

Seat No.	
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SN - 246

Total No. of Pages : 3

B.C.A.(Part - II) (Semester -III) (NEP-2020)**Examination, 2025****Elements of Statistics****Sub. Code: 91173****Day and Date : Saturday, 03-05-2025****Total Marks : 80****Time : 10.30 a.m. to 1.30 p.m.****Instructions:**

- 1) Question No. 1 and Question No. 8 is compulsory and attempt any three Questions from Question No. 2 to Question No. 7.
- 2) Figures to the right indicate full marks.
- 3) Use of Non- programmable calculator is allowed.

Q.1 Select the correct alternative and rewrite the statement:**[12]**

- 1) Cumulative frequency polygon can be used for the calculation of -----.
a) Mean b) Median c) Mode d) Geometric mean
- 2) If all the points of a scatter diagram lie on a straight line falling from left bottom corner to the right upper corner, then the correlation is called ----- .
a) zero correlation b) high degree of positive correlation
c) perfect positive correlation d) perfect negative correlation
- 3) Given that E and F are events such that $P(E) = 0.5$, $P(F) = 0.4$ and $P(E \cap F) = 0.3$, then what will be the value of $P(F|E) =$ -----.
a) $2/5$ b) $3/5$ c) $3/4$ d) $2/4$
- 4) If the regression line is X on Y, then the variable X is known as----- .
a) dependent variable b) independent variable
c) dependent as well as independent variable d) none of these
- 5) Which of the following represents the multiplication theorem of probability?
a) $P(A \cap B) = P(B). P(B/A)$ b) $P(A \cap B) = P(A) .P(B/A)$
c) $P(A \cap B) = P(A). P(B/B)$ d) $P(A \cap B) = P(A) .P(A/A)$
- 6) The average of lower and upper class limits is called ----- .
a) class boundary b) class frequency c) class mark d) class limit
- 7) ----- is not a measure of central tendency..
a) Mode b) Mean c) Range d) Median

8) The following frequency distribution

Classes	Less than 10	Less than 20	Less than 30	Less than 40	Less than 50
frequency	2	6	16	19	20

is classified as ----- .

- a) Less than cumulative frequency distribution
 b) Continuous frequency distribution
 c) More than cumulative frequency distribution
 d) Discrete frequency distribution
- 9) If the values of two variables move in the same direction, then correlation is said to be -----
 a) linear b) non-linear c) positive d) negative
- 10) Any subset of sample space is known as -----
 a) an event b) probability of an event c) a sample space d) none of these
- 11) Primary data are collected by the method of -----
 a) government publications b) reports of committees
 c) investigation through questionnaire d) all (a), (b) & (c)
- 12) ----- is the positional average.
 a) Mode b) Mean c) Median d) All (a), (b) & (c)

Q.2 a) Define Sample Space and probability of an event. If a coin and die are tossed together, then write a sample space and find the probability of getting (i) head on coin and even number on die, (ii) tail on coin and perfect square number on die. [8]

b) What is an Ogive curve ?. Draw a less than Ogive curve from following data and hence obtain median from it.

Marks	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60
No. of Students	3	9	15	30	18	5

[8]

Q.3 a) Define Median. Find median and mode for given data

Class	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60
Frequency	7	9	15	11	8

[8]

b) Define correlation. Calculate the coefficient of correlation between the variables price and demand.

Price	2	3	4	7	6
Demand	10	7	3	1	2

[8]

Q.4 a) State equations of two regression lines. From 7 observations the following results were obtained.

$$\sum X = 21, \sum Y = 20, \sum X^2 = 91, \sum XY = 74$$

Find the regression equation of Y on X. Also estimate Y when X = 4.

[8]

Q.4 b) Define Q.D. and coefficient of Q.D. Find QD and its coefficient for following data.

Age in years (X)	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55
No. of Persons (f)	8	16	20	36	25	15	5

[8]

Q.5 a) State addition law of probability. If $P(A) = 0.2$, $P(B) = 0.6$. A and B are independent events. Find the probability that at least one of A and B will happen.

[8]

b) Explain primary and secondary data.

[8]

Q.6 a) Following data gives number of catches taken by Dhoni and Kartik behind the wickets. Find who is consistent in the matter of wicket taking.

Catches taken by	Dhoni	1	0	4	4	1
	Kartik	4	5	1	4	2

[8]

b) Define Spearman's Rank correlation coefficient. Calculate Spearman's rank correlation coefficient for the following data.

X	20	11	72	65	43	29	50
Y	60	63	26	35	43	51	35

[8]

Q. 7 a) An urn contains 3 white and 7 red balls and another urn contains 10 white and 6 red balls. One ball is drawn from each urn. What is the probability that (i) the balls will be of different colours, (ii) of the same colour.

[8]

b) Define combined mean. The average income of the factory workers was Rs. 270. The mean income of 70 male workers was Rs. 300. Find the mean income of 30 female workers.

[8]

Q. 8 Write note on any four of the following:

[12]

a) Meaning of Statistics.

b) Scatter diagram

c) Requirements of good measures of central tendency

d) Construction of Pie diagram.

e) Types of correlation.

f) Bayes' theorem.

Seat No.

