



**B.C.A. – III<sup>rd</sup> Year**

**SEM – V & VI**

**Previous Year**

**Question Papers**

**Academic Year**

**(2024-25)**





**B.C.A. – III<sup>rd</sup> Year**

**SEM – V**

**Previous Year**

**Question Papers**

**Academic Year**

**(2024-25)**



Seat  
No.

SG - 309

Total No. of Pages : 3

**B.C.A. (Part-III) (Semester -V) CBCS  
Examination, 2024  
Data Warehousing and Data mining  
Subject Code: 88233**



**Day and Date : Wednesday, 27-11-2024**

**Total Marks : 70**

**Time : 10.30 a.m. to 1.30 p.m.**

**Instructions:**

1. Figure to right indicates full marks.
2. Q.1 and Q.6 are compulsory.
3. Attempt any three questions from Q.2 To Q.5

**Q.1 A) Select Correct alternatives**

**(10)**

1. The full form of KDD is .....
  - A. Knowledge database
  - B. Knowledge discovery in database
  - C. Knowledge data house
  - D. Knowledge data definition
2. Incorrect or invalid data is known as .....
  - A. changing data
  - B. noisy data
  - C. outliers
  - D. missing data
3. The star schema is composed of ..... fact table
  - A. one
  - B. two
  - C. three
  - D. four
4. Group of similar objects that differ significantly from other objects is named as
  - A. Classification
  - B. cluster
  - C. Community
  - D. none of these





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**Q3)** What is Data mining? Explain KDD process in detail. (10)

**Q.4)** What is frequent item ser? Explain apriori algorithm in detail? (10)

**Q.5)** What is clustering? Explain K-means algorithm. (10)

**Q.6) Short note (any four)** (20)

- a) Decision tree
- b) OLAP
- c) Multi-dimensional data model
- d) Graph mining
- e) Hierarchical clustering
- f) Data mining task

□□□



Seat No. 

**MAR-APR 2025 SUMMER EXAMINATION**  
**11949 Bachelor of Computer Application(BCA) NEP 2.0**

**Sub. Name: Data Warehousing and Data Mining**

**Sub. Code: 88233/88659** *BCA-III Sem.V*



**Day and Date: APRIL ,22-04-2025**

**Total Marks: 70**

**Time: 10:30 AM To 01:30 PM**

**Instructions: 1. Figures to the right indicate full marks**

**Special Inst.: 1. Question No.1A, 2 and question No.7 are compulsory and Attempt any three questions from question no 3 to question no 6.**

- Q1) A.** Solve following MCQ. **[10]**
- i.** From following, Which is a characteristics of data warehouse
    - A. Subject-oriented
    - B. Non-volatile
    - C. Time variant
    - D. All of above
  - ii.** Process of removing deficiencies and loopholes in data is called as \_\_\_\_\_
    - A. Data Aggregation
    - B. Data Extraction
    - C. Compression of data
    - D. Data Cleaning
  - iii.** DSS in DW stands for
    - A. Decision Support system
    - B. Decision Single System.
    - C. Data Storable System
    - D. Data Support System
  - iv.** The star schema is composed of \_\_\_\_\_ fact table.
    - A. 1
    - B. 2
    - C. 3
    - D. 4
  - v.** Data warehouse used for.....
    - A. Online Analytical Processing (OLAP).
    - B. Offline Analytical Processing.
    - C. Online Transactional Processing (OLTP).
    - D. None of above
  - vi.** .....is collecting raw data and translating it into usable information.
    - A. Data processing



- B. Data Analysis
- C. Both A and B
- D. None of above

vii The process of making a group of abstract objects into classes of similar objects is known as.....

- A. Partition
- B. Clustering
- C. Sampling
- D. Classification

vii Which one of the clustering technique needs the merging approach?

- i. A. Partitioned
- B. Naïve Bayes
- C. Hierarchical
- D. Both A and C

ix. A multidimensional model views data in the form of a .....

- A. Facts
- B. Data-cube.
- C. Dimensions
- D. All of above

x. ETL stands for \_\_\_\_\_

- A. Effect, transfer, and load
- B. Explain, transfer and load q
- C. Extract, transfer, and load
- D. Extract, transform, and load

- Q2)** Write short answers (Any two) [10]
- a. Describe different applications of data mining. [5]
  - b. What are the types of data in cluster analysis? [5]
  - c. Describe Bayesian classification. [5]
- Q3)** Define Data warehouse? Explain Architecture of DW? [10]
- Q4)** Define data mining? Explain functionalities issue in data mining. [10]
- Q5)** What is graph sampling? Discuss tree and sequence mining. [10]
- Q6)** What is partitioning? Discuss K mean partitioning method in detail. [10]
- Q7)** Write short note on (Any Four) [20]



- a. KDD process [5]
- b. Decision Tree [5]
- c. Data mining tasks [5]
- d. Clean and transform data in data warehouse [5]
- e. Apriori algorithm [5]

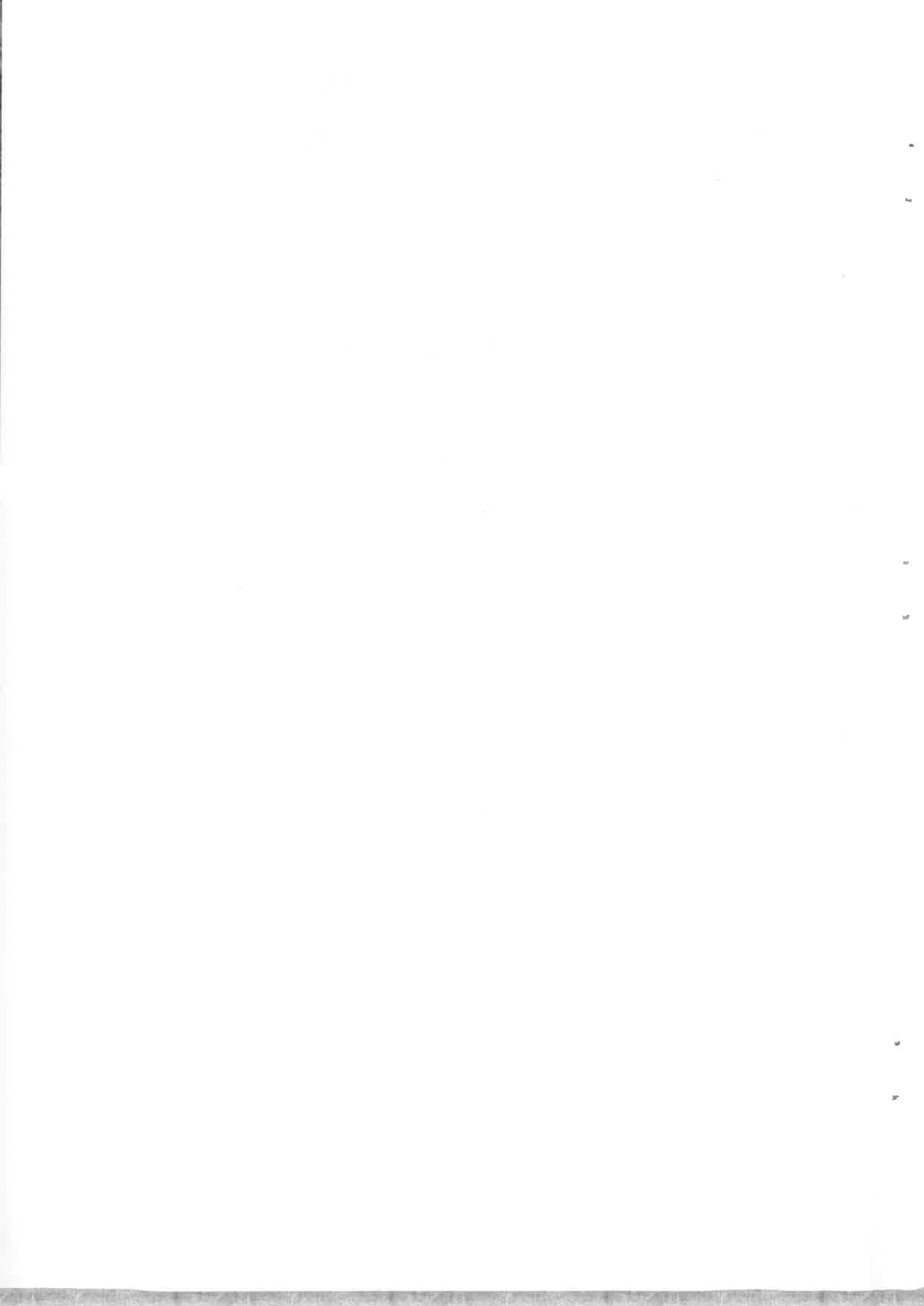
## End Of Question Paper

### 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] (7810) B.C.A. (CBCS) (88233) Data Warehousing and Data Mining Part 3 SEM 5
- 2] (717) Bachelor of Computer Application (88659) Data Warehousing and Data Mining Part 3 SEM 5



Seat No.	
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Total No. of Pages : 3

Course Name- B.C.A. (CBCS) III  
Examination, 2024 Sem. V

Subject - Python Programming  
Subject Code - 88235

Day and Date : Friday, 29-11-2024

Total Marks : 70

Time : 10.30 a.m. to 1.30 p.m.

**Instructions:**

- 1) Que. 1 and Que. 6 are compulsory
- 2) Attempt any three Questions from Que. No.2 to Que. No. 5.
- 3) Figures to the right indicate marks.

**Q.1) A. Multiple Choice Questions**

**(10)**

I. Which one is NOT a feature of Python language?

- |                         |                     |
|-------------------------|---------------------|
| a) Interpreted language | b) Portable         |
| c) High level language  | d) Case insensitive |

II. Which one of the following has the same precedence level?

- a) Addition and Subtraction
- b) Multiplication, Division and Addition
- c) Multiplication, Division, Addition and Subtraction
- d) Addition and Multiplication

III. What arithmetic operators cannot be used with strings in Python?

- |      |                  |
|------|------------------|
| a) * | b) -             |
| c) + | d) None of these |

IV. Which of the following is a core data type in Python programming?

- |               |                     |
|---------------|---------------------|
| a) Tuples     | b) Lists            |
| c) Dictionary | d) All of the above |



V. Which of the following statements is used to create an empty set in Python?

- a) ()
- b) []
- c) {}
- d) set()

VI. Which one of the following is the use of function in python?

- a) Functions don't provide better modularity for your application
- b) you can't also create your own functions
- c) Functions are reusable pieces of programs
- d) All of the mentioned

VII. Which of the following is a Python tuple?

- a) {1,2,3}
- b) {}
- c) [1, 2, 3]
- d) (1, 2, 3)

VIII. In Python, the primary use of the tell() method is that:

- a) It tells the end position within the file
- b) It tells the current position within the file
- c). It tells if the file is opened
- d) None of the above

IX. The sleep function under the time module is used to

- a) Pause the code for the specified number of seconds
- b) Return the specified number of seconds, in terms of milliseconds.
- c) Stop the execution of the code
- d) None of the above

X. In Python context, what does GUI stand for?

- a) Golfing Union of Ireland
- b) General User Interface
- c) Graphical User Interface
- d) Graphical Unit Interface



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**B. Give Short answers (Any two)**

(10)

- a) Identify the different applications of Python,
- b) Explain continue and pass statement with example.
- c) Explain the basic GUI programming in python.

**Q.2) Explain the different conditional statements in python with example. (10)**

**Q.3) Explain the different built-in functions on string with example. (10)**

**Q.4) What is tuple? Identify the basic operations on tuple with example. (10)**

**Q.5) What is dictionary? Identify the basic operations on dictionary with exammn ple. (10)**

**Q.6) Write notes on (Any Four) (20)**

- a) Features of Python
- b) Lambda functions
- c) List methods
- d) Set operations
- e) Math module
- f) Reading files in Python

□□□



Seat No. **MAR\_APR 2025 SUMMER EXAMINATION****11949 Bachelor of Computer Application(BCA) NEP 2.0****Sub. Name: Python Programming** *BCA-III sem V***Sub. Code: 88235/88661****Day and Date: APRIL ,24-04-2025****Time: 10:30 AM To 01:30 PM****Instructions: 1. Figures to the right indicate full marks****Special Inst.: Q.1 and Q.6 are compulsory and attempt any three questions from Q.2 and Q.5****Total Marks: 70**

- Q1) A.** Multiple Choice questions (10 questions for 1 mark each) **[10]**
- i. Is Python code compiled or interpreted?
    - A. Python code is both compiled and interpreted
    - B. Python code is neither compiled nor interpreted
    - C. Python code is only compiled
    - D. Python code is only interpreted
  - ii. Which keyword is used for function in Python language?
    - A. Function
    - B. def
    - C. Fun
    - D. Define
  - iii. What is the order of precedence in python?
    - A. Exponential, Parentheses, Multiplication, Division, Addition, Subtraction
    - B. Exponential, Parentheses, Division, Multiplication, Addition, Subtraction
    - C. Parentheses, Exponential, Multiplication, Addition, Division, Subtraction
    - D. Parentheses, Exponential, Multiplication, Division, Addition, Subtraction
  - iv. Which of the following is not a core data type in Python programming?
    - A. Tuples
    - B. Lists
    - C. Class
    - D. Dictionary
  - v. Which of the following statements is used to create an empty set in Python?
    - A. ()
    - B. []
    - C. {}
    - D. set()
  - vi. To add a new element to a list we use which Python command?
    - A. list1.addEnd(5)



- B. list1.addLast(5)
- C. list1.append(5)
- D. list1.add(5)

vii Which of the following is a Python tuple?

- A. {1, 2, 3}
- B. {}
- C. [1, 2, 3]
- D. (1, 2, 3)

vii What is output of print(math.pow(3, 2))?

- i. A. 9.0
- B. 3.2
- C. 9
- D. None of these

ix. Which of the following statements is true?

- A. When you open a file for reading, if the file does not exist, an error occurs
- B. When you open a file for writing, if the file does not exist, a new file is created
- C. When you open a file for writing, if the file exists, the existing file is overwritten with the new file
- D. All of these

x. What GUI stands for?

- A. Graph user interaction
- B. Global user interaction
- C. Graphical user interface
- D. Graph user interface

**B. Short answer questions (Any two out of three) [10]**

- I) How to access and update values in string?
- II) Explain the concept of lambda functions in Python.
- III) Identify any five functions available in calendar module.

**Q2) What are the different conditional statements available in Python? [10]**

**Q3) Illustrate the different operations performed on Tuple with suitable example. [10]**

**Q4) Illustrate the different operations performed on Set with suitable example. [10]**

**Q5) Explain the reading and writing of files in Python with suitable example. [10]**

**Q6) Write notes on (Any Four out of Six) [20]**

**a. Features of Python [5]**

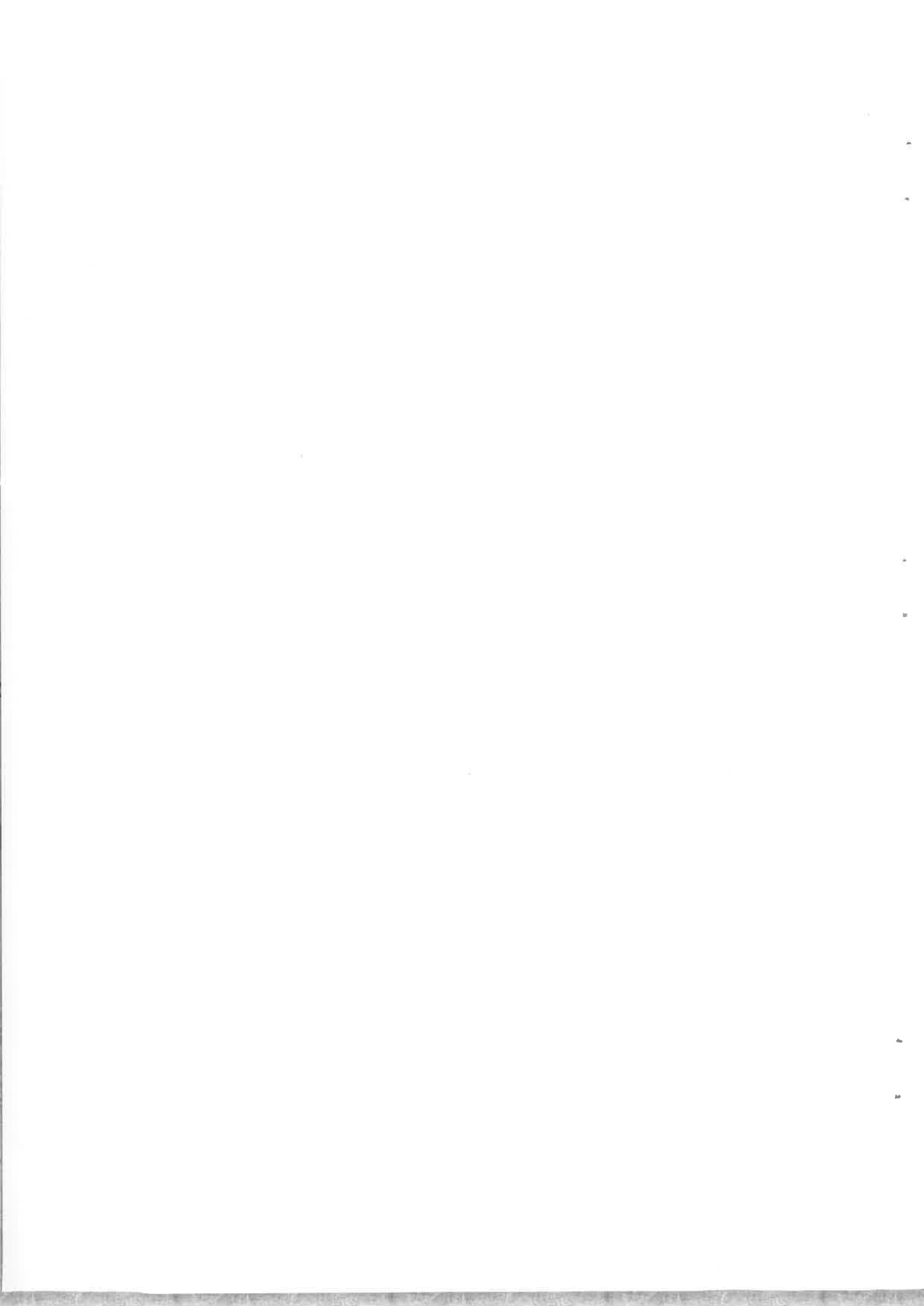
- |    |                      |     |
|----|----------------------|-----|
| b. | Operator precedence  | [5] |
| c. | While loop in Python | [5] |
| d. | List methods         | [5] |
| e. | Dictionary methods   | [5] |
| f. | GUI in Python        | [5] |



## 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] (7810) B.C.A. (CBCS) (88235) Python Programming Part 3 SEM 5
- 2] (717) Bachelor of Computer Application (88661) Python Programming Part 3 SEM 5





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**Total No. of Pages : 4**

Seat  
No.

**Oct.-Nov. 2024 Examination**  
**BCA PART III (SEM V) (CBCS)**  
**Java Programming**  
**Subject Code : 88232**

**Day and Date : Tuesday, 26-11-2024**  
**Time : 10:30 am to 1:30 pm**

**Total Marks : 70**

**Instructions:**

1. Question No.1 and question No.6 are compulsory
2. Attempt any 3 questions from question no 2 to question no 5.

**Q. 1 A) Choose correct options**

**10**

1) JRE stands for .....

- A. Java run ecosystem
- B. JDK runtime Environment
- C. Java Runtime Environment
- D. None of these

2) What are the types of memory allocated in memory in java?

- A. Heap memory
- B. Stack memory
- C. Both A and B
- D. None of these





3. Which class in Java is used to take input from the user?

- A. Scanner
- B. Input
- C. Applier
- D. None of these

4. What will be the output of following Java code?

```
publicclass Main {  
    publicstaticvoidmain(String[] args){  
        String str ="Hello";  
        str ="Bye";  
        System.out.println(str);  
    }  
}
```

- A. Hello
- B. Bye
- C. Error
- D. All of these

5. Which type of casting is lossy in Java?

- A. Widening typecasting
- B. Narrowing typecasting
- C. Manual typecasting
- D. All of these





6. Can the Java program accept input from the command line?
  - A. Yes, using command-line arguments
  - B. Yes, by access command prompt
  - C. No
  - D. None of these
  
7. Which of the following exception is thrown when divided by zero statement is executed?
  - A. NullPointerException
  - B. NumberFormatException
  - C. Arithmetic Exception
  - D. None
  
8. Which Java method is used to clear element of ArrayList?
  - A. deleteAll()
  - B. delete()
  - C. clearAll()
  - D. clear()
  
9. What is the full form of AWT?
  - A. Absolute window toolkit
  - B. Abstract window toolkit
  - C. Absolute wear kit
  - D. Abstract window tools



10. Which mechanism helps in the process of naming as well as visibility control of the classes and their content?

- A. Packages
- B. Interfaces
- C. Object
- D. None of the above

**B) Give short answer (Any two) 10**

1. What is a Constructor? What is difference between constructor and method in JAVA?
2. Define Class, Method and Object? Show the syntax to define these in java.
3. What is a Java Exception and its Types

Q.2 What is Multithreading? What are the ways to create multiple threads in Java 10

Q.3 What is an Operator? Explain type of operators in Java with example 10

Q.4 Write a java program to develop Login Window using AWT 10

Q.5 Explain the term polymorphism with an example. 10

**Q.6 Write short note on (Any 4) 20**

- a) This Keyword
- b) JVM
- c) states of a thread
- d) Garbage collection
- e) Event-Delegation Model
- f) AWT



Seat No. 

**MAR\_APR 2025 SUMMER EXAMINATION**  
**11949 Bachelor of Computer Application(BCA) NEP 2.0**

**Sub. Name: Java Programming** *BCA-III sem V*

**Sub. Code: 88232/88658**

**Day and Date: APRIL ,21-04-2025**

**Total Marks: 70**

**Time: 10:30 AM To 01:30 PM**

**Instructions: 1. Figures to the right indicate full marks**

**Special Inst.: 2. Que. 1 and Que. 6 are compulsory.**

**3. Solve ANY THREE questions from Que. 2 to Que. 5.**



**Q1) A.** Solve the following MCQ.

**[10]**

**i.** Which component of Java is responsible for running the compiled Java bytecode?

- A. JDK
- B. JVM
- C. JRE
- D. JIT

**ii.** Which of these keywords is used to define interfaces in Java?

- A. intf
- B. Intf
- C. interface
- D. Interface

**iii.** Which one of the following is not an access modifier?

- A. Protected
- B. Void
- C. Private
- D. Public

**iv.** Identify the correct definition of a package.

- A. A package is a collection of editing tools
- B. A package is a collection of classes
- C. A package is a collection of classes and interfaces
- D. A package is a collection of interfaces

**v.** A single try block must be followed by \_\_\_\_\_

- A. finally
- B. catch
- C. finally & catch
- D. All of these

**vi.** File Extension used in Java is \_\_\_\_\_.

**[1]**

**P.T.O.**



- A. .jav
- B. .java
- C. .javax
- D. None of the above

vii When the finalize method is called?

- A. Before garbage collection
- B. Before an object goes out of scope
- C. Before variable goes out of scope
- D. None of these

vii Java was designed by\_\_\_\_\_.

- i. A. Sun Microsystems
- B. Mozilla Corporation
- C. Amazon Inc
- D. Microsoft

ix. What is Runnable?

- A. Abstract class
- B. Interface
- C. class
- D. Method

x. What is the "super" keyword used in Java?

- A. To call a method or constructor of the superclass
- B. To create a new instance of a class
- C. To hide superclass method
- D. To make a method final

B. Write Short Answer (Any 2)

[10]

- a. What is Java? Describe the structure of java program with example.
- b. Explain various looping statements used in java.
- c. Write the difference between AWT and Swing in Java.

Q2) Define Inheritance in java and explain the types of inheritance.

[10]

Q3) What is Multithreading? Explain life cycle of thread.

[10]

Q4) What is AWT? Explain different components of AWT.

[10]

Q5) Define Encapsulation and explain getter and setter method in Java.

[10]

Q6) Write short note on ANY FOUR of the following.

[20]

a. Type Casting in Java.

[5]

b. Features of Java.

[5]

- c. Difference between static binding and Dynamic binding. [5]
- d. Layouts in AWT. [5]
- e. Package in Java [5]
- f. Polymorphism. [5]

## End Of Question Paper

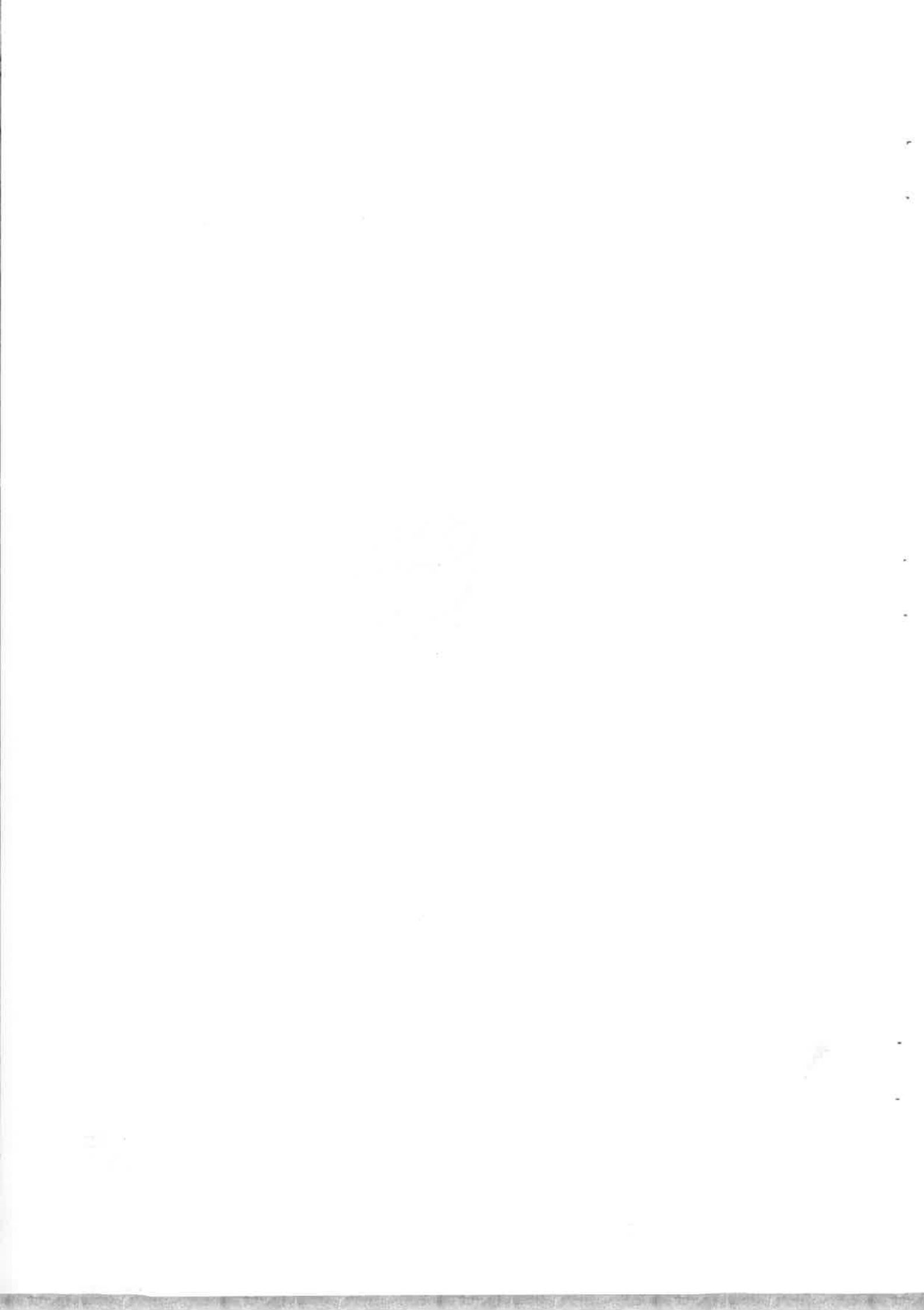
**Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -**

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सदरची प्रश्नपत्रिका खालील विषयांकरिता वितरित करता येईल.

- 1] (717) Bachelor of Computer Application (88658) Java Programming Part 3 SEM 5
- 2] (7810) B.C.A. (CBCS) (88232) Java Programming Part 3 SEM 5







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Total No. of Pages : 3

Seat No.

**OCT\_NOV\_2024 WINTER EXAMINATION**

**Bachelor of Computer Application(BCA) NEP 2.0**

**Sub. Name: Java Programming** *BCA III sem V*

**Sub. Code: 108794/96642**

**Day and Date: NOVEMBER ,26-11-2024**

**Total Marks: 80**

**Time: 10:30 AM To 01:30 PM**

**Instructions:** 1. Draw neat labelled diagrams wherever necessary  
2. Figures to the right indicate full marks

**Special Inst.:** Que.1 and Que. 8 are compulsory.  
Attempt any three Questions from Que. No.2 to Que. No. 7.

**Q1)** Choose the correct answer in each of the following questions.

**[12]**

- i. Who developed the Java programming language?
  - A. James Gosling
  - B. Dennis Ritchie
  - C. Bjarne Stroustrup
  - D. Guido van Rossum
  
- ii. What is the term used for Java's ability to detect and remove unused objects automatically?
  - A. Dynamic Memory Allocation
  - B. Garbage Collection
  - C. Object Pooling
  - D. Resource Deallocation
  
- iii. Which of the following is the most restrictive access modifier in Java?
  - A. public
  - B. protected
  - C. private
  - D. default (no modifier)
  
- iv. Which of the following is NOT a type of inheritance supported in Java?
  - A. Single Inheritance
  - B. Multiple Inheritance using classes
  - C. Multilevel Inheritance
  - D. Hierarchical Inheritance
  
- v. Which of the following is a superclass of all exceptions in Java?
  - A. RuntimeException
  - B. Throwable
  - C. Exception
  - D. Error

[1]

P.T.O.

- vi. Which of the following is NOT a valid state of a thread in Java?
- A. New
  - B. Runnable
  - C. Blocked
  - D. Started
- vii. Which of the following is the default package provided by Java?
- A. java.io
  - B. java.lang
  - C. java.util
  - D. java.awt
- viii. Which of the following is an example of compile-time polymorphism in Java?
- A. Method overloading
  - B. Method overriding
  - C. Inheritance
  - D. Interfaces
- ix. Which of the following best describes encapsulation?
- A. Making all fields public so they can be accessed directly
  - B. Hiding the implementation details and only exposing essential details
  - C. Allowing unrestricted access to class members
  - D. Making the class final
- x. What is the function of the add() method in AWT?
- A. To set the size of a component
  - B. To add components to a container
  - C. To set the visibility of a component
  - D. To handle events
- xi. What is the default layout manager for a JFrame?
- A. FlowLayout
  - B. BorderLayout
  - C. GridLayout
  - D. CardLayout
- xii. Which of the following is included in the JDK?
- A. JVM (Java Virtual Machine)
  - B. JRE (Java Runtime Environment)
  - C. Java compiler (javac)
  - D. All of the above

Q2)

- a. Explain Features of Java in details

[8]



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b. Explain static keyword with example. [8]

**Q3)**

a. What is thread? Explain Thread Life Cycle with example. [8]

b. What is the difference between AWT and SWING? [8]

**Q4)**

a. Explain this keyword with example. [8]

b. What is inheritance? Explain multilevel inheritance with example. [8]

**Q5)** What is constructor? Explain type of constructor with example. [16]

**Q6)**

a. Explain method overriding with example. [8]

b. Write a Java program to Calculate Simple Interest. [8]

**Q7)** What is an interface? Explain it with suitable example. [16]

**Q8)** Write notes on (Any Four out of Six) [20]

a. Encapsulation in Java. [5]

b. super keyword [5]

c. try-catch block [5]

d. Swing [5]

e. Wait() notify() notify all() methods [5]

f. Data types [5]

**\* \* \***



Seat No. **MAR\_APR 2025 SUMMER EXAMINATION****11949 Bachelor of Computer Application(BCA) NEP 2.0****Sub. Name: Java Programming** BCA-III sem.V**Sub. Code: 66425/109323/108794/96642****Day and Date: APRIL ,21-04-2025****Total Marks: 80****Time: 10:30 AM To 01:30 PM**

**Instructions:** 1. Draw neat labelled diagrams wherever necessary  
 2. 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. What does JDK stand for?  
 A. Java Deployment Kit  
 B. Java Development Kit  
 C. Java Design Kit  
 D. Java Debugging Kit
- ii. Which part of memory is used for the execution of a Java program?  
 A. Stack  
 B. Heap  
 C. Both Stack and Heap  
 D. Register
- iii. What is the output of the following code?  

```
for (int i = 0; i < 5; i++) {
  if (i == 3) break;
  System.out.print(i + " ");
}
```

 A. 0 1 2  
 B. 0 1 2 3  
 C. 1 2 3  
 D. 0 1 2 3 4
- iv. What does the "Is-A" relationship in Java signify?  
 A. Inheritance  
 B. Encapsulation  
 C. Polymorphism  
 D. Abstraction
- v. Which concept allows method overloading and method overriding in Java?  
 A. Inheritance



- B. Encapsulation  
C. Polymorphism  
D. Abstraction
- vi. What is the primary use of the super keyword in Java?  
A. To call the constructor of the parent class  
B. To access private members of the parent class  
C. To call the main() method of the parent class  
D. To access the child class constructor
- vii. What is the purpose of using packages in Java?  
A. To improve code readability  
B. To avoid class name conflicts  
C. To reduce execution time  
D. To allow multiple inheritance
- viii. Which Java class is used to create a thread by extending it?  
A. Thread  
B. Runnable  
C. Executor  
D. Process
- ix. Which of the following is the parent class of all exceptions in Java?  
A. Throwable  
B. Exception  
C. Runtime Exception  
D. Error
- x. What does AWT stand for in Java?  
A. Advanced Window Toolkit  
B. Abstract Window Toolkit  
C. Application Window Toolkit  
D. Automated Window Toolkit
- xi. Which method is used to set the background color of an AWT component?  
A. setColor()  
B. setBackground()  
C. setBackColor()  
D. setBgColor()
- xii. Which package contains Java Swing classes?  
A. java.awt  
B. java.swing  
C. javax.swing  
D. java.gui



- Q2)** Attempt the following questions. [16]
- Distinguish between C++ and Java? [8]
  - Explain Java environment in details. [8]
- Q3)** What is inheritance? Explain single and multilevel inheritances with example. [16]
- Q4)** What is Multithreading? How to create thread? Explain thread life cycle. [16]
- Q5)** Attempt the following questions. [16]
- Write a program to calculate area of rectangle. [8]
  - Write a program to find given number is odd or even. [8]
- Q6)** Attempt the following questions. [16]
- What is the difference between AWT and SWING? [8]
  - What is method overriding? Explain it with suitable example. [8]
- Q7)** Attempt the following questions. [16]
- Explain Data types in details. [8]
  - Explain final keyword with example. [8]
- Q8)** Write short notes on (Any Four out of Six) [20]
- Encapsulation in Java [5]
  - super keyword [5]
  - try-catch block [5]
  - this keyword [5]
  - if...else [5]
  - Wait() notify() notify all() methods [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 (109323) Java Programming Part 3 SEM 5
- 2] (7810) B.C.A. (CBCS) (108794) Java Programming Part 3 SEM 5
- 3] (717) Bachelor of Computer Application (66425) Java Programming Part 3 SEM 6
- 4] (7824) Bachelor of Computer Application (CBCS)NEP (96642) Java Programming Part 3 SEM 5



983212

Seat No. **OCT\_NOV\_2024 WINTER EXAMINATION****Bachelor of Computer Application(BCA) NEP 2.0****Sub. Name: Dot NET Technology****Sub. Code: 108796/96644**

BCA-III sem-V

**Day and Date: NOVEMBER ,28-11-2024****Total Marks: 80****Time: 10:30 AM To 01:30 PM****Instructions: 1. Figures to the right indicate full marks****Special Inst.: i) Que 1 and Que 8 are compulsory  
ii) Solve any three from Que 2 to Que 7****Q1) Solve following MCQ.****[12]**

- i. What is the extension of the ASP.net page?  
A. .asp  
B. .aspx  
C. .asx  
D. .apx
- ii. CLR stands for ...  
A. Common language rule  
B. Common Layout Rule  
C. Common Language Runtime  
D. Common Low Runtime
- iii. In \_\_\_\_\_ page processing transfers from one page to the other page without making a round-trip back to the clients browser.  
A. Response.Redirect  
B. Server.Redirect  
C. Client.Transfer  
D. Server.Transfer
- iv. Webforms are made up using?  
A. ASPX file  
B. Code behind file (.CS, .vb)  
C. Both A & B  
D. None of these
- v. From following, which is navigation control?  
A. SiteMapPath  
B. Menu  
C. TreeView  
D. All of above

- vi. Which of the following attribute must be set on a validator control for the validation?
- A. ControlToValidate
  - B. ValidateControl
  - C. ValidateToBind
  - D. ValidateBind
- vii. Which of the following programming language can be used with ASP.net?
- A. C#.net
  - B. Vb.net
  - C. Both
  - D. None of Above
- viii. What namespace is used for asp.net web form by default?
- A. System.Web.Form
  - B. System.Web.UI.Page
  - C. System.Web.GUI.Page
  - D. System.Web.UI.Form
- ix. What is the role of the Global.aspx file in Asp.net applications?
- A. To store application-level events and settings
  - B. To define CSS styles
  - C. To handle database connections
  - D. To manage user authentication
- x. Which of the following is an ASP.net server control?
- A. <div>
  - B. asp:Button
  - C. <header>
  - D. <input>
- xi. What is the purpose of the web.config file in ASP.net?
- A. To configure server settings
  - B. To configure application settings
  - C. To define user roles
  - D. All of Above
- xii. Which event occurs first in the web forms life cycle?
- A. Page\_Load
  - B. Page\_Init
  - C. Page\_Unload
  - D. Page\_Render

Q2) What is Validation control? Explain with example various validation controls used in [16]  
ASP.net



**Q3) [16]**

- a. Explain different types of JIT. [8]
- b. Discuss different valid forms of Main. [8]

**Q4) What is server control? Explain with example various asp.net server controls. [16]**

**Q5) [16]**

- a. Discuss Boxing and Unboxing with example. [8]
- b. Describe architecture of .net framework with diagram. [8]

**Q6) [16]**

- a. Discuss call by value and call by reference with example. [8]
- b. Differentiate between .dll and .exe [8]

**Q7) [16]**

- a. Explain in detail different ado.net classes. [8]
- b. Describe cross page posting. [8]

**Q8) Write short note (Any 4) [20]**

- a. Navigation controls [5]
- b. Differentiate between Response.redirect and Server.Transfer [5]
- c. Features of .net [5]
- d. Web form life cycle [5]
- e. Managed & unmanaged code [5]
- f. Connected and disconnected architecture [5]

**\* \* \***



**MAR\_APR 2025 SUMMER EXAMINATION**  
**11949 Bachelor of Computer Application(BCA sci) NEP 2.0**  
**Sub. Name: Dot NET Technology**  
**Sub. Code: 109325/108796/96644**



Day and Date: APRIL ,25-04-2025

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.

2) Attempt any three Questions from Que. No.2 to Que. No. 7.

Q1) Multiple Choice questions (1 mark each)

[12]

- i. What is the .NET Framework primarily used for?  
 A. Operating system development  
 B. Game engine development  
 C. Application development on Windows  
 D. Hardware design
- ii. What is "Managed Code"?  
 A. Code executed outside the .NET runtime  
 B. Code written in assembly language  
 C. Code executed by the CLR  
 D. Code written in unmanaged languages
- iii. What is the purpose of Metadata in .NET?  
 A. To compile the program  
 B. To store user data  
 C. To describe the structure and meaning of the code  
 D. To connect to the database
- iv. 4. Which component of .NET compiles IL to native code at runtime?  
 A. CTS  
 B. CLS  
 C. JIT  
 D. FCL
- v. Which of the following is a valid signature of the Main method?  
 A. public void Main()  
 B. static void Main(string args[])  
 C. public static int Main()  
 D. All of the above
- vi. Which statement is used to skip the current iteration in a loop?



- A. skip
- B. break
- C. stop
- D. continue

vii. Which of the following is a value type in C#?

- A. String
- B. Object
- C. Int
- D. Array

viii.

Which server control is used to accept user input?

- A. Label
- B. TextBox
- C. Literal
- D. Panel

ix. 9. Which event is the first to be triggered in the page lifecycle?

- A. Page\_Load
- B. Page\_Init
- C. Page\_PreRender
- D. Page\_Unload

x. 10. Which control ensures that a field is not left empty before form submission?

- A. RangeValidator
- B. RegularExpressionValidator
- C. RequiredFieldValidator
- D. CompareValidator

xi. 1. Which class is used to execute SQL queries or stored procedures in ADO.NET?

- A. SqlConnection
- B. SqlCommand
- C. SqlDataAdapter
- D. SqlDataReader

xii. 12. Which ADO.NET object is used to retrieve data in a forward-only, read-only manner?

- A. SqlConnection
- B. SqlDataAdapter
- C. SqlDataReader
- D. SqlCommand

Q2) Draw and explain the architecture of the .NET Framework.

[16]

- Q3)** What are the different data types in C#? Explain type casting, boxing, and unboxing [16] with examples.
- Q4)** Explain the ASP.NET Web Form Lifecycle in detail. [16]
- Q5)** Discuss the differences between connected and disconnected data access models [16] in ADO.NET. Provide examples of when each model should be used.
- Q6)** Explain the ADO.NET architecture in detail. Discuss the key components involved [16] in ADO.NET for managing database interactions.
- Q7)** Explain the various control structures in C# with examples. [16]
- Q8)** Write short note ( any Four) [20]
- a. process of generating reports in ADO.NET. [5]
  - b. Visual studio .NET IDE [5]
  - c. Parameter Passing mechanism [5]
  - d. Cross page posting [5]
  - e. Features of .NET [5]
  - f. Navigation controls [5]

## End Of Question Paper

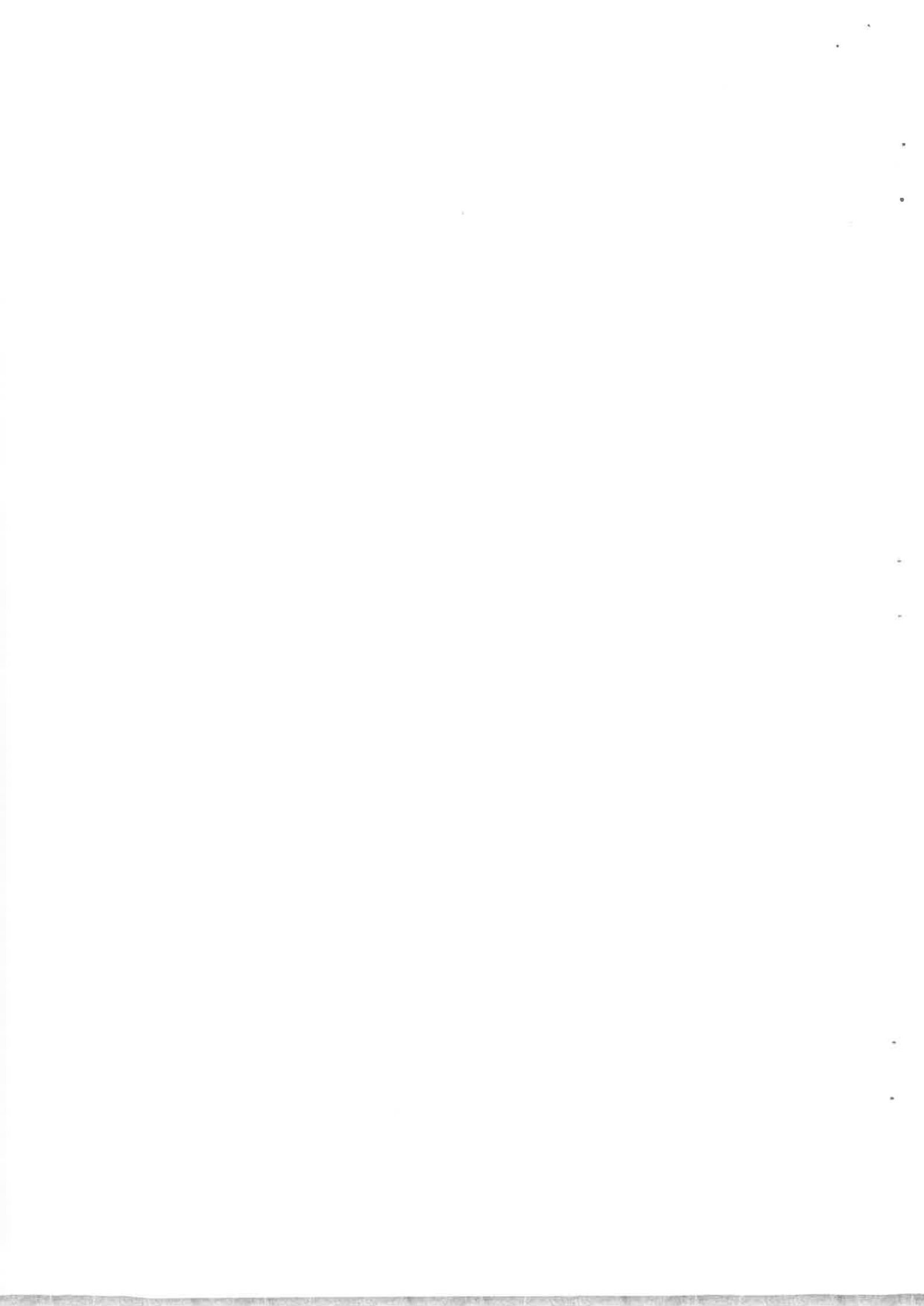
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- 1] (717) Bachelor of Computer Application (109325) DOT NET Technology Part 3 SEM 5
- 2] (7824) Bachelor of Computer Application (CBCS)NEP (96644) Dot NET Technology Part 3 SEM 5
- 3] (7810) B.C.A. (CBCS) (108796) DOT NET Technology Part 3 SEM 5





Seat No. **OCT\_NOV\_2024 WINTER EXAMINATION****Bachelor of Computer Application(BCA) NEP 2.0****Sub. Name: Data Warehousing and Data Mining****Sub. Code: 108795/96643** *BCA-III sem.V***Day and Date: NOVEMBER ,27-11-2024****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 3 questions from Que. No. 2 to Que. No. 7****Q1) Solve following MCQ.****[12]**

- i. Which of the following is not the type of OLAP
  - A. Relational OLAP
  - B. Multidimensional OLAP
  - C. Desktop OLAP
  - D. Object Oriented OALP
  
- ii. The key function of OLAP is to\_\_\_\_\_
  - A. Support real-time transaction processing
  - B. Perform multi-dimensional data analysis
  - C. Store historical data
  - D. Retrieve unstructured data
  
- iii. In a 3-tier data warehouse architecture, the middle tier is responsible for\_\_\_\_\_
  - A. Data transformation
  - B. Data retrieval and analysis
  - C. Data storage
  - D. Data entry
  
- iv. Data Mart can be best described as\_\_\_\_\_
  - A. A small subset of a data warehouse
  - B. A volatile data store
  - C. An unorganized data source
  - D. A single large database
  
- v. From where are classification rules extracted?
  - A. Branches
  - B. Decision tree
  - C. Siblings
  - D. Root node

- vi. ....refers to the overall process of discovering useful knowledge from data.
- A. KCC
  - B. KLL
  - C. KDD
  - D. None of above
- vii. Which one of the following can be considered as the correct application of the data mining?
- A. Fraud detection
  - B. Corporate Analysis & Risk management
  - C. Management and market analysis.
  - D. All of the above
- viii. ....is defined as the removal of noisy and irrelevant data from the collection.
- A. Data extraction
  - B. Data cleaning
  - C. Data Modeling
  - D. None of above
- ix. Which of the following is a classification algorithm?
- A. K-Means
  - B. Decision Tree
  - C. Apriori
  - D. Association rule mining
- x. In a star schema, which component connects to the fact table?
- A. Dimension table
  - B. Factless table
  - C. OLTP table
  - D. Metadata table
- xi. Which of the following best describes a data warehouse?
- A. A collection of integrated and subject-oriented databases
  - B. A real-time data processing system
  - C. A decentralized storage system for large datasets
  - D. An online transaction processing system (OLTP)
- xii. Which algorithm is used for finding frequent itemsets?
- A. K-Means
  - B. Apriori algorithm
  - C. Decision tree
  - D. Naïve Bayes

Q2) [16]



- a. Define data mining? Explain kdd process in detail. [8]
- b. Discuss applications of data mining. [8]
- Q3) What is multi-dimensional data model? Explain data cube and star model in detail. [16]**
- Q4) [16]**
- a. What is the significance of ETL (Extract, Transform, Load) processes in a Data Warehouse? [8]
- b. What is a Data Warehouse? Explain main characteristics of Data Warehouse. [8]
- Q5) [16]**
- a. Describe the Bayesian classification method. What are its strengths and limitations? [8]
- b. Why is Data pre-processing essential in Data mining? Describe the key steps involved in Data pre-processing [8]
- Q6) Discuss in detail frequent sub graph mining, tree mining and sequence mining. [16]**
- Q7) [16]**
- a. Explain in detail partitioning methods like K-mean and K-medoids. [8]
- b. Discuss different clustering methods in detail. [8]
- Q8) Write short note (Any Four) [20]**
- a. Functionalities issues in data mining [5]
- b. Database system Vs Data Warehouse [5]
- c. Online analytical processing (OLAP) [5]
- d. Apriori Algorithm [5]
- e. Snowflake Schema [5]
- f. Advantages of Data Warehouse [5]

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161391

Seat No. 

## MAR\_APR 2025 SUMMER EXAMINATION

11949 Bachelor of Computer Application(BCA) NEP 2.0

Sub. Name: Data Warehousing and Data Mining

Sub. Code: 66423/109324/108795/96643 B.C.A. III sem. IV

Day and Date: APRIL ,22-04-2025

Total Marks: 80

Time: 10:30 AM To 01:30 PM

Instructions: 1. Draw neat labelled diagrams wherever necessary  
2. 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) Multiple Choice Questions (12 questions for 1 mark each)

[12]

- i. In data mining, the technique used to find hidden patterns in the data is
  - A. Data extraction
  - B. Data analytics
  - C. Pattern recognition
  - D. Data redundancy
- ii. Which of the following best describes a data warehouse?
  - A. A collection of integrated and subject-oriented databases
  - B. A real-time data processing system
  - C. A decentralized storage system for large datasets
  - D. An online transaction processing system (OLTP)
- iii. Association rule mining helps to:
  - A. Find hidden patterns
  - B. Predict continuous values
  - C. Find associations between different variables
  - D. Reduce data dimensionality
- iv. The K-Medoids algorithm differs from K-Means in that:
  - A. It uses centroids
  - B. It minimizes a squared error
  - C. It uses actual data points as cluster centers
  - D. It clusters categorical data
- v. Which algorithm is used for finding frequent itemsets?
  - A. K-Means
  - B. Apriori algorithm
  - C. Decision tree
  - D. Naïve Bayes



- vi. The key function of OLAP is to \_\_\_\_\_
- A. Support real-time transaction processing
  - B. Perform multi-dimensional data analysis
  - C. Store historical data
  - D. Retrieve unstructured data
- vii. In a 3-tier data warehouse architecture, the middle tier is responsible for \_\_\_\_\_
- A. Data transformation
  - B. Data retrieval and analysis
  - C. Data storage
  - D. Data entry
- viii. The process of summarizing data in a data warehouse is called:
- A. Aggregation
  - B. Data cleansing
  - C. De-normalization
  - D. Data transformation
- ix. The technique that aims to group similar objects into clusters is known as:
- A. Classification
  - B. Clustering
  - C. Prediction
  - D. Association rule mining
- x. Data Mart can be best described as \_\_\_\_\_
- A. A small subset of a data warehouse
  - B. A volatile data store
  - C. An unorganized data source
  - D. A single large database
- xi. In a star schema, which component connects to the fact table?
- A. Dimension table
  - B. Factless table
  - C. OLTP table
  - D. Metadata table
- xii. Which of the following is a classification algorithm?
- A. K-Means
  - B. Decision Tree
  - C. Apriori
  - D. Association rule mining

Q2) [16]

- a. What are the key components of a data warehouse, and how do they interact [8]

with each other?

- b. Define Data Mining. Discuss different application areas of data mining. [8]

**Q3)** Why is Data pre-processing essential in Data mining? Describe the key steps [16] involved in Data pre-processing.

**Q4)** [16]

- a. What is the significance of ETL (Extract, Transform, Load) processes in a Data Warehouse? [8]
- b. Describe the Knowledge Discovery in Databases (KDD) process and its stages in detail. [8]

**Q5)** [16]

- a. Describe the Bayesian classification method. What are its strengths and limitations? [8]
- b. What is Online analytical processing (OLAP)? How does OLAP function within a data warehousing environment? [8]

**Q6)** [16]

- a. What are the main tasks in Data mining? Explain each briefly. [8]
- b. What are Partitioning Methods? Differentiate between K-Means and K-Medoids. [8]

**Q7)** [16]

- a. What are the primary issues associated with classification and prediction in data mining? [8]
- b. What are the key differences between tree mining and sequence mining, and how do these techniques contribute to data analysis? [8]

**Q8)** Write short note (Any Four) [20]

- a. Database system Vs Data Warehouse [5]
- b. Snowflake Schema [5]
- c. Decision Tree [5]
- d. Characteristics of Data Warehouse [5]



e. Apriori Algorithm

[5]

f. Graph sampling

[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] (7810) B.C.A. (CBCS) (108795) Data Warehousing and Data Mining Part 3 SEM 5

2] (7824) Bachelor of Computer Application (CBCS)NEP (96643) Data Warehousing and Data Mining Part 3 SEM 5

3] (717) Bachelor of Computer Application (66423) Data Mining and Data Warehousing Part 3 SEM 6

4] (717) Bachelor of Computer Application (109324) Data Warehousing and Data Mining Part 3 SEM 5

Seat No. **OCT\_NOV\_2024 WINTER EXAMINATION****Bachelor of Computer Application(BCA) NEP 2.0****Sub. Name: Digital Marketing** BCA-III sem V**Sub. Code: 108801/96648**

Day and Date: NOVEMBER ,30-11-2024

Time: 10:30 AM To 01:30 PM

Instructions:

- Special Inst.:** 1) Que.1 and Que. 8 are compulsory.  
2) Attempt any THREE questions from Que. No.2 to Que. No. 7.  
3) Figures to the right indicate marks



Total Marks: 80

Q1) Solve following MCQ.

[12]

- i. Which tool is commonly used to analyze website traffic and user behavior?
- Facebook Insights
  - LinkedIn Analytics
  - Google Analytics
  - Twitter Dashboard
- ii. What is the purpose of a landing page in digital marketing?
- To entertain visitors
  - To serve as a homepage for a website
  - To capture leads or drive specific actions from visitors
  - To display only company information
- iii. Which type of digital marketing involves sending promotional messages directly to users' devices?
- Content marketing
  - Affiliate marketing
  - Push notifications
  - SEO
- iv. In social media marketing, what does the term "engagement" refer to?
- The number of followers a brand has
  - Interactions like likes, comments, shares, and clicks on posts
  - The total number of posts published
  - The revenue generated from social media ads
- v. Which of these strategies is used to improve a website's SEO?
- Increasing website loading speed
  - Creating high-quality, relevant content
  - Building quality backlinks
  - All of the above



- vi. What is a “conversion” in digital marketing?
  - A. When a visitor leaves the website
  - B. Any action that leads a visitor towards a desired goal, like signing up or making a purchase
  - C. Only when someone clicks an ad
  - D. Increasing website traffic
  
- vii. Which term refers to the process of optimizing ads to appear at the top of search engine results?
  - A. Social media marketing
  - B. Paid search advertising
  - C. Content marketing
  - D. Email marketing
  
- viii. Which metric measures the percentage of people who leave a website after viewing only one page?
  - A. Click-Through Rate (CTR)
  - B. Engagement Rate
  - C. Bounce Rate
  - D. Conversion Rate
  
- ix. What is the primary focus of influencer marketing?
  - A. Using celebrity endorsements only
  - B. Collaborating with influential figures to promote a brand or product
  - C. Increasing brand followers through paid ads
  - D. Creating informative blog content
  
- x. Which of the following is true about remarketing?
  - A. It only targets new customers
  - B. It is ineffective for e-commerce sites
  - C. It retargets users who have already interacted with your brand or website
  - D. It is unrelated to customer behaviour
  
- xi. What is the term for the percentage of visitors who take a desired action on a website?
  - A. Engagement rate
  - B. Conversion rate
  - C. Click-through rate
  - D. Retention rate
  
- xii. In email marketing, what does A/B testing involve?
  - A. Testing different audiences with the same email
  - B. Sending emails to two separate groups without any changes
  - C. Testing two versions of an email to see which performs better
  - D. Sending different emails to random customers

- Q2)** Define Digital Marketing. Explain the concept and scope of Digital Marketing. **[16]**  
Discuss the advantages and disadvantages of digital marketing.
- Q3)** What is Search Engine Optimization (SEO)? Explain different types of SEO. **[16]**
- Q4)** What is social media marketing? Explain various social media channels. **[16]**
- Q5)** What is Affiliate Marketing? Explain different types of Affiliate Marketing. **[16]**
- Q6)** What is E-mail Marketing? Explain different types of E-mail Marketing **[16]**
- Q7)** What is Display Marketing? What are the different types of display marketing? **[16]**  
Explain Display Marketing Ecosystem.
- Q8)** Write short note any FOUR **[20]**
- a. Mobile app acquisition strategies
  - b. Advantages of digital medium over other media
  - c. Difference between SEO & SEM
  - d. Digital consumer behaviour
  - e. Technological advancements in Digital Marketing
  - f. Future of Digital Marketing



\* \* \*



Seat No. 

**MAR\_APR 2025 SUMMER EXAMINATION**  
**11949 Bachelor of Computer Application(BCA) NEP 2.0**

**Sub. Name: Digital Marketing** BCA-III sem V  
**Sub. Code: 109328/108801/96648**

Day and Date: APRIL ,24-04-2025

Time: 10:30 AM To 01:30 PM

**Instructions:**

- Special Inst.:** 1) Que.1 and Que. 8 are compulsory.  
 2) Attempt any **THREE** questions from Que. No.2 to Que. No. 7.  
 3) Figures to the right indicate marks



Total Marks: 80

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

- i. Which tool is commonly used to analyze website traffic and user behavior?
  - A. Facebook Insights
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  - C. Google Analytics
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  - A. To entertain visitors
  - B. To serve as a homepage for a website
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- iii. Which type of digital marketing involves sending promotional messages directly to users' devices?
  - A. Content marketing
  - B. Affiliate marketing
  - C. Push notifications
  - D. SEO
  
- iv. In social media marketing, what does the term "engagement" refer to?
  - A. The number of followers a brand has
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  - Digital consumer behaviour
  - Technological advancements in Digital Marketing
  - Future of Digital Marketing

## End Of Question Paper

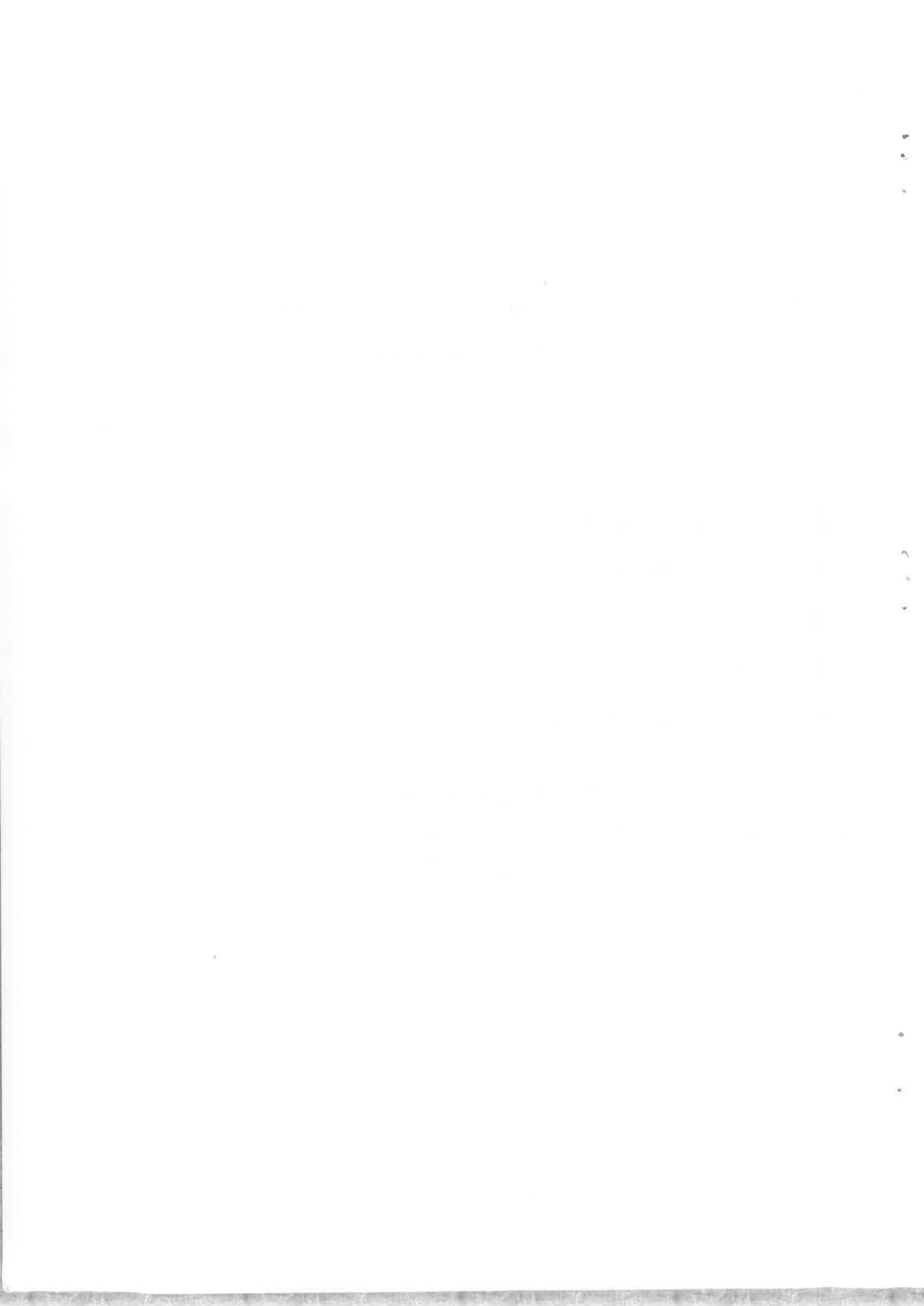
**Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -**

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 (109328) Digital Marketing Part 3 SEM 5
- 2] (7810) B.C.A. (CBCS) (108801) Digital marketing Part 3 SEM 5
- 3] (7824) Bachelor of Computer Application (CBCS)NEP (96648) Digital Marketing Part 3 SEM 5





Seat No. **OCT\_NOV\_2024 WINTER EXAMINATION****Bachelor of Computer Application(BCA) NEP 2.0**Sub. Name: Linux *BCA-III sem V*Sub. Code: 108800/96647

Day and Date: NOVEMBER ,29-11-2024

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



Total Marks: 80

Q1) Solve following MCQ.

[12]

- i. Which is the core of the operating system?
  - A. Shell
  - B. Kernel
  - C. Commands
  - D. Script
  
- ii. Which command is used to moves the cursor down one line?
  - A. i
  - B. j
  - C. k
  - D. l
  
- iii. Which command creates a space for entering a new line of text below the current cursor location?
  - A. o
  - B. O
  - C. a
  - D. S
  
- iv. Which option of rm command is used to remove a directory with all its subdirectories
  - A. -V
  - B. -i
  - C. -f
  - D. -r
  
- v. Which of the following commands will allow the user to search contents of a file for a particular pattern
  - A. touch
  - B. grep



- C. find  
D. ls
- vi. Which command is used to change permissions of files and directories?  
A. mv  
B. chgrep  
C. chmod  
D. set
- vii. The permission -rwxr-r- represented in octal expression will be  
A. 777  
B. 666  
C. 744  
D. 711
- viii. Which directory contains the system kernel?  
A. /etc  
B. /  
C. /boot  
D. /proc
- ix. Which key is used for deleting text?  
A. d  
B. y  
C. k  
D. f
- x. To copy (yank) lines in vi editor, we use \_\_\_\_\_ command  
A. dd  
B. x  
C. yy  
D. p
- xi. To extract specific columns from a file \_\_\_\_\_ command is used.  
A. cut  
B. pr  
C. head  
D. tail
- xii. Which of the following command is used to sort the lines of data in a file in alphabetical order?  
A. sh  
B. sort -r  
C. sort  
D. st

- Q2) What is operating system? What are types and functions of operating system [16]
- Q3) What is a file? Write different file handling commands with example [16]
- Q4) Write with syntax and example different directory handling commands and filter commands [16]
- Q5) Write various cursor movement commands in vi editor [16]
- Q6) Explain with example use of test, if, case, exit statement in Linux [16]
- Q7) Discuss looping statements with example- while and for [16]
- Q8) Write short note [20]



- a. Write notes on (Any Four out of Six)
- a) Kernal
  - b) chmod command
  - c) Features of Linux
  - d) pipe command
  - e) Copying and deleting commands in vi editor
  - f) Until command

\* \* \*





SG-310

Total No. of Pages : 3

Seat  
No.

Oct.-Nov. 2024 Examination

B.C.A. (CBCS) PART - III Semester- V

IT Security

Subject Code: - 88234

Day and Date : Thursday, 28-11-2024

Total Marks : 70

Time : 10:30 am to 01:30 pm

**Instructions:**

- 1) Que.1 and Que. 6 are compulsory
- 2) Attempt any three Questions from Que. No.2 to Que. No. 5
- 3) Figures to the right indicate marks.

**Q.1 A Choose the correct answer in each of the following questions: 10**

- 1 What role does access control play in IT security?
  - a) It ensures that all IT systems are connected to the internet.
  - b) It limits access to IT resources based on user roles and permissions'
  - c) It involves monitoring physical access to IT facilities.
  - d) It encourages sharing of sensitive information among employees.
- 2 What is spoofing?
  - a) Impersonating a legitimate user to gain unauthorized access to a system or network
  - b) Creating fake websites to steal login credentials
  - c) Monitoring network traffic to capture sensitive information
  - d) Flooding a system or network with traffic to disrupt its normal functioning



- 3 How do perpetrators typically use web tracking data?
  - a) To impersonate legitimate users
  - b) To flood a system or network with traffic
  - c) To analyze a user's online behavior and preferences for targeted advertising or malicious purposes
  - d) To intercept and capture sensitive information transmitted over a network
  
- 4 Why employee training and awareness is considered an important aspect of IT security?
  - a) To encrypt sensitive data transmissions.
  - b) To monitor physical access to IT facilities.
  - c) To ensure that employees understand potential security risks and best practices.
  - d) To authenticate users before granting access to IT resources.
  
5. Why encryption is considered an essential component of IT security?
  - a) It prevents unauthorized physical access to IT infrastructure.
  - b) It protects data from being intercepted and read by unauthorized users.
  - c) It eliminates the need for regular data backups.
  - d) It speeds up data transmission on networks.



6. What is the primary function of a malware detector ?
  - a) To create and spread malware across networks.
  - b) To analyze and identify malicious software on a system or network.
  - c) To encrypt sensitive data transmissions.
  - d) To limit access to specific IP addresses.
  
7. Which of the following is an example of a biometric characteristic commonly used for verification?
  - a) Social security number
  - b) Password
  - c) PIN code
  - d) Fingerprint
  
8. How does biometric verification contribute to the overall security posture of an organization's IT infrastructure?
  - a) By making it easier for unauthorized individuals to access IT resources
  - b) By providing an additional layer of security beyond traditional authentication methods
  - c) By increasing the likelihood of password theft and unauthorized access
  - d) By reducing the need for regular security audits
  
9. Which dimension of information security involves protecting data from unauthorized modification or deletion?
  - a) Confidentiality
  - b) Integrity
  - c) Availability
  - d) Authentication



10. What is phishing?

- a) A technique to intercept network traffic and capture sensitive information
- b) A method of sending fraudulent emails or messages to trick individuals into disclosing personal or sensitive information
- c) A type of attack that floods a system or network with traffic to disrupt its normal functioning
- d) A process of creating fake websites to steal login credentials

**B) Attempt any two questions. 10**

- 1) Explain challenges of IT act.
- 2) What is Trojan horse?
- 3) Describe Malware in detail.

**Q.2 What is Cryptography? Explain different types of Cryptography. 10**

**Q.3 Explain physical and logical assets IT Security in details. 10**

**Q.4 Describe need and significance of IT security. 10**

**Q.5 What is security threat? Explain different types of security threats. 10**

**Q.6 Write notes on (Any Four) 20**

- 1) Biometric verification
- 2) Acts of God (Natural disaster)
- 3) Crackers
- 4) IT Assets
- 5) Sources of threats
- 6) Multilevel authentication

◆◆◆



**B.C.A. – III<sup>rd</sup> Year**

**SEM – VI**

**Previous Year**

**Question Papers**

**Academic Year**

**(2024-25)**



Seat No. 

BCA - III sem. VI

**MAR\_APR 2025 SUMMER EXAMINATION**  
**11949 Bachelor of Computer Application(BCA) NEP 2.0**  
**Sub. Name: Cloud Computing**  
**Sub. Code: 88669/90543/88293**

Day and Date: APRIL ,28-04-2025

Total Marks: 70

Time: 02:30 PM To 05:30 PM

Instructions: 1. Figures to the right indicate full marks

Special Inst.: 2. Q1, Q2 and Q7 are compulsory

3. Solve any THREE questions from Q3 to Q6



Q1) A) Solve following MCQ.

[10]

i. Which of the following is the correct statement about cloud computing?

- A. Cloud computing abstracts systems by pooling and sharing resources
- B. Cloud computing is nothing more than the Internet
- C. The use of the word "cloud" makes reference to the two essential concepts
- D. All of the mentioned

ii. Which of the following is social application of the cloud computing?

- A. Amazon Web Services (AWS)
- B. Dropbox
- C. Facebook
- D. All of the above

iii. \_\_\_\_\_ cloud deployment model is operated solely for one organization

- A. Public cloud
- B. Private cloud
- C. Hybrid cloud
- D. Community cloud

iv. Scalability mean \_\_\_\_\_ in cloud computing

- A. Ability to expand software features
- B. Ability to handle growing amount of work
- C. Ability to scale documents
- D. Ability to reduce cloud costs

- v. \_\_\_\_\_ is a characteristic of cloud computing?
- High maintenance
  - Limited storage
  - On-demand self-service
  - Manual configuration
- vi. \_\_\_\_\_ software is used for virtualization
- Google Chrome
  - VMware
  - Microsoft Word
  - Adobe Photoshop
- vii. In virtualization, the physical machine called \_\_\_\_\_
- Virtual host
  - Host machine
  - Guest machine
  - Hypervisor
- viii. \_\_\_\_\_ services typically provided by IaaS providers
- .Email applications
  - Runtime environments
  - Virtual machines and storage
  - CRM systems
- ix. SaaS best describes as \_\_\_\_\_
- End users develop applications
  - End users rent virtual servers
  - End users access software via the internet
  - End users deploy operating systems
- x. Cloud computing benefit the education sector \_\_\_\_\_
- By reducing internet usage
  - By providing online learning platforms and virtual labs
  - By replacing teachers with robots
  - By increasing textbook prices



- Q2)** B) Give Reasons or Short answer question (Any two out of three) [10]  
 a) Explain types of cloud.  
 b) Write virtualization of CPU in detail  
 c) Discuss Database as a service in detail.
- Q3)** Write architecture of cloud computing [10]
- Q4)** What is Virtualization? Explain Virtualization at the OS Model [10]
- Q5)** Explain in detail- Infrastructure as a service and Software as a service [10]

Q6) Explain business applications of cloud computing

[10]

Q7) Write short note

[20]

- a. Write notes on (Any Four out of Six)
- Challenges in the cloud
  - Benefits of virtualization
  - Guidelines for selecting PaaS Provider
  - Entertainment Applications of cloud computing
  - Virtualization Hosted Structure
  - Social Applications of cloud computing

## 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.

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- 1] (7810) B.C.A. (CBCS) (88293) Cloud Computing Part 3 SEM 6
- 2] (717) Bachelor of Computer Application (88669) Cloud Computing Part 3 SEM 6
- 3] (717) Bachelor of Computer Application (90543) Cloud Computing Part 3 SEM 6





Seat No.
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**Oct.-Nov. 2024 Examination**  
**B.CA. III Sememster - VI (CBCS)**  
**Cloud Computing**  
**Subject Code: 88293**



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**Day and Date : Tuesday, 26-11-2024****Total Marks : 70****Time : 02:30 pm to 05:30 pm**

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Instructions:

- 1) Que 1 and Que, 6 are compulsory
  - 2) Attempt any three Questions from Que. No.2 to Que. No. 5.
  - 3) Figures to the right indicate marks.
- 

**Q.1 A. Multiple Choice Questions****10**

1. Which of the following is not a type of cloud server?
  - a) Public Cloud Servers
  - b) Private Cloud Servers
  - c) Dedicated Cloud Servers
  - d) Merged Cloud Servers
2. Which of the following is te application of cloud computing?
  - a) Adobe
  - b) Paypal
  - c) Google G Suite
  - d) All of the above
3. Which of the following is the Cloud Platform provided by Amazon?
  - a) AWS
  - b) Cloudera
  - c) Azure
  - d) All of the mentioned



9. Which of the model involves the special types of services that users can access on a Cloud Computing platform?

- a) Service
- b) Planning
- c) Deployment
- d) Application

10. Cloud computing architecture is a combination of?

- a) service-oriented architecture and grid computing
- b) Utility computing and event-driven architecture.
- c) Service-oriented architecture and event-driven architecture.
- d) Virtualization and event-driven architecture.

**Q.1 B. Give Short answers (Any two)**

**10 marks**

- 1) Define cloud computing and explain the types of cloud
- 2) Discuss the challenges of cloud
- 3) Explain the benefits of virtualization

Q.2 Explain the implementation levels of virtualization

**10 marks**

Q.3 Explain virtualization at CPU level

**10 marks**

Q.4 Explain Infrastructure As Service

**10 marks**

Q.5 Explain platform as service

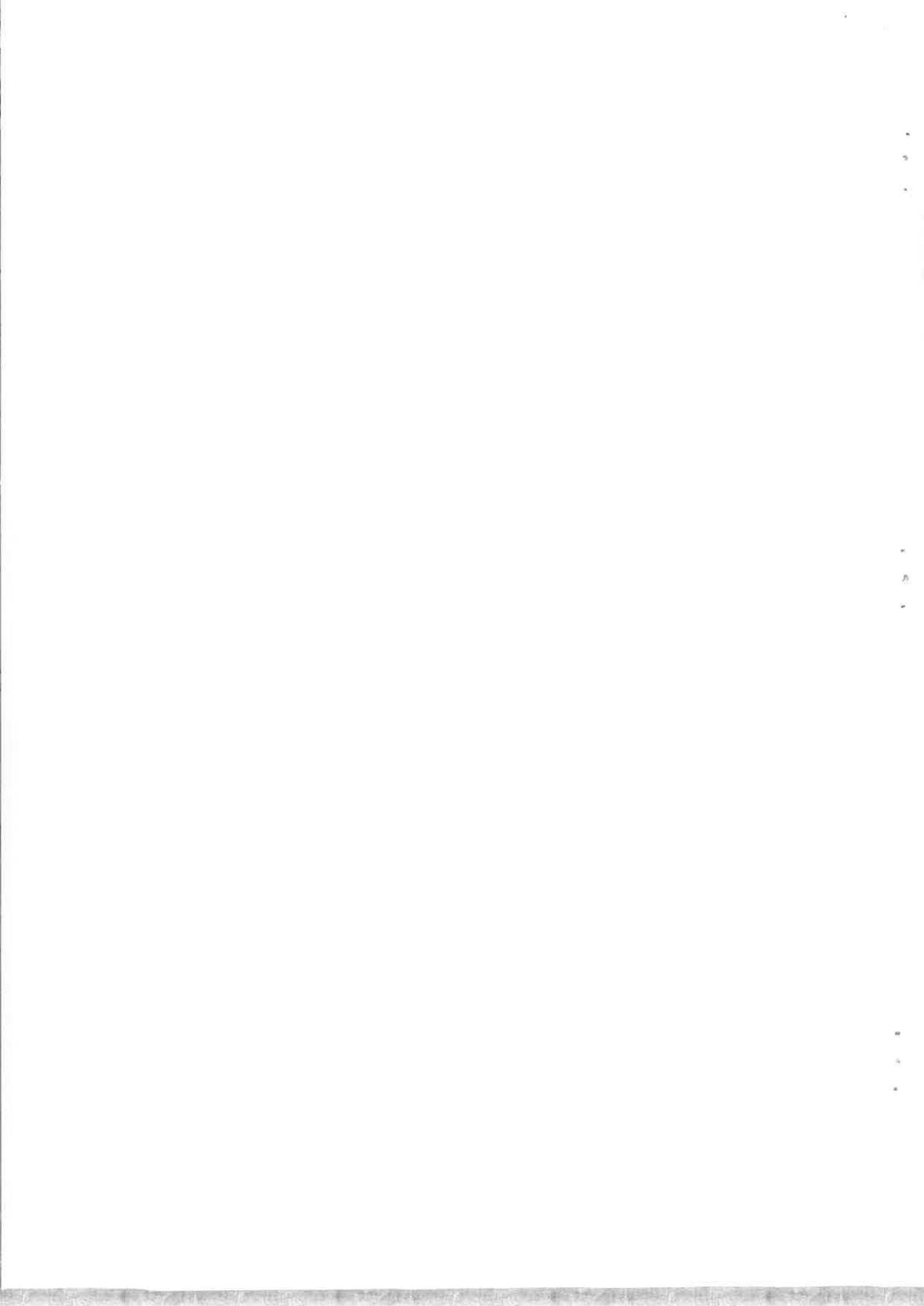
**10 marks**

**Q.6 Write short note on (Any four)**

**20 marks**

- a) properties of cloud
- b) SAAS
- c) PAAS
- d) Database as service in cloud
- e) Mailchimp Application
- f) Paypal





Seat No. 

**MAR-APR 2025 SUMMER EXAMINATION**  
**11949 Bachelor of Computer Application(BCA) NEP 2.0**

**Sub. Name: R Programming**    *BCA-III sem VI*  
**Sub. Code: 88672/90549/88296**

Day and Date: APRIL ,22-04-2025

Total Marks: 70

Time: 02:30 PM To 05:30 PM

Instructions: 1. Figures to the right indicate full marks

Special Inst.: Q.1 and Q.6 are compulsory and attempt any three questions from Q.2 to Q.5

**Q1) A.** Multiple Choice questions (10 questions for 1 mark each)**[10]**

i. Which data type in R is used to store true or false values?

- A. integer
- B. logical
- C. character
- D. double

ii. How do you declare a constant in R?

- A. Using the const keyword
- B. By assigning a value once
- C. Using the define keyword
- D. By using the constant() function

iii. Which function would you use to convert a character string to uppercase in R?

- A. toUpper()
- B. toUpperCase()
- C. upperCase()
- D. toupper()

iv. Which function in R can be used to create a vector of consecutive integers from 1 to 10?

- A. c(1:10)
- B. seq(1, 10)
- C. vector(1, 10)
- D. range(1, 10)

v. In R, what is a data frame?

- A. Special type of list
- B. Special type of matrix
- C. Low-level data structure
- D. Non-relational database

vi. How can we access the first component of the list?

- A. Number of the position





- B. Function
- C. Package
- D. Tools

vii Which of the following is two dimensional rectangular data set?

- A. Data Frame
- B. List
- C. Matrix
- D. Vector

vii Which function takes a dim attribute which creates the required number of dimensions?

- i.
  - A. Vector
  - B. Array
  - C. Matrix
  - D. Lists

ix. Which of the following functions is typically used to add elements to a plot in the base graphics system?

- A. lines()
- B. hist()
- C. plot()
- D. boxplot()

x. Which of the following functions produces one-dimensional scatterplots?

- A. xyplot
- B. stripplot
- C. barchart
- D. bwplot

**B. Short answer questions (Any two out of three)**

**[10]**

- I) How to create and manipulate string using R program?
- II) Explain the concept of lazy evaluation of function in R.
- III) Identify any five important built-in functions available in R.

**Q2) What are the different conditional statements available in R?**

**[10]**

**Q3) Illustrate the different operations performed on Vector with suitable example.**

**[10]**

**Q4) Illustrate the different operations performed on Data frames with suitable example.**

**[10]**

**Q5) Explain the different types of plots used for data visualization with suitable example.**

**[10]**

**Q6) Write notes on (Any Four out of Six)**

**[20]**

a. Features of R

**[5]**

- b. R Variables [5]
- c. Repeat loop in R [5]
- d. Accessing elements of a array [5]
- e. Creating matrix in R [5]
- f. Importing data in R [5]



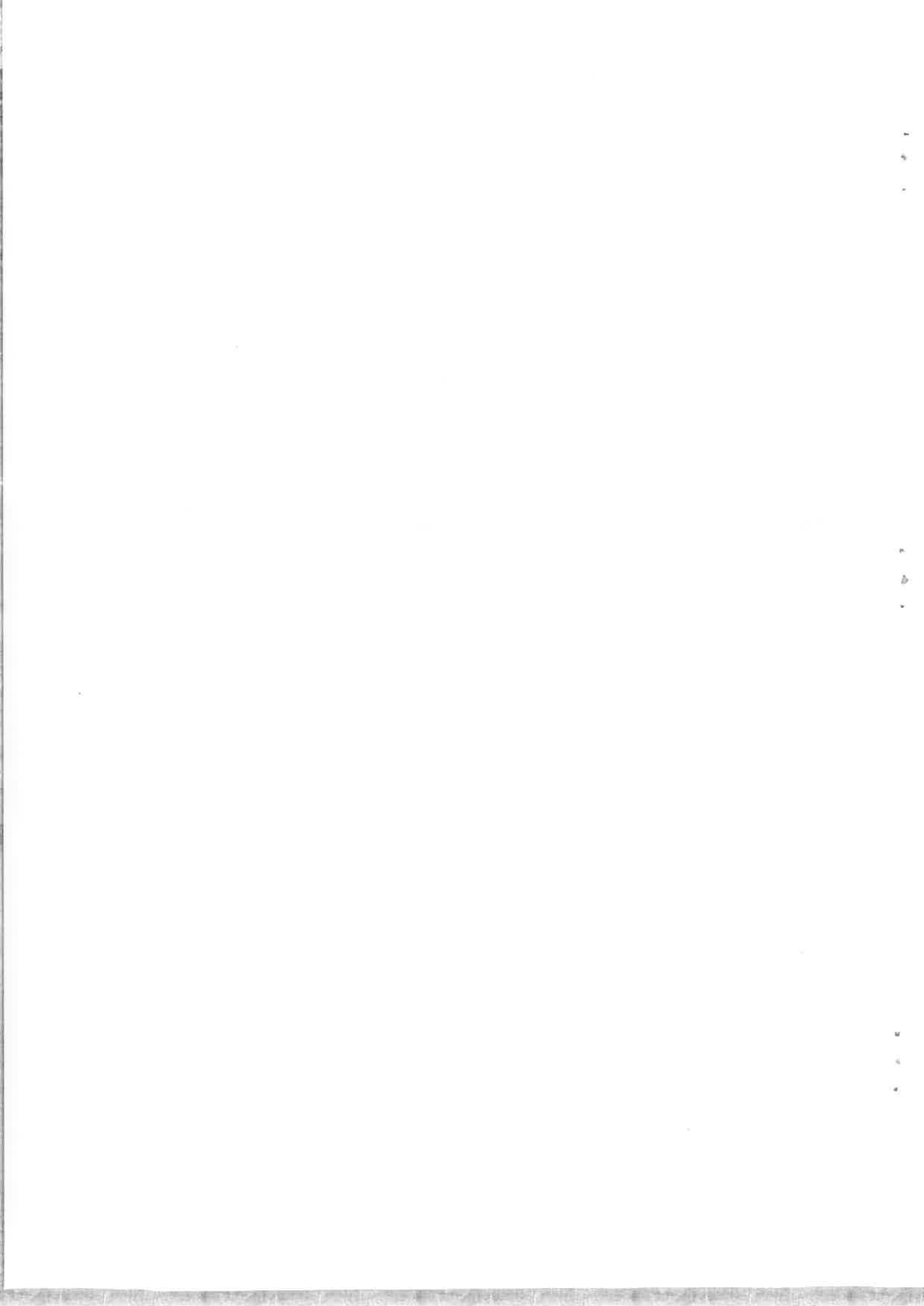
## End Of Question Paper

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- 1] (717) Bachelor of Computer Application (90549) R Programming Part 3 SEM 6
- 2] (717) Bachelor of Computer Application (88672) R Programming Part 3 SEM 6
- 3] (7810) B.C.A. (CBCS) (88296) R Programming Part 3 SEM 6



Seat No. 

**MAR\_APR 2025 SUMMER EXAMINATION**  
**11949 Bachelor of Computer Application(BCA) NEP 2.0**

**Sub. Name: R Programming** *BCA-III Sem VI*  
**Sub. Code: 111001/110749/96658**

Day and Date: APRIL ,22-04-2025

Time: 02:30 PM To 05:30 PM

Total Marks: 80

**Instructions:** 1. Figures to the right indicate full marks**Special Inst.:** 1) Que. No.1 and Que. No. 8 are compulsory

2) Attempt any three Questions from Que. No.2 to Que. No. 7.

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

- i. Which function takes a dim attribute that creates the required number of dimensions?
  - A. Array
  - B. Lists
  - C. Matrix
  - D. Vector
- ii. Which are indexed by either row or column using a specific name or number?
  - A. Data frames
  - B. Data
  - C. Datasets
  - D. Functions
- iii. Data frames can be converted to a matrix by calling data \_\_\_\_\_.
  - A. as.matrix()
  - B. as.matr()
  - C. as.mat()
  - D. as.max()
- iv. Which of the following extracts first element from the following R vector?  

$$> x <- c("a", "b", "c", "c", "d", "a")$$
  - A. x[0]
  - B. x[1]
  - C. x[2]
  - D. x[10]
- v. Who is introduced R Programming Language?
  - A. Ross Ihaka
  - B. Robert Gentleman
  - C. Both (A) and (B)
  - D. Florian Hahne



- vi. Which function is used to add additional columns in a matrix?
- A. add()
  - B. cbind()
  - C. join()
  - D. append\_item()
- vii. Which function can be used to return the square root of a number?
- A. sr()
  - B. sqrt()
  - C. sqrt()
  - D. square\_root()
- viii. What will be the output of the following R code?
- ```
> x <- 1  
> print(x)
```
- A. 1
  - B. 2
  - C. 3
  - D. 4
- ix. R has how many atomic classes of objects?
- A. 5
  - B. 4
  - C. 3
  - D. 2
- x. \_\_\_\_\_ function returns a vector of the same size as x with the elements arranged in increasing order.
- A. orderby()
  - B. sort()
  - C. orderasc()
  - D. sequence()
- xi. Which of the following is used to install packages in R?
- A. include()
  - B. library()
  - C. require()
  - D. install.packages()
- xii. Which function is used to read a CSV file into R?
- A. read.csv()
  - B. read\_csv()
  - C. load.csv()
  - D. import.csv()

- Q2) Explain in detail the variables, constants, and operators in R. [16]
- Q3) Explain different conditional statements used in R programming. [16]
- Q4) [16]
- a. Explain argument and lazy evaluation of functions with an example. [8]
- b. Explain Recursive functions with an appropriate example. [8]
- Q5) What is data visualization? Explain bar plot and line plot with an appropriate example. [16]
- Q6) What is a Data Frame? Explain any five operations on a Data Frame. [16]
- Q7) Write a program to accept a number and check given number is prime or not. Also, find factorial of a given number. [16]
- Q8) Write notes on (Any Four) [20]
- a. Vector Arithmetic
- b. paste ()
- c. 3D pie chart
- d. Array
- e. Matrix transpose
- f. Real-world uses of R



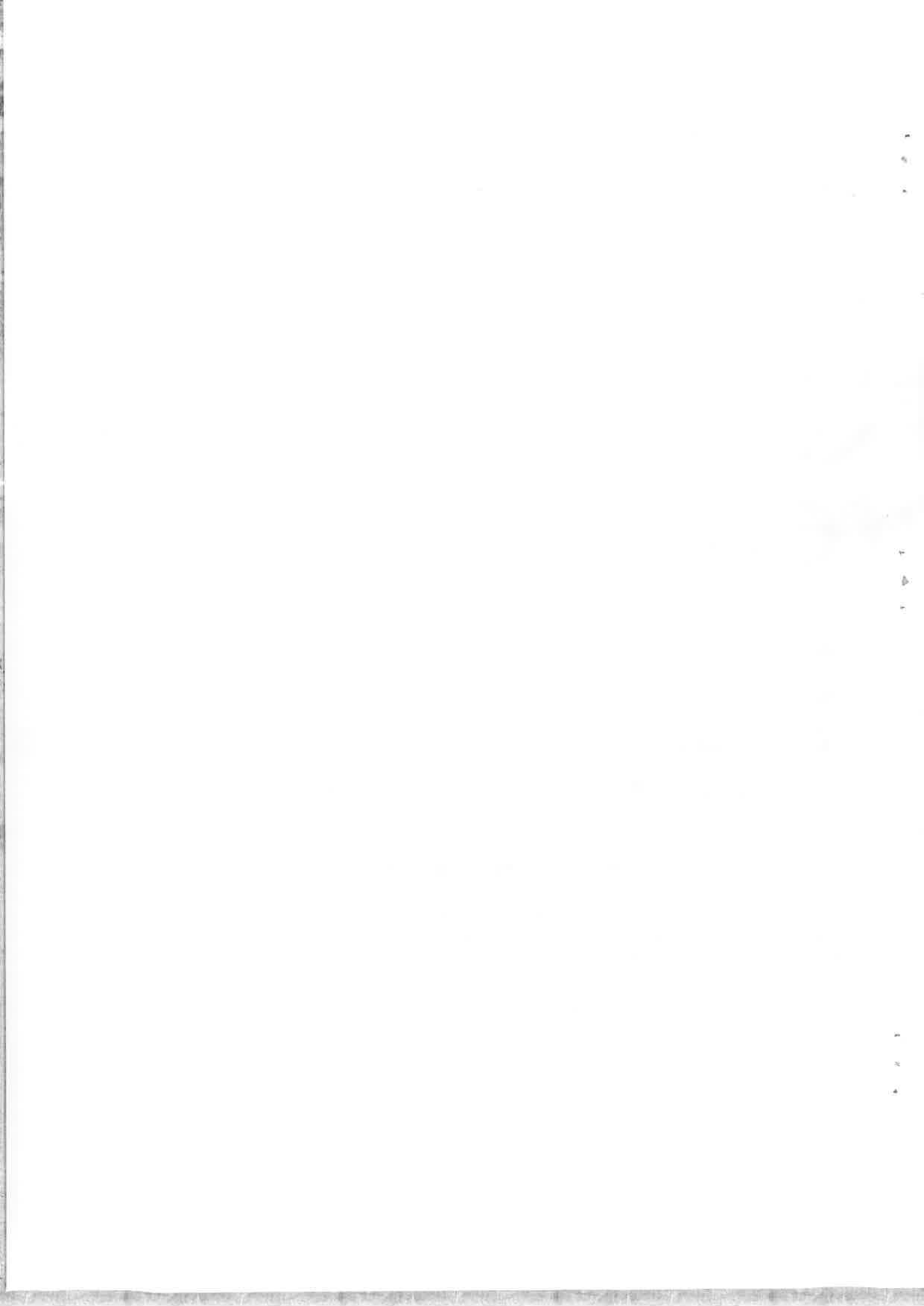
## End Of Question Paper

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

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- 1] (717) Bachelor of Computer Application (111001) R Programming Part 3 SEM 6
- 2] (7810) B.C.A. (CBCS) (110749) R Programming Part 3 SEM 6
- 3] (7824) Bