a binary tree?
6. **Write short notes on following :**
 - a) Adjacency matrix
 - b) Linear search
7. Explain the concept of Hashing and Hashing function. What are various collision resolution techniques?

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Roll No.

Total No. of Pages : 02

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B.Sc. (Graphics and Web Designing) (Sem. 4)

ANIMATION ART

Subject Code : UGWD1909

M Code : 79531

Date of Examination : 22-11-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1. Explain briefly :

- a) Surface
- b) Contrast
- c) Light & shadow
- d) Pastel Color
- e) Round & Flat Brushes
- f) Proportion
- g) Tilt
- h) Visual Balance
- i) Curved Lines
- j) Unity.

SECTION-B

2. Discuss the different types of pencils and their usage.
3. Discuss the role of light and changing mood.
4. Describe the various types of sheets.
5. In what ways would you represent insects birds and animals with attention to structure and morphology?
6. Discuss the theory of viewpoint drawing.
7. What is a story board and discuss its usage?

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Roll No.

Total No. of Pages : 02

Total No. of Questions : 07

B.Sc. (Graphic and Web Designing) (Sem.-4)

PROGRAMMING IN PYTHON

Subject Code : UGCA1914

M.Code : 79530

Date of Examination : 20-11-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1. Write briefly :

- a) What is Python and what are its key features?
- b) Define functions.
- c) What is import command?
- d) What is the need of precedence in operators?
- e) Explain Data type.
- f) Do we use pointers in python? Why?
- g) Write difference between Object and Classes.
- h) Write an example of read() and write() methods.
- i) How to open a file in python?
- j) Define packages.

SECTION-B

2. a) What is the difference between binary and text file modes when working with files?
b) How do you create an empty list, dictionary and set in Python?
3. Compare procedural programming with object oriented programming. For what type of application is the procedural programming suitable and for what type OOP is suitable? Where does python belong to? Justify your answer.
4. Explain associativity of the operators and what non-associative operators are? Explain with examples.
5. What do you mean by path searching of a module? How to perform in python?
6. What are python functions? What are different forms of functions? Give an example of each.
7. How to edit class attributes? What is the built-in class attributes?

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INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is **COMPULSORY** consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A**1. Write briefly :**

- a) What are the various applications of computer graphics?
- b) Briefly mention the role of a look up table.
- c) Differentiate the features of random scan and raster scan displays.
- d) State the concept of interpolation.
- e) What are the different types of 3D rotations?
- f) State the rules for 2D rotation.
- g) What is character generation and its advantages?
- h) Why is morphing process required in computer graphics?
- i) Differentiate between reflection and shearing.
- j) Enlist few applications of virtual reality and related environments.

SECTION-B

1. Discuss the characteristics of Video display device, especially 3D viewing device in detail.
2. What is "projective transformation"? Explain the projective transformations (translation, scaling, rotation and reflection) in 2D graphics.
3. Why is flood fill essential for scan conversions? Describe the flood filling and area filling techniques in detail.
4. What is scan conversion and why is it required? Explain the steps of Bresenham's algorithm for drawing lines by taking a suitable example.
5. Clip a line A (-1,5) and B (3,8) using Liang-Bresky algorithm for clipping with window coordinates (-3,1) and (2,6).
6. Write short notes on the following *any 3* 3D graphics:
 - a) Morphing Techniques
 - b) Parallel and Perspective Projections.

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Total No. of Pages : 02

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B.Sc. (Graphics and Web Designing) (Sem.-4)

VIDEO EDITING

Subject Code : UGWD1911

M.Code : 79536

Date of Examination : 29-11-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

I. Write briefly :

- a) Audible Range
- b) Voice Over
- c) Dialogue
- d) Audio Monitors
- e) Critical Listening
- f) Pitch
- g) Patterns
- h) Sound track
- i) High pass
- j) Digital Audio.

SECTION-B

2. Establish the relation between sound and culture.
3. What is voice modulation? Why a voice over artist needs to master this art?
4. What do you mean by mastering? Describe the process & setup of mastering.
5. "Film is a visual medium" Justify the role of sound in it.
6. What do you mean by equalization? Why and how do you achieve it?
7. Describe the different types of compression used in audio production.

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Total No. of Pages : 02

Total No. of Questions: 07

B.Sc. (G&WD) (Sem. 5)

PROGRAMMING IN PHP

Subject Code : UGCA 1929

M Code : 90376

Date of Examination : 17-11-2023

Time: 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

- SECTION B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1. Explain the following :

- a) Dynamic variable
- b) Comments in PHP
- c) Echo
- d) String
- e) Null
- f) HTML
- g) Constants
- h) Assignment operator
- i) Select statement
- j) Loop.

SECTION-B

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Roll No. _____

Total No. of Questions : 07

Total No. of Pages : 02

Bachelor of Science (Graphics & Web Designing) (Sem.-5)

LIGHTING AND RENDERING

Subject Code : UGWD1914

M.Code : 90378

Date of Examination: 23-11-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1. Explain briefly :

- a) Ambient Shaders
- b) Directional Light
- c) Area Light
- d) Decay Rate
- e) Depth Map
- f) Linking Light
- g) Textures
- h) Shading
- i) HDR
- j) GI (Global Illumination).

SECTION-B

2. What are some key principles to consider when setting up lighting for a 3D scene in Maya to create a visually appealing composition?
3. Describe your preferred approach to achieve realistic global illumination in Maya, considering various rendering engines and settings.
4. When working on an interior scene, how do you tackle the challenges of simulating natural light and artificial lighting to create a convincing atmosphere?
5. What role does color theory play in 3D Maya lighting? How do you choose and adjust light colors to enhance the mood or storytelling in a scene?
6. What are the most important aspects to consider when choosing textures and materials for a scene?
7. What is your preferred rendering engine in Maya and why?

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Roll No. 11111111
Total No. of Questions : 07

Total No. of Pages : 02

B.Sc. (G&WD) (Sem- 5)
LINUX OPERATING SYSTEM
Subject Code : UGCA-1935
M.Code : 90380
Date of Examination : 28-11-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

I. Write briefly :

- a) What is the history of Linux, and how does it relate to Unix?
- b) Explain the structure of the Linux Operating System.
- c) Describe the installation process for the X Window System.
- d) What are the key features of the KDE desktop environment?
- e) Name different types of text editors used in Linux.
- f) What are the common shell and utility commands in Linux?
- g) How does shell scripting play a role in the Linux environment?
- h) What are the uses of Linux Operating System?
- i) Explain the rules for naming variables in shell scripting.
- j) How do you manage files and directories using Linux commands?

SECTION-B

1. Discuss the different types of shells in the Linux Operating System. Provide examples of each type and their distinct features. Explain how to configure and initialize a shell.
2. Explain the process of file name expansion in Linux, including wildcard characters and patterns. Provide practical examples of file name expansion in the shell.
3. Describe the methods for standard input and output redirection in Linux. Discuss how redirection is used to manipulate and manage input and output streams?
4. Explore the concept of pipes in Linux command-line operations. Provide examples of how pipes are used to connect commands and pass data between processes?
5. Detail the management of jobs in a Linux shell, including job control commands, background and foreground processes, and job manipulation.
6. Provide an overview of Linux software management, including package installation and removal. Explain the concept of software repositories and their role in package management.

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Total No. of Pages : 02

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B.Sc. (Graphics & Web Designing) (Sem-5)

MULTIMEDIA 2D & 3D DESIGNING

Subject Code : UGWD-1913

M.Code : 90377

Date of Examination : 21-11-2023

Time 3 Hrs.

Max. Marks : 60

III. INSTRUCTIONS TO CANDIDATES :

- SECTION B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1. Write briefly :

- Timeline
- Key frames
- Motion tween
- Bitmapapped
- Layout
- Lip-syncing
- Cuing
- Postures
- Key poses
- 3D Designing

SECTION B

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Total No. of Pages : 02

Total No. of Questions : 07

B.Sc. (Graphics & Web Designing) (Sem. 6)

MOTION GRAPHICS & COMPOSITION

Subject Code : UGWD1917

M. Code : 91998

Date of Examination : 20-11-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

I. Write briefly :

- a) Teasers
- b) GUI
- c) Timeline
- d) Ram Preview
- e) Pixel Aspect Ratio
- f) Keyframe
- g) Bezier
- h) Reverb
- i) Audio Equalizing
- j) PAL.

SECTION-B

1. Describe the most efficient way of creating and managing the project.
2. What do you mean by track matte? Describe its usage in animation.
3. What do you mean by pre-compositing and nesting? Discuss their usage.
4. What is your preferred method for creating realistic motion blur in After Effects? Why do you find it effective?
5. Describe the steps to render and export a movie using the render queue.
6. Describe the usage and working of 3D camera tracker.

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Total No. of Pages : 02

Total No. of Questions : 07

B.Sc.(Graphics & Web Designing) (Sem.-6)

DIGITAL MARKETING

Subject Code : UGCA-1947

M.Code : 91999

Date of Examination : 22-11-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1. Explain briefly :

- a) Digital Landscape
- b) SEO
- c) Google rankings
- d) Display media
- e) Web analytics
- f) LinkedIn Marketing
- g) Blogging
- h) Social Media Engagement
- i) Role of adverts
- j) Content Optimization.

SECTION-B

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Total No. of Questions : 07

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B.Sc. (C.W.D) (Sem - 6)

INTRODUCTION TO GAMING

Subject Code : UC.WD-101B

M Code : 92000

Date of Examination : 24-11-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES:

1. SECTION A contains 10 questions carrying 10 marks each.
2. SECTION B contains 7 questions carrying 50 marks each and students have to attempt any FOUR questions.

SECTION A

1. Explain the following:

- a) Game Design
- b) Ideology
- c) Platform
- d) Game animations
- e) Game engine
- f) Genres
- g) 3D Game
- h) Theme
- i) Game controller
- j) Game score.

SECTION B

1. Define game. Explain its evolution.
2. Describe the popular titles of gaming today.
3. Differentiate between different roles that exist in game development.
4. Explain various features need to be considered while programming a game.
5. Illustrate the case study of cricket game.
6. Discuss the game application for a roller-coaster ride.

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Roll No. III

Total No. of Questions : 07

Total No. of Pages : 02

B.Sc. (Graphics & Web Designing) (Sem.-6)

PROGRAMMING IN JAVA

Subject Code : UGCA-1932

M.Code : 92001

Date of Examination : 29-11-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION A is **COMPULSORY** consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

I. Answer briefly :

- a) What are jumping statements?
- b) List the features of object oriented programming paradigm.
- c) What is an Applet?
- d) What is the role of *finally* keyword for exception handling?
- e) What are Access Specifiers in Java?
- f) What is Thread synchronization?
- g) What are Character Streams?
- h) What do you mean by scope of a variable?
- i) What is the advantage of static import in Java?
- j) What is array of objects?

SECTION-B

1. Compare and contrast between String and StringBuffer class with suitable examples.
2. List and discuss various operators and their usage in Java.
3. Discuss the use of threads in Java. Explain the thread creation, thread scheduler and thread priority in detail.
4. Explain various decision making statements used in Java with example of each.
5. List and explain various built-in exceptions in Java.
6. Write short notes on:
 - a) Filtered Byte Streams
 - b) Multiple interfaces.

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Total No. of Questions : 10

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Branch : B.Tech. Computer Science & Engineering (CSE) (Sem. IV)

MATHS MATHEMATICS

Subject Code : MCA A 1901

Mo code : 26961

Date of Examination : 17-06-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1. Write briefly :

- Set builder method
- Null set
- Disjunction
- Contradiction
- Diagonal matrix
- Arithmetic progression
- Geometric mean

h) Show that $AUA^c = U$

i) If $A = \begin{bmatrix} 2 & 5 \\ 1 & 3 \end{bmatrix}$, $B = \begin{bmatrix} 1 & -1 \\ -3 & 0 \end{bmatrix}$, find $5A - 3B$.

j) Prove by an example that AB can be zero matrix when either of A and B is zero matrix.

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SECTION-B

2. a) Let $U = \{0, 1, 2, 3, \dots, 9\}$, $A = \{x \in U; x \text{ is multiple of } 3\}$, $B = \{x \in U; x^2 \leq 4\}$. Determine

i) $A \cap B$

ii) $A \cup B$

b) List all the members of the power set of the set $A = \{a, b, c, d\}$.

3. Prove $p \wedge (q \vee r) = (p \wedge q) \vee (p \wedge r)$

4. For what values of x, y, z, w

$$3 \begin{bmatrix} x & y \\ z & w \end{bmatrix} = \begin{bmatrix} x & i \\ -1 & 2w \end{bmatrix} + \begin{bmatrix} 4 & x+y \\ z+w & 3 \end{bmatrix}$$

5. If $A = \begin{bmatrix} 1 & 0 & 2 \\ -1 & 2 & -3 \end{bmatrix}$, $B = \begin{bmatrix} 2 & 0 \\ 1 & -1 \\ 0 & -2 \end{bmatrix}$ verify that $(AB)^t = B^t A^t$.

6. a) Prove that if a, b, c are in AP, then $a^2(b+c), b^2(c+a), c^2(a+b)$ are in AP

b) Insert 5 AMs between 9 and 27.

7. a) The sum of three terms of a GP is 21 and their product is 216. Find the terms.

b) Insert 5 GMs between 3 and 192.

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Total No. of Pages : 02

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B.Sc. (Computer & Web Designing) (Sem. II)
INTRODUCTION TO SCRIPTING LANGUAGES

Subject Code : BTWD 1001

M Code : 11200

Date of Examination : 20-06-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. SECTION-B contains **SIX** questions carrying **TEN** marks each and students have to attempt any **FOUR** questions.

SECTION-A

I. Write briefly :

- a) What is the difference between www and internet?
- b) Write HTML syntax to create a create a link.
- c) Differentiate between frameset and non-frame documents.
- d) What are targeted links?
- e) Write a short note on style sheets.
- f) Differentiate between 'serif' and 'sans-serif' font families.
- g) Discuss any two attributes available in the 'img' tag.
- h) What is the difference between 'class' and 'id' selectors available in CSS?
- i) Write the CSS properties to control the font size and style of the text.
- j) What purpose does 'rowspan' and 'colspan' serve in HTML tables?

SECTION-B

1. Discuss how <td>, <tr>, <thead>, <tbody> and <caption> elements are used in web page and how <td colspan=
2. Describe the procedure involved in processing HTML forms, highlighting the need of form validation for enabling user input. Also discuss various forms control elements.
3. Describe the significance of navigation and page layout in web design. Discuss various navigational aids and layouts available in HTML.
4. Explain various ways to incorporate images into a web page. Also discuss various image formats along with their advantages and disadvantages.
5. Describe the role that site design plays in developing a successful and interesting web page. Discuss the important concepts in designing websites, involving font, color, arrangement and browsing.
6. What are style rules in HTML? Explain different ways in which style rules can be applied to HTML elements with the help of an example.

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B.Sc. (IT / Graphics & Web Designing)/BCA (Sem. I)

FUNDAMENTALS OF COMPUTER AND II

Subject Code: BCIAT102

M Code: 76962

Date of Examination: 24.05.2023

Time : 3 Hrs.

Max. Marks: 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

I. Write briefly:

- a. What is the function of the Arithmetic Logic Unit (ALU) in a computer system?
- b. What is the difference between a binary and a decimal number system?
- c. How does IoT connect devices and data in new ways?
- d. What is UPI (Unified Payments Interface) and how does it facilitate electronic fund transfer between bank accounts?
- e. How can you sort the data in Microsoft Excel?
- f. What are the different types of computer languages?
- g. What are some examples of utility programs that are commonly used in computer systems?
- h. How do you protect cells, sheets, and workbooks in Microsoft Excel?
- i. What is the difference between a page break and a section break in Microsoft Word?
- j. What is the purpose of speaker notes in Microsoft PowerPoint?

SECTION-B

1. How is a payment system different from other payment systems? How does the use of QR code as a payment system compare to traditional currencies and what are the security risks involved?
2. What is the purpose of handouts and notes pages in Microsoft PowerPoint and how can you add these features to a slide show? How can you use hyperlinks to link to external sources or other slides within a Microsoft PowerPoint presentation? Illustrate.
3. How do operating systems manage computer resources such as memory, CPU, and storage? What is disk management software and how is it used to manage computer storage?
4. How are arithmetic operations performed in different number systems? Give examples in context to various number systems. How are hexadecimal and octal number systems used in computer systems?
5. What are some examples of input devices that can be used with a computer system? Explain working of these devices.
6. What are macros and how are they used to automate tasks in Microsoft Excel? How can you use Excel to create financial statements, such as a balance sheet or income statement? Give suitable examples.



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CHANDIGARH COLLEGE OF TECHNOLOGY
SCHOOL OF VIRTUAL DESIGNING AND DEVELOPMENT

College Code : UCWD 1903

MO Code : 22729

Date of Examination : 07-06-2023

Time : 1 Hr

Max. Marks : 60

INSTRUCTIONS TO CANDIDATE :

1. There is a compulsory consisting of TEN questions carrying TWO marks each.
2. SECTION B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

I. Write short note on the following :

- a) Briefly explain any two protocols for data transfer over internet.
- b) Name any two types of internet servers. Also, briefly explain usability of these servers.
- c) What is meant by web hosting? Name any two companies which provides hosting services.
- d) Draw the diagram showing communication using client-server architecture.
- e) What is meant by OpenSource Software? Briefly explain.
- f) How server-side scripting languages are different than client-side scripting languages?
- g) Explain, briefly any two properties of a DBMS.
- h) What do you understand by articles in Content Management System (CMS)? Answer briefly.
- i) Write two differences between White Hat and Black Hat SEO techniques.
- j) Write a short note on permalinks.

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SECTION-B

2. Explain in details, principles of web site designing. Also, mention key points to remember while preparing sitemap.
3. Mention key issues to be handled in web designing. Name standard techniques to address these issues.
4. What is meant by user centric design? How this designing approach is different from development centric design approach?
5. What is the difference between static and dynamic website? With the help of a diagram explain how database is managed using PHP and MySQL?
6. What is Search Engine Optimization? Explain the different techniques of SEO to improve ranking of a website.
7. What is a blog? How blogs help in improving SEO? Explain important characteristics of any blog engines.



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Total No. of Pages: 02

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B.E. (Graphics and Web Designing) (Sem. 2)

FUNDAMENTALS OF STATISTICS

Subject Code: UGCA 1907

M. Code: 77728

Date of Examination: 05-06-2023

Time: 3 Hrs.

Max. Marks: 60

INSTRUCTIONS TO CANDIDATES:

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1. Write briefly:

- Differentiate between primary data and secondary data.
- How will you check the authenticity of secondary data?
- "Statistics can prove anything". Discuss this statement.
- Give formula to calculate mean, median and mode in individual discrete and continuous series.
- Which method of Central tendency out of mean median and mode do you considered to be the best and why?
- What are the different measures of Dispersion?
- Explain coefficient of Variation.
- How do Histogram and Bar Graphs contribute in analysis of the data?
- What do you mean by classification of the data?
- Types of graphs.

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SECTION-B

- Write the definition of Statistics in simple and plain sense? Write also its importance, scope and limitations?
- The sum of median and mode of 250 workers is given to be 33.3 and 34 respectively, find the missing frequencies:

Wages (Rs)	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Number of Workers	4	16	-	-	-	6	4

- Calculate the variation for the following data and discuss the relative consistency of the two bricks:

Brick A: 706 675 725 625 650 700 650 700 600 650

Brick B: 550 600 575 550 650 600 550 525 625 600

- Explain the various methods for collecting primary data and secondary data
- What are the different ways to classify the numerical data?
- List down the advantages and disadvantages of the diagrammatic presentation of the data.



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Roll No.

Total No. of Pages : 02

Total No. of Questions : 07

Reg. No. (P.S.W.D.) Term : 2

ENVIRONMENTAL SCIENCE

Subject Code : EVS 102/13

M Code : 77734

Date of Examination : 02.06.2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

I. Write briefly :

- a) Green House effect
- b) Biosphere reserve
- c) Land as a resource
- d) Industrial uses of water
- e) Natural Resources
- f) Disaster Management
- g) Biodiversity
- h) Aquatic Ecosystem
- i) Reasons of over-exploitation of forests
- j) Landslides.

SECTION-B

- a) Discuss the causes of global warming and its implications.
- b) Discuss the causes of global warming and its implications.
- c) Discuss the causes of global warming and its implications.
- d) Discuss the causes of global warming and its implications.
- e) Discuss the causes of global warming and its implications.
- f) Discuss the causes of global warming and its implications.
- g) Discuss the causes of global warming and its implications.
- h) Discuss the causes of global warming and its implications.
- i) Discuss the causes of global warming and its implications.
- j) Discuss the causes of global warming and its implications.



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Total No. of Pages: 02

Total No. of Questions: 10/

Bachelor of Science (Graphics & Web Designing) (Sem.-2)

OBJECT ORIENTED PROGRAMMING USING C++

Subject Code: UGCA-1909

M.Code: 77730

Date of Examination: 30-05-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. SECTION-B contains **SIX** questions carrying **TEN** marks each and students have to attempt any **FOUR** questions.

SECTION-A

1. Write Briefly :

- a. What are copy constructors?
- b. What are default constructors?
- c. What are the advantages of a class?
- d. How is (ios::app) mode different from (ios::ate mode)?
- e. What is a friend functions?
- f. How are structures is different from a class?
- g. What is meant by dynamic initialization of a variable?
- h. What is polymorphism?
- i. What is direct memory access?
- j. What is a static variable?

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SECTION-B

2. Write a program in C++ to overload the $+$ operation to find the addition and subtraction of Complex numbers.
3. What are the various File Opening Modes? Explain with examples.
4. Explain how base class member functions can be invoked in a derived class if the derived class also has a member function with the same name.
5. Explain what is an overloaded operator & how does a compiler proceed to execute an overloaded operator?
6. Write a program to find the roots of a quadratic equation.
7. What are the various input statements of C++. Explain



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Roll No.

Total No. of Questions: 07

Total No. of Pages: 02

B.Tech. (G.S.W.D.) ELECT & A. Term III

DATA STRUCTURE

Subject Code: ECEA1111

M Code: 231131

Date of Examination: 03.06.2023

Time: 3 Hrs.

Max. Marks: 60

INSTRUCTIONS TO CANDIDATES:

1. SECTION A is COMPULSORY consisting of TEN questions, carrying TWO marks each.
2. SECTION B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1. Write briefly :

- a. Define algorithm. Give an example.
- b. Differentiate between linear and non-linear data structure.
- c. How is memory allocated to 2-D Array?
- d. Explain the concept of de-queue.
- e. Explain the various operations performed on stack.
- f. What is a binary search tree? Give an example.
- g. List the different types of graphs.
- h. What is collision in hashing?
- i. What is the time complexity of binary search algorithm? How it performs better than linear search?
- j. List the various applications of stack.

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SECTION-B

3. Briefly describe the algorithm for bubble sort. Explain with the help of an example.
4. What is a hash function? Explain different types of hash functions with the help of an example of each.
5. Write algorithm for depth first search and explain it with the help of an example.
6. Define data structure. Explain the different types of data structures.
7. What is a queue? Explain different operations that can be performed on a queue with the help of an example of each.
8. Write short note on :
 - a. Algorithm complexity.
 - b. Circular linked list.



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Total No. of Pages: 02

Total No. of Questions : 07

B.Sc. (G&WD) (Sem. 3)
DATABASE MANAGEMENT SYSTEMS

Subject Code : UGCA-1922

M. Code : 78473

Date of Examination : 20-05-2023

Time = 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1. Write briefly :
- What is the purpose of a database management system (DBMS), and how does it differ from a traditional file system?
 - How does Data Manipulation Language (DML) differ from DDL?
 - What are the primary components of a DBMS architecture and how do they work together to manage data?
 - How does normalization play a role in database design?
 - What are the major types of database models and what are the advantages and disadvantages of each?
 - List various key components of a database schema.
 - How can data replication be used to ensure data availability?
 - What are some common problems that can arise when designing a database schema?
 - What is the need of database recovery modules?
 - How can normalization be used to improve database performance?

SECTION 15

- What are the different normal forms used in database design and how do they differ in terms of the level of normalization and data redundancy? Explain the key features of the first normal form (1NF), second normal form (2NF), third normal form (3NF), and beyond.
- What is database security and how can it be enhanced through the use of access control mechanisms, encryption and other security measures? Explain some common security threats, such as SQL injection, buffer overflow attacks and denial of service attacks.
- What is Database Control Language (DCL) and how is it used to manage access control and security in a relational database system? Explain some common DCL commands, such as GRANT and REVOKE.
- What are some common types of relationships that can be represented in an entity relationship model? Discuss in detail. How are these relationships represented in the model and what are some examples of each type of relationship in a real-world database?
- What is relational algebra and how is it used to manipulate data in a relational database system? Explain some common operations of relational algebra, such as selection, projection, join, and aggregation.
- How can concurrency control be used to manage access to a database by multiple users and prevent data inconsistencies and conflicts? Explain some common concurrency control techniques.



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B.Sc. (Graphics & Web Designing) (Sem.-3)

ELEMENTS OF DESIGN

Subject Code : UGWD-1905

M.Code : 78472

Date of Examination : 18-05-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1. Write briefly :

- a) Difference between transformation and alteration.
- b) Use of Typography in design.
- c) List 4 tertiary colors.
- d) What is the purpose of contrast?
- e) What do we mean by rhythm?
- f) What do you mean by secondary colors?
- g) Elements of perception.
- h) What is the difference between Harmony and rhythm?
- i) Character visual elements.
- j) How do you express balance in a composition?

SECTION-B

2. Write a short note on the following:

- a) Black and White Composition
 - b) Positive and Negative Composition.
3. What is balance? What are the types of balance in design composition?
 4. What are the visual elements of design? Illustrate the uses of visual elements.
 5. What do we understand by the word design? What are different applications of design. Explain in detail the concept of balance in Design composition?
 6. What do we understand by the term "Design principles"? Explain in detail different principles of design.
 7. a) Explain the concept of Emphasis and how can it be achieved?
b) What are Balance, Harmony and Rhythm?



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Total No. of Pages: 02

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B.Sc. (Graphics & Web Designing) (Sem- III)

IMAGE EDITING & PHOTOGRAPHY

Subject Code: UGWD 1907

M Code: /BA/7

Date of Examination: 16.07.2023

Max. Marks: 60

Time: 3 Hrs.

INSTRUCTIONS TO CANDIDATE'S:

1. SECTION A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION B contains SIX questions carrying TEN marks each and students have to attempt **any FOUR** questions.

SECTION-A

1. Write briefly :

- a) Give camera control elements and function of each.
- b) How the camera configuration menu is opened?
- c) How a 256-gray level intensity image is converted into binary image?
- d) What are lighting effects on images in image acquisition?
- e) What is natural and artificial illumination models in video and photography?
- f) What are post-image acquisition processing tools? Discuss any two popular tools.
- g) What are image file formats and what is the purpose of different file formats?
- h) What do you mean by image resolution and contrast of an image?
- i) Where are color channels in color images?
- j) What are web portal image formats? How these are different than printable images?

SECTION B

1. List the different image models. Why neither color model nor color image photography possible?
2. How grayscale image is converted for image transformation in digital camera? Also discuss the important image sampling and quantization process in digital imaging?
3. What is illumination model in photography? Discuss model of ambient illumination, diffused reflection and specular reflection illumination models.
4. List various image editing tools. What is the purpose of image editing? Give various image editing techniques used in Adobe Photoshop.
5. What are different canvas sizes for imaging? Discuss portrait image size and its types.
6. What are various camera setting hardware equipments for outdoor video and photography?



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B.Sc. (Graphics and Web Designing) (Sem.-4)

VIDEO EDITING

Subject Code : UGWD1911

M.Code : 79536

Date of Examination : 26-05-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1. Write briefly :

- a) Frequency
- b) Low frequency
- c) Dialogue
- d) Equalizing
- e) XLR Cable
- f) Sample rate
- g) Patterns
- h) Audio Monitors
- i) High pass
- j) Digital Audio.

SECTION-B

2. Discuss the various audio controls of a professional audio mixer.
3. Write note on Ear Training & Critical Listening.
4. What is voice modulation? Why a voice over artist needs to master this art?
5. Describe the mixing process.
6. Define chorus effect, clipping, band pass & reverb.
7. What do you mean by mastering? Describe the process & setup of mastering.



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Total No. of Pages : 02

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B.Sc. (Graphics & Web Designing) (Sem.-4)

PROGRAMMING IN PYTHON

Subject Code : UGCA1914

M.Code : 79530

Date of Examination : 24-05-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1. Write briefly:
 - a) How is python different from other languages?
 - b) Write four limitations of python.
 - c) When do we use elif?
 - d) State the differences between Sets and Lists.
 - e) Compare and contrast Python and C++.
 - f) Name four types of built-in functions in python.
 - g) Discuss the lifetime of variables.
 - h) What is the need for python modules?
 - i) What are the functionalities of tell() and seek()?
 - j) How does garbage collection work in python?

SECTION-B

2. Write five applications of Python and elaborate them.
3.
 - a. What is a Dictionary and what functions can we in on it?
 - b. How do we create and import a module in python?
4. Define the following terms:
Keywords, Identifiers, Indentation, Variables, and Documentation.
5. What are the various loops available in Python? Explain using code for each type.
6.
 - a) Differentiate between pass-by-value and pass-by-reference. Explain using code examples.
 - b) Discuss five functions of Strings in python.
7.
 - a) Discuss the built-in exceptions while making exception handling in python.
 - b) While doing file management in python, discuss various operations on the file.



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Total No. of Pages : 02

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B.Sc. (Graphics and Web Designing) (Sem : 4)

ANIMATION ART

Subject Code : UGWD1909

M.Code : 79531

Date of Examination : 17-05-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is **COMPULSORY** consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1. Write briefly :

- a. Structure
- b. Texture
- c. Perspective
- d. 2 Dimension
- e. Drama
- f. Morphology
- g. Pan
- h. OSS
- i. Visual Weight
- j. Unity.



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SECTION-B

1. Discuss the principles of subject drawing.
2. Discuss the role of light and shading (mood).
3. Discuss the theory of one point perspective.
4. What ways would you represent 'mace', 'birds' and 'mound' with attention to structure and morphology?
5. Discuss form weight and balance with respect to the human figure.
6. What is a story board discuss its usage?

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B.Tec. (Graphics and Web Designing) Course-4)

COMPUTER GRAPHICS

Subject Code: AUC/AP034

M Code: 79512

Date of Examination: 19/05/2024

Time : 3 Hrs.

Max. Marks: 60

INSTRUCTIONS TO CANDIDATE :

1. SECTION-A is compulsory consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

I. Write briefly :

- a. What do you mean by virtual reality? List its various applications.
- b. Differentiate between raster scan displays and random scan displays.
- c. What is difference between cabinet and cavalier projections?
- d. What is meant by perspective foreshortening?
- e. What do you mean by differential scaling?
- f. Prove that uniform scaling and rotation form a commutative pair of operations.
- g. What are homogenous coordinates? What is their use?
- h. What is horizontal and vertical retrace?
- i. What is aspect ratio? Can aspect ratio be equal to 1?
- j. In context of raster scan systems, what do you mean by interlacing?



SECTION-B

1. a. Describe in detail various applications of computer graphics.
- b. Describe the construction and working of graphical input devices namely joysticks and track ball.
2. a. What do you mean by window and viewport? Derive general window to viewport transformation.
- b. Magnify the triangle with vertices A(0,0), B(1,1) and C(5,2) to twice its size while keeping C(5,2) fixed.
3. Describe in detail the construction and working of shadow mask CRT and beam penetration CRT.
4. Explain in detail Bresenham's algorithm for scan converting a line. Using Bresenham's line drawing algorithm, compute the coordinates of points on line between (3, 5) and (10, 9).
5. Describe Sutherland-Hodgeman polygon clipping algorithm. Why line clipping is not suitable to clip polygons on edge-to-edge basis?
6. Find the matrix for mirror reflection with respect to the plane passing through the origin and having a normal vector whose direction is $N = I + J + K$.

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B.Tech. Computer & Web Designing (Sem-5)

PROGRAMMING IN PHP

Semester Code: B.Tech A-19/20

M Code: 90326

Date of Examination: 07/06/21

Time: 3 Hrs.

Max. Marks: 60

INSTRUCTIONS TO CANDIDATE:

1. SECTION A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

E. Write briefly :

- a) What is WYSIWYG?
- b) Which server is used to compile PHP code?
- c) Write a few applications of PHP.
- d) Write a history of PHP.
- e) Differentiate between While and Do-While statement.
- f) Explain the GET method in detail.
- g) Write a procedure for uploading a data file.
- h) What is Google Caffeine?
- i) What is the use of the final keyword?
- j) How to write HTML code in PHP?

SECTION B

Ques. (PHP) (4pts) (Total: 4) The username, password and email values from the user and check whether the user has filled the details or not. Also, check the email field whether it contains correct format or not.

Ques. (PHP) (4pts) (Total: 4) Write a program to update the value of the database on user request.

Ques. (PHP) (4pts) (Total: 4) Explain various control statements in PHP, each with an example.

Ques. (PHP) (4pts) (Total: 4) How sound files are imported in PHP. Write a program to import a sound file. How Zip archiving to dialogue is performed?

Ques. (SQL) (4pts) (Total: 4) What are the various types of joins available in SQL?

Ques. (PHP) (4pts) (Total: 4) How to create a connection between PHP and My SQL? Explain its step-by-step procedure.



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Roll No.

Total No. of Pages : 02

Total No. of Questions : 07

B.Sc. (Graphics & Web Designing) (Sem. V)

LIGHTING AND RENDERING

Subject Code : UGWD1914

M Code : 90378

Date of Examination : 05-06-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

I. Write briefly :

- a) What is the real problem of real-world multi-dimensional objects representation in digital systems?
- b) What are lighting techniques in object high lighting?
- c) What is the difference between the camera-model of real-world model?
- d) How a shader tool is used to create virtual real effects?
- e) What do you mean by zero-depth camera projection?
- f) How and why camera-projection depth is increased.
- g) What is lighting and rendering?
- h) Which tool is used to create lighting effects in 3D Maya for object rendering?
- i) Explain in direct lighting and indirect-lighting and how it is different than ambient lighting?
- j) What do you mean by scene-sampling and its quantization for object rendering?

SECTION-B

1. Give detailed introduction of Autodesk Maya software and its applications. Give names of important properties of 3D Maya shader in rendering.
2. What are illumination models? Name and discuss important illumination models and their characteristics.
3. What is the role of coordinate systems in rendering, projection and coloring different planes for visualization virtual-real-models?
4. Discuss important six types of lightings available in Autodesk Maya and their light-effects with labelled diagram of each.
5. What is the purpose and significance of 3-point lighting setup? How it is used in a CG projection rendering. Also give its advantages.
6. What are wireframe models? How fast ambient occlusion methods are used in wireframe object model rendering?

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B.Sc (Graphics & Web Designing) (Sem.-6)

MOTION GRAPHICS & COMPOSITION

Subject Code : UGWD1917

M.Code : 91998

Date of Examination : 20-05-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

I. Write briefly :

- a) Frame rate
- b) Splitting
- c) Layer stack
- d) Motion Blur
- e) Auto Bezier
- f) Ear Training
- g) Pitch
- h) CODEC
- i) Proxies
- j) Background music.

SECTION-B

2. Discuss the various broadcasting fundamentals.
3. How does nesting helps in the compositing process?
4. Discuss the animation bases on alpha effects.
5. Write notes on interpolation, time remapping & frame blending.
6. Discuss the different audio effects.
7. Explain the rendering process.



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Total No. of Questions : 07

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B.Sc. (Computer & Web Designing) (Sem. - 6)

DIGITAL MARKETING

Subject Code : UGCA1947

M Code : 91999

Date of Examination : 25-05-23

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

I. Write briefly :

- a. SEO
- b. Outbound Marketing
- c. Different types of DM
- d. What is PRC?
- e. Qn-Page Optimisation
- f. PPC Advertising
- g. Bumper Ads
- h. How to improve conversion rates?
- i. Google AdWords Remarketing
- j. Google Ads

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SECTION-B

2. Define Search Engine Optimization. What is the need of an SEO friendly website? Write the importance of Internet and Search Engines.
3. Difference between SEO & SEM. How is SEM changing the era of marketing?
4. Content is the King in Digital Marketing. But your content should have the right kind of keywords. Why are keywords so important? Which are the different types of classifying keywords?
5. What is the impact of online marketing? Explain Affiliate Marketing, Viral Marketing, Influencer Marketing & Referral Marketing.
6. What are the types of DM? Differentiate between Inbound and Outbound marketing.
7. Why is Online Marketing trending these days? What do you understand by SMM? What KPIs do you use in social media reporting?

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