MAR_APR 2025 SUMMER EXAMINATION
11949 Bachelor of Computer Application(BCA) NEP 2.0
Sub. Name: ERP
Sub. Code: 110989/94742/91182

Day and Date: MAY ,03-05-2025**Total Marks: 80****Time: 02:30 PM To 05:30 PM****Instructions: 1. Figures to the right indicate full marks****Special Inst.: 1)Que. 1 and Que.8 are compulsory.****2) Attempt any three questions from Que. No.2 to Que No.7.****Q1) Choose appropriate from following options.****[12]**

- i. Which of the following is a primary function of an ERP system?
 - A. Accounting and Financial Management
 - B. Human Resource Management
 - C. Customer Relationship Management (CRM)
 - D. All of above
- ii. What is the purpose of ERP integration?
 - A. To create silos of data
 - B. To increase data redundancy
 - C. To streamline business processes and data flow across departments
 - D. To complicate data access for users
- iii. Which phase of the ERP implementation lifecycle involves selecting an appropriate vendor and negotiating contracts?
 - A. Requirements gathering
 - B. Vendor selection
 - C. Implementation
 - D. Training and deployment
- iv. Which factor is crucial for a successful ERP implementation?
 - A. Lack of stakeholder involvement
 - B. Resistance to change
 - C. Comprehensive training and support
 - D. Limited communication
- v. In ERP systems, the Production Planning module is often associated with which subsystem?
 - A. Material Requirements Planning (MRP)
 - B. Customer Relationship Management (CRM)
 - C. Inventory Control
 - D. Payroll Management

- vi.** An Enterprise is a group of people with -----
A. common goal
B. Separate goal for each department
C. multiple goals
D. two or more goals
- vii.** ----- approach reduce data redundancy and provide update information.
A. Legacy system
B. Information system
C. Integrated data model
D. Database
- viii.** ERP begins with -----
A. BPR
B. Selection of Vendor
C. SRS
D. Requirement Gathering
- ix.** -----is one of the benefit of supply chain management.
A. Easy process
B. Manufacturing make- to- stock products
C. Minimum time
D. Faster response to market changes
- x.** ERP implementation process has -----phases.
A. nine
B. two
C. ten
D. eleven
- xi.** In -----phase roles are identified and responsibilities assigned.
A. Project Planning
B. Gap Analysis
C. Reengineering
D. Configuration
- xii.** Normally the ERP package needs ----- of company's functional requirements.
A. 50%
B. 80%
C. 100%
D. 90%

Q2) What do you mean by BPR? Describe various phases of BPR.

[16]

- Q3)** Explain ERP Implementation life cycle with neat diagram. [16]
- Q4)** Explain Sales and Distribution module and Finance Module in ERP. [16]
- Q5)** Describe ERP Evolution in detail. Write direct & indirect benefits of ERP. [16]
- Q6)** Explain features of SAP and Oracle ERP system with their subsystems. [16]
- Q7)** Describe market overview of ERP and Explain future trends in ERP. [16]
- Q8)** Write a short notes on (any 4) [20]
- a. Gap analysis [5]
 - b. Inventory Module [5]
 - c. SCM [5]
 - d. Role of Consultant [5]
 - e. Selection criteria of an ERP [5]
 - f. Hidden Cost in ERP Implementation [5]

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -

This Question Paper may be distributed for following Subjects as common code.

सदरची प्रश्नपत्रिका खालील विषयांकरिता वितरित करता येईल.

- 1] (717) Bachelor of Computer Application (110989) ERP Part 2 SEM 4
- 2] (7824) Bachelor of Computer Application (CBCS)NEP (91182) ERP Part 2 SEM 4
- 3] (7810) B.C.A. (CBCS) (94742) ERP Part 2 SEM 4

Seat No.

MAR_APR 2025 SUMMER EXAMINATION
11949 Bachelor of Computer Application(BCA) NEP 2.0
Sub. Name: Computer Network and Internet
Sub. Code: 109537/84099/83375/94731/91171

Day and Date: APRIL ,30-04-2025**Total Marks: 80****Time: 10:30 AM To 01:30 PM****Instructions: 1. Figures to the right indicate full marks****Special Inst.: Que.1 and Que. 8 are compulsory and attempt any three Questions from Que. No. 2 to Que. No. 7****Q1) Solve following MCQ.****[12]**

- i. SMTP stands for
 - A. Simple mail transfer protocol
 - B. Sample mail transfer protocol
 - C. Simple mail transmission protocol
 - D. All of these
- ii. CRC stands for
 - A. Cycle Redundancy Check
 - B. Cyclic Redundancy Correction
 - C. Cyclic Repeater Check
 - D. Cyclic Redundancy Check
- iii. Data communication system within a building or campus is
 - A. MAN
 - B. LAN
 - C. WAN
 - D. PAN
- iv. The number of layers in OSI model is
 - A. 4
 - B. 5
 - C. 6
 - D. 7
- v. A normal Flooding technique is an example of
 - A. Semi casting
 - B. Unicasting
 - C. Telecasting
 - D. Broadcasting
- vi. The network layer is concerned with _____ of data

- A. Bits
 - B. Frames
 - C. Packets
 - D. Bytes
- vii.** Which network topology requires a central controller or hub?
- A. Ring
 - B. Bus
 - C. Star
 - D. Mesh
- viii.** Which layer provides the services to user?
- A. Application layer
 - B. Session layer
 - C. Presentation Layer
 - D. All of these
- ix.** The kind of “read-only” web where you can only read the Internet pages is
- A. Web 2.0
 - B. Web 1.0
 - C. Web 3.0
 - D. None of these
- x.** Serial transmission can be
- A. Parallel
 - B. Synchronous
 - C. Asynchronous
 - D. B or C
- xi.** The encryption process where same keys are used for encrypting and decrypting the information is known as _____ Encryption
- A. Asymmetric Key
 - B. Encryption Key
 - C. Sample Key
 - D. Symmetric Key
- xii.** Stop and wait is a _____ technique
- A. Line discipline
 - B. Flow control
 - C. Error control
 - D. Session management

Q2) Define computer network? Explain components of computer network? **[16]**

Q3) Explain simplex, half-duplex, and full-duplex transmission modes. Provide examples? **[16]**

- Q4)** What is OSI model? Explain different layers in OSI model? [16]
- Q5)** Describe various network topologies with its advantages and limitations. [16]
- Q6)** Define and distinguish between the LAN, MAN and WAN. Explain how it works? [16]
- Q7)** Explain common types of threats in computer networks? [16]
- Q8)** Write short note on any four [20]
- a. Analog and digital signals
 - b. Fiber optic cable
 - c. Types of errors
 - d. Web 3.0
 - e. Search engines
 - f. DNS

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -

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- 1] (7810) B.C.A. (CBCS) (83375) Computer Network and Internet Part 2 SEM 3
- 2] (717) Bachelor of Computer Application (84099) Computer Network and Internet Part 2 SEM 3
- 3] (7810) B.C.A. (CBCS) (94731) Computer Network and Internet Part 2 SEM 3
- 4] (717) Bachelor of Computer Application (109537) Computer Network and Internet Part 2 SEM 3
- 5] (7824) Bachelor of Computer Application (91171) Computer Network and Internet Part 2 SEM 3
(CBCS)NEP

Seat No.

MAR_APR 2025 SUMMER EXAMINATION
11949 Bachelor of Computer Application(BCA) NEP 2.0
Sub. Name: Data Structure using C
Sub. Code: 109538/84100/94732/83376/91172

Day and Date: MAY ,02-05-2025**Total Marks: 80****Time: 10:30 AM To 01:30 PM****Instructions: 1. Figures to the right indicate full marks****Special Inst.: 2. Que.1 and Que. 8 are compulsory.****3. Attempt any three Questions from Que. No. 2 to Que. No. 7.****Q1) Solve following MCQ.****[12]**

- i. Which of the following is not the application of stack?
 - A. Data Transfer between two asynchronous process
 - B. Compiler Syntax Analyzer
 - C. Tracking of local variables at run time
 - D. A parentheses balancing program
- ii. How can we initialize an array in C language?
 - A. `int arr[2]=(10, 20)`
 - B. `int arr(2)={10, 20}`
 - C. `int arr[2] = {10, 20}`
 - D. `int arr(2) = (10, 20)`
- iii. Which data structure is required to convert the infix to prefix notation?
 - A. Stack
 - B. Linked list
 - C. Binary tree
 - D. Queue
- iv. Which one of the following is not the type of the Queue?
 - A. Linear Queue
 - B. Circular Queue
 - C. Double ended Queue
 - D. Single ended Queue
- v. What is the advantage of selection sort over other sorting techniques?
 - A. It is faster than any other sorting technique
 - B. It is scalable
 - C. It works best for inputs which are already sorted
 - D. It requires no additional storage space
- vi. What is the advantage of bubble sort over other sorting techniques?

- A. Detects whether the input is already sorted
- B. Requires less memory space
- C. Time Consuming
- D. It is Faster

vii. _____ is a collection of similar elements where each element points to next element.

- A. Queue
- B. Linked list
- C. Stack
- D. Tree

viii. Which of the following is not Primitive data type?

- A. Arrays
- B. Integer
- C. Pointer
- D. String

ix. In which stage data or instructions are put into the computer system.

- A. Output
- B. Information
- C. Input
- D. Process

x. What is the advantage of bubble sort over other sorting techniques?

- A. Detects whether the input is already sorted
- B. Requires less memory space
- C. Time Consuming
- D. It is Faster

xi. At which position we have to insert element?

- A. At beginning of linked list
- B. At the end of linked list
- C. At the specified position in linked list
- D. All of above

xii. In which linked list node has no beginning and no end.

- A. Circular Linked list
- B. Singly Linked list
- C. Doubly Linked list
- D. Doubly Circular Linked list

Q2) A. Differentiate between linear and non linear data structure.

[8]

B. Illustrate Bubblesort with example.

[8]

Q3) A. Explain Array Implementation of Stack using C.

[8]

- B.** What is Queue? Describe types of Queue with example. [8]
- Q4)** What is linked list? Explain types of linked list with example. [16]
- Q5) A.** Explain concept of ADT in detail. [8]
B. Illustrate linear search with example. [8]
- Q6) A.** Describe data structure operations in detail. [8]
B. How to convert infix to prefix expression? [8]
- Q7) A.** Explain Linear Search and Binary Search methods with example. [8]
B. What is Circular queue? Explain in detail. [8]
- Q8)** Write short note on Any FOUR of the following [20]
- a.** Application of stack [5]
 - b.** Hashing [5]
 - c.** Data and Information [5]
 - d.** Indexed sequential search [5]
 - e.** Merge sort [5]
 - f.** Operations on Queue [5]

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -

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- 1] (7824) Bachelor of Computer Application (CBCS)NEP (91172) Data Structure using C Part 2 SEM 3
- 2] (717) Bachelor of Computer Application (109538) Data Structure Using C Part 2 SEM 3
- 3] (7810) B.C.A. (CBCS) (94732) Data Structure using C Part 2 SEM 3
- 4] (717) Bachelor of Computer Application (84100) Data Structure using C Part 2 SEM 3
- 5] (7810) B.C.A. (CBCS) (83376) Data Structure using C Part 2 SEM 3

Seat No. **MAR_APR 2025 SUMMER EXAMINATION****11949 Bachelor of Computer Application(BCA) NEP 2.0****Sub. Name: Human Resource Management and Materials Management****Sub. Code: 109540/84102/83378/94734/91174****Day and Date: MAY ,05-05-2025****Total Marks: 80****Time: 10:30 AM To 01:30 PM****Instructions: 1. Figures to the right indicate full marks****Special Inst.: 1) Que.1 and Que. 8 are compulsory and attempt any three Questions from Que. No.2 to Que. No. 7.****Q1) Multiple Choice Questions (12 questions for 1 mark each)****[12]****i.****What is the primary objective of Human Resource Management (HRM)?**

- A. To maximize profits by increasing the number of employees
- B. To ensure the optimal utilization of human resources
- C. To reduce employee wages and benefits
- D. To limit employee turnover at all costs

ii.**Which of the following is a scope of Human Resource Management?**

- A. Only handling recruitment
- B. Managing employee relations and welfare
- C. Designing marketing strategies
- D. Conducting market research

iii.**Which of the following is NOT a part of the selection procedure?**

- A. Screening resumes
- B. Conducting interviews
- C. Offering job benefits
- D. Checking references and background

iv. What is the primary objective of performance appraisal?

- A. To increase employee turnover
- B. To punish underperformers
- C. To assess employee performance and provide feedback
- D. To delay promotions

v. Which of the following best defines training?

- A. A punishment for low performance
 - B. A process to hire skilled labor
 - C. A process to improve employees' job-related skills
 - D. A method to reduce salaries
- vi.** Which of the following is a time-based method of wage payment?
- A. Piece rate system
 - B. Halsey plan
 - C. Time rate system
 - D. Profit sharing
- vii.** What is the main objective of Material Management?
- A. Increase advertising expenses
 - B. Ensure smooth flow of materials at minimum cost
 - C. Delay production processes
 - D. Maximize employee turnover
- viii.** Why is Material Management important in manufacturing?
- A. It increases production downtime
 - B. It helps maintain uninterrupted production
 - C. It delays procurement
 - D. It focuses only on marketing
- ix.** Which is NOT typically a future trend in Material Management in India?
- A. Digital transformation
 - B. AI-driven forecasting
 - C. Manual record-keeping
 - D. Sustainable sourcing
- x.** What is the main objective of purchasing in material management?
- A. To delay procurement
 - B. To procure materials of right quality at the right time and cost
 - C. To increase overhead costs
 - D. To eliminate storage needs
- xi.** Which of the following is NOT a type of inventory?
- A. Raw materials
 - B. Work-in-progress
 - C. Finished goods
 - D. Capital investment
- xii.** The EOQ (Economic Order Quantity) model helps in

- A. Determining the price of finished goods
- B. Finding the optimal order quantity to minimize total inventory costs
- C. Increasing warehouse space
- D. Reducing employee numbers

Q2)

- a. Explain Concept of Selection and explain the selection procedure in detail. **[8]**
- b. Define Human Resources Planning (HRP). Explain the objectives of HRP in detail. **[8]**

Q3)

- a. Define Human Resource Management (HRM) and explain its objectives, scope **[8]**
- b. Define the concept of Performance Appraisal. Discuss the Performance Appraisal methods **[8]**

Q4)

- a. Discuss the Need of Training and Development. Explain the training methods. **[8]**
- b. Explain the various methods of wage payments used in organizations. Discuss the key factors that determine the level of employee remuneration **[8]**

Q5)

- a. Define Material Management and discuss Functions of Material Management. **[8]**
- b. Discuss Importance of Material Management .Analyze the key challenges faced in Material Management today. **[8]**

Q6)

- a. Explain the concept of purchasing and Discuss how purchasing can be considered a profit centre. **[8]**
- b. Define inventory management and explain its importance in organizational operations **[8]**

Q7)

- a. Explain the various types of inventory commonly maintained by organizations. Discuss the different types of inventory costs. **[8]**

- b. What are the key stages in the purchasing cycle.

Q8) Write notes on (Any Four out of Six)

[20]

- a. Fringe Benefits
- b. Importance of Training
- c. Future of Material Management in India
- d. 5R in purchasing
- e. Vendor Managed Inventory
- f. HRP process

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -

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1] (717) Bachelor of Computer Application	(84102) Human Resource Management and Materials Managment	Part 2 SEM 3
2] (717) Bachelor of Computer Application	(109540) Human Resource Management and Materials	Part 2 SEM 3
3] (7810) B.C.A. (CBCS)	(83378) Human Resource Management and Materials Managment	Part 2 SEM 3
4] (7810) B.C.A. (CBCS)	(94734) Human Resource Management and Materials Managment	Part 2 SEM 3
5] (7824) Bachelor of Computer Application (CBCS)NEP	(91174) Human Resource Management and Materials Managment	Part 2 SEM 3

Seat No.

MAR_APR 2025 SUMMER EXAMINATION
11949 Bachelor of Computer Application(BCA) NEP 2.0
Sub. Name: Object Oriented Programming Using C++
Sub. Code: 110984/94738/91178

Day and Date: APRIL ,29-04-2025**Total Marks: 80****Time: 02:30 PM To 05:30 PM**

Instructions: 1. All questions are compulsory
2. Figures to the right indicate full marks

Special Inst.: 3. Q.1 and Q.8 are compulsory. Solve any three Questions from Q.2 to Q.7

Q1) Solve following MCQ.**[12]**

- i. Which of these is an advantage of OOP over POP?
- A. Less memory usage
 - B. Faster compilation
 - C. Code reusability through inheritance
 - D. Uses less number of keywords
- ii. What does data encapsulation ensure?
- A. Reduces execution time
 - B. Hides data from outside interference
 - C. Increases memory
 - D. None of the above
- iii. Which function is automatically invoked when an object is created?
- A. Member function
 - B. Destructor
 - C. Constructor
 - D. Inline function
- iv. Which keyword is used to define a friend function?
- A. buddy
 - B. associate
 - C. friend
 - D. allow
- v. What is the correct way to define a function outside the class?
- A. void className::functionName()
 - B. void functionName::className()
 - C. functionName::className()
 - D. className->functionName()

- vi.** What type of inheritance involves one base class and multiple derived classes?
- A. Multilevel
 - B. Hybrid
 - C. Hierarchical
 - D. Multiple
- vii.** Which operator is used for dynamic memory deallocation in C++?
- A. free
 - B. remove
 - C. delete
 - D. clear
- viii.** In which inheritance does a derived class inherit from more than one base class?
- A. Single
 - B. Multiple
 - C. Multilevel
 - D. Hierarchical
- ix.** What is the output determined at runtime using polymorphism called?
- A. Static Binding
 - B. Dynamic Binding
 - C. Early Binding
 - D. Pre-binding
- x.** What does this pointer point to?
- A. Current function
 - B. Current class
 - C. Current object
 - D. Current file
- xi.** Pointers to derived classes are useful for:
- A. Dynamic binding
 - B. Static polymorphism
 - C. Inline function calling
 - D. None of the above
- xii.** Which of the following is a correct C++ data type?
- A. num
 - B. real
 - C. float
 - D. decimal

Q2) A. Compare Procedure-Oriented Programming and Object-Oriented **[8]**

Programming. Explain any four features of OOP.

- B.** Define a class Book with attributes like title, author, and price. Write member functions to input and display book details. Use constructors. **[8]**
- Q3)** What is the role of constructors in inheritance? How can base class constructors be called in a derived class? Explain with example. **[16]**
- Q4) A.** Define pure virtual function. Explain abstract class with an example. **[8]**
B. Explain the use of this pointer in C++ with a program **[8]**
- Q5)** Differentiate between compile-time and run-time polymorphism. Give an example of each. **[16]**
- Q6) A.** Explain the concept of operator overloading in C++. **[8]**
B. What are access specifiers in C++? Compare private, public, and protected with an example. **[8]**
- Q7)** What is data hiding in C++? Explain with an example. **[16]**
- Q8)** Write short notes on (any four) **[20]**
- a.** Inline functions
 - b.** Scope resolution operator
 - c.** Default arguments
 - d.** Constructor Types
 - e.** Pointers to Objects
 - f.** Friend Function

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -

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- 1] (7824) Bachelor of Computer Application (CBCS)NEP (91178) Object Oriented Programming Using C++ Part 2 SEM 4
- 2] (7810) B.C.A. (CBCS) (94738) Object Oriented Programming Using C Part 2 SEM 4
- 3] (717) Bachelor of Computer Application (110984) Object Oriented Programming using C Part 2 SEM 4

Seat No.

MAR_APR 2025 SUMMER EXAMINATION
11949 Bachelor of Computer Application(BCA Sci) NEP 2.0

Sub. Name: PHP

Sub. Code: 83385/94740/91180/110987

Day and Date: MAY ,05-05-2025**Total Marks: 80****Time: 02:30 PM To 05:30 PM****Instructions:**

- Special Inst.:** 1) Q.1 and Q.8 are compulsory.
2) Attempt any three Questions from Q.2 to Q.7
3) Figures to the right indicate marks.

- Q1)** Multiple Choice Questions (12 questions for 1 mark each) 12 **[12]**
- I) Which of the following is a correct PHP tag?
- A <?php ?>
B <php>
C <? >
D <% %>
- II) Which of the following data types is not supported in PHP?
- A. String
B. Array
C. Object
D. Character
- III) What is the keyword used to define a function in PHP?
- A. function
B. def
C. create
D. func
- IV) What is the use of fopen() function in PHP?
- a) The fopen() function is used to open folders in PHP
b) The fopen() function is used to open remote server
c) The fopen() function is used to open files in PHP
d) None of the above
- V) Which of the following function is used to set cookie in PHP?
- a) createcookie()
b) makecookie()
c) setcookie()
d) None of the above
- VI) Which of the following function is used to sort an array in descending order?

- a) sort()
- b) asrot()
- c) dsort()
- d) rsort()

VII) PHP's numerically indexed array begin with position ____.

- A. 1
- B. 2
- C. 0
- D. -1

VIII) Which looping structure is best for iterating over an associative array in PHP?

- A. for
- B. foreach
- C. while
- D. do-while

IX) Which of the following type cast is not correct?

- A. real
- B. double
- C. decimal
- D. boolean

X) In PHP, which function is used to execute a SQL query against a MySQL database?

- A. mysql_query()
- B. mysqli_query()
- C. execute_sql()
- D. run_query()

XI) Which one of the following function is used to start a session?

- a) start_session()
- b) session_start()
- c) session_begin()
- d) begin_session()

XII) What is the main advantage of using prepared statements in PHP for database queries?

- A. Increased query execution speed
- B. Reduced memory usage
- C. Enhanced security against SQL injection attacks
- D. Simplified syntax

Q2) Explain the different types of operators available in PHP with example.

[16]

- Q3)** Explain the different conditional statements in PHP with suitable example. **[16]**
- Q4)** Illustrate the different built-in functions on array in PHP with suitable example. **[16]**
- Q5)** How to connect MySQL database through PHP and retrieve data through it? **[16]**
Explain with suitable example.
- Q6)** Explain the different session management techniques used in PHP. **[16]**
- Q7)** What is exception? How to handle custom exception using PHP? **[16]**
- Q8)** Write notes on (Any Four out of Six) **[20]**
I) Magic constants in PHP
II) continue statement in PHP
III) Defining and calling function in PHP
IV) File functions in PHP
V) File permissions in PHP
VI) Prepared statements

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -

This Question Paper may be distributed for following Subjects as common code.

सदरची प्रश्नपत्रिका खालील विषयांकरिता वितरित करता येईल.

- 1] (717) Bachelor of Computer Application (110987) PHP Part 2 SEM 4
- 2] (7810) B.C.A. (CBCS) (94740) PHP Part 2 SEM 4
- 3] (7824) Bachelor of Computer Application (CBCS)NEP (91180) PHP Part 2 SEM 4
- 4] (7810) B.C.A. (CBCS) (83385) PHP Part 2 SEM 4

Seat No.

MAR_APR 2025 SUMMER EXAMINATION
11949 Bachelor of Computer Application(BCA) NEP 2.0
Sub. Name: RDBMS
Sub. Code: 83381/84645

Day and Date: MAY ,03-05-2025**Total Marks: 70****Time: 02:30 PM To 05:30 PM****Instructions: 1. Figures to the right indicate full marks****Special Inst.: 1) Que.1 and Que. 6 are compulsory****2) Attempt any three Questions from Que. No.2 to Que. No. 5.****Q1) A. Multiple Choice Questions. [10]**

- i. The attribute name could be structured as an attribute consisting of first name, middle initial, and last name. This type of attribute is called.....
- A. simple attribute
 - B. composite attribute
 - C. multivalued attribute
 - D. derived attribute
- ii. How can you fetch unique values from a column?
- A. Unique
 - B. Distinct
 - C. Single
 - D. Uno
- iii. Which keyword is used to join two tables in MySQL?
- A. Connect
 - B. Link
 - C. Join
 - D. Combine
- iv. Which command is used to create a new database in MySQL?
- A. Create new database
 - B. Add database
 - C. New database
 - D. Create database
- v. What type of join returns only rows when there is at least one match in both tables?
- A. Left join
 - B. Right join
 - C. Inner join
 - D. Full join

vi. Which command is used to remove a specific row from a table?

- A. Remove
- B. Drop
- C. Delete
- D. Destroy

vii What is data in a MySQL database organized into?

- A. tables
- B. networks
- C. objects
- D. file systems

vii Suppose you want to select a database named 'sampledb' as the default database. Which of the following commands do you use?

- A. select database()
- B. select database sampledb
- C. use database sampledb
- D. use sampledb

ix. The number of attributes in the following SQL table is _____ .

Create table employee (
 emp_name char(30),
 emp_id int
):

- A. 30
- B. 1
- C. 2
- D. 3

x. Which clause is used with the group by clause to filter grouped results in SQL?

- A. Where
- B. Order by
- C. Having
- D. Like

B. Attempt any two questions.

[10]

1. Describe database security threats.
2. Illustrate TCL commands in MySQL.
3. Explain outer join in MySQL.

Q2) What is a stored procedure? Explain creating and executing procedures with [10] examples.

Q3) Describe group by and having clause with appropriate examples.

[10]

- Q4)** Illustrate different DDL commands used in MySQL. [10]
- Q5)** What is a DBA? Explain the role and responsibilities of a DBA in detail. [10]
- Q6)** Write notes on (any four). [20]
- a. Difference between DBMS and RDBMS
 - b. Math functions
 - c. If statement
 - d. Cursor
 - e. Sub queries
 - f. RDBMS terminologies

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -

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सदरची प्रश्नपत्रिका खालील विषयांकरिता वितरित करता येईल.

1] (7810) B.C.A. (CBCS) (83381) RDBMS Part 2 SEM 4

2] (717) Bachelor of Computer Application (84645) RDBMS Part 2 SEM 4

Seat No.

MAR-APR 2025 SUMMER EXAMINATION
11949 Bachelor of Computer Application(BCA) NEP 2.0
Sub. Name: Software Engineering
Sub. Code: 110986/94739/91179

Day and Date: APRIL ,30-04-2025**Total Marks: 80****Time: 02:30 PM To 05:30 PM****Instructions: 1. Figures to the right indicate full marks****Special Inst.: Que.1 and Que. 8 are compulsory and attempt any three Questions from Que. No.2 to Que. No. 7.****Q1) Solve following MCQ.****[12]**

- i. Attributes of good software is _____
 - A. Development
 - B. Maintainability & functionality
 - C. Functionality
 - D. Maintainability
- ii. In which step of SDLC actual programming of software code is done?
 - A. Development and Documentation
 - B. Maintenance and Evaluation
 - C. Design
 - D. Analysis
- iii. Why do bugs and failures occur in software?
 - A. Lack of training on required skills
 - B. Because of Technology
 - C. Both A and B
 - D. None of the above
- iv. Which of the following is not a part of Software evolution?
 - A. Re-engineering activities
 - B. Maintenance activities
 - C. Development activities
 - D. Negotiating with client
- v. _____ specification is also known as SRS document.
 - A. white-box
 - B. grey-box
 - C. black-box
 - D. None of the above
- vi. Quality Management is known as _____

- A. SQI
 - B. SQA
 - C. SQM
 - D. SQA and SQM
- vii.** _____ is a software development life cycle model that is chosen if the development team has less experience on similar projects.
- A. Iterative Enhancement Model
 - B. RAD
 - C. Spiral
 - D. Waterfall
- viii.** Who proposed the spiral model?
- A. Barry Boehm
 - B. Pressman
 - C. Royce
 - D. IBM
- ix.** _____ is a software development activity that is not a part of software processes.
- A. Validation
 - B. Specification
 - C. Development
 - D. Dependence
- x.** _____ is defined as the process of generating analysis and designing documents?
- A. Re-engineering
 - B. Software engineering
 - C. Reverse engineering
 - D. Science and engineering
- xi.** What does SDLC stand for in software engineering?
- A. Software Debugging Life Cycle
 - B. Software Development Life Cycle
 - C. System Design Life Cycle
 - D. Software Delivery Life Cycle
- xii.** Which process model is built around phases and is linear in nature?
- A. Waterfall model
 - B. Scrum
 - C. RAD (Rapid Application Development)
 - D. Kanban

Q2) Explain in detail Spiral Model and Waterfall Model?

[16]

- Q3)** Explain “Library Management System” Case Study? [16]
- Q4)** Explain Input and Output Design concept like - I/O design considerations, Structured Chart, HIPO chart with proper examples? [16]
- Q5)** What is Software Testing? Explain Types of Software Testing? [16]
- Q6)** Explain DFD and ERD with Suitable example? [16]
- Q7)** What is Requirement Engineering? Explain types of Requirements and Requirement Elicitation Techniques? [16]
- Q8)** Write short note on (Any Four) [20]
- a. Characteristics of good SRS
 - b. Data Dictionary.
 - c. Quality Assurance
 - d. System and its Characteristics
 - e. Verification and Validation Process
 - f. Cost of Quality

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -

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- 1] (717) Bachelor of Computer Application (110986) Software Engineering Part 2 SEM 4
- 2] (7824) Bachelor of Computer Application (CBCS)NEP (91179) Software Engineering Part 2 SEM 4
- 3] (7810) B.C.A. (CBCS) (94739) Software Engineering Part 2 SEM 4

Seat No.

MAR_APR 2025 SUMMER EXAMINATION
11949 Bachelor of Computer Application(BCA) NEP 2.0
Sub. Name: Entrepreneurship Development
Sub. Code: 83384/84648

Day and Date: MAY ,02-05-2025**Total Marks: 70****Time: 02:30 PM To 05:30 PM****Instructions: 1. Figures to the right indicate full marks****Special Inst.: Q.1,Q.2 and Q.8 are compulsory**
Attempt any THREE from Q.3 to Q.7**Q1) Solve following MCQ.****[10]**

- i. The term entrepreneur is derived from..... language
 - A. German
 - B. Greek
 - C. French
 - D. English
- ii. According to David McClelland Need for..... Is essential entrepreneurial motivation
 - A. Power
 - B. Achievement
 - C. Affiliation
 - D. Esteem
- iii. Trade payable is a source of finance
 - A. Short-term
 - B. Long-term
 - C. Moderate
 - D. internal
- iv. Which of the following is internal source of finance?
 - A. Debentures
 - B. Bank loan
 - C. trade creditors
 - D. General reserves
- v. Make in India scheme is designed to
 - A. Facilitate investment
 - B. Foster innovation
 - C. Protect intellectual property
 - D. All the above

- vi.** 'M' in Mudra stands for
A. Money
B. Micro
C. Macro
D. Machine
- vii.** is the founder of HCL
A. Azim Premji
B. Narayan Murthy
C. Shiv Nadar
D. Sunder Pichai
- viii.** Which of the following institutions functions at district level for development of industrial sector?
A. DIC
B. SIDBI
C. SISI
D. NSIC
- ix.** Which of the following is not the challenge faced by women entrepreneurs?
A. Male dominated society
B. Low Mobility
C. Low Intelligence
D. Lack of family support
- x.** Prime Minister Rojgar Yojana is implemented through.....
A. NABARD
B. RBI
C. SIDBI
D. DIC

Q2) Answer in Short (any 2) **[10]**

- a.** Characteristics of successful entrepreneur **[5]**
- b.** Sources of business idea **[5]**
- c.** MUDRA **[5]**

Q3) Explain in detail the concept and evolution of the term Entrepreneur **[10]**

Q4) Explain in detail role of entrepreneur in economic development of the region **[10]**

Q5) What are the broader content of business plan or project report? **[10]**

Q6) Explain the role and function of any two major institutions in entrepreneurship development in India. **[10]**

Q7) What are different types of finance essential for business venture? Also explain [10]
major sources of finance

Q8) Write short note Any 4 [20]

- a. Narayan Murthy [5]
- b. Venture capital [5]
- c. Digital business model [5]
- d. Environmental analysis [5]
- e. Women entrepreneurs in India [5]
- f. Azim Premji [5]

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -

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सदरची प्रश्नपत्रिका खालील विषयांकरिता वितरित करता येईल.

- 1] (717) Bachelor of Computer Application (84648) Entrepreneurship Development Part 2 SEM 4
- 2] (7810) B.C.A. (CBCS) (83384) Entrepreneurship Development Part 2 SEM 4

Seat No.

MAR_APR 2025 SUMMER EXAMINATION
11949 Bachelor of Computer Application(BCA) NEP 2.0
Sub. Name: Entrepreneurship Development
Sub. Code: 110988/94741/91181

Day and Date: MAY ,02-05-2025**Total Marks: 80****Time: 02:30 PM To 05:30 PM****Instructions: 1. Figures to the right indicate full marks****Special Inst.: Q.1 and Q.8 are compulsory**
Attempt any three from Q.2 to Q.7.**Q1) Solve following MCQ.****[12]**

- i. Identify odd man out
 - A. Risk bearer
 - B. Innovator
 - C. Risk adverse
 - D. Need for achievement
- ii. Environmental analysis does not include analysis
 - A. Economic
 - B. Social
 - C. Organizational structure
 - D. Legal
- iii. Feasibility report is prepared.....
 - A. Before starting a project
 - B. At the time of raising funds for the project
 - C. Before maturity stage of the project
 - D. As per the convenience of the promoter
- iv. Project analysis includes
 - A. Financial analysis
 - B. Operational analysis
 - C. marketing analysis
 - D. All the above
- v. Start-up India and Stand-up India are the initiatives to promote.....
 - A. Finance Department
 - B. Self Empowerment
 - C. Self Employment
 - D. Project planning
- vi. Founder of Wipro.....

- A. Azim Premji
- B. Narayan Murthy
- C. Sunder Pichai
- D. Shiv Nadar

- vii.** NSIC is Institution
- A. Government of India
 - B. NGO
 - C. Autonomous
 - D. Private
- viii.** Prime Minister Rojgar Yojana is implemented through.....
- A. NABARD
 - B. RBI
 - C. SIDBI
 - D. DIC
- ix.** Idea generation, idea screening, concept testing are stages of
- A. Project Planning
 - B. Project evaluation
 - C. Raising finance
 - D. Venture funding
- x.** Innovative projects with high risk usually go for.....
- A. Loan from commercial bank
 - B. Venture Funding
 - C. Debentures
 - D. Public Deposits
- xi.** differentiated between person bearing risks and person supplying capital
- A. Jean Baptiste Say
 - B. Karl Vesper
 - C. Robert Hisrich
 - D. Richard Cantillon
- xii.** Is the type of equity funding
- A. Loan
 - B. Debentures
 - C. Venture Capital
 - D. All the above

Q2) Define the term 'Entrepreneur. Explain in detail evolution of the concept [16]
'entrepreneur'.

Q3) Describe the major qualities of successful entrepreneur

[16]

- Q4)** Give a detailed outline of content of a feasibility report. **[16]**
- Q5)** Explain different types of debt and equity finance. **[16]**
- Q6)** Write a detailed note on women entrepreneurs in India, also mention major problems of women entrepreneurs **[16]**
- Q7)** Explain in detail role and function of SIDBI and DIC. **[16]**
- Q8)** Write short note Any 4 **[20]**
- a.** Role of entrepreneur in economic development **[5]**
 - b.** Entrepreneurial opportunities in India **[5]**
 - c.** MUDRA **[5]**
 - d.** Sources of business idea **[5]**
 - e.** Importance of digital marketing **[5]**
 - f.** Steve Jobs **[5]**

End Of Question Paper

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- 3] (7810) B.C.A. (CBCS) (94741) Entrepreneurship Development Part 2 SEM 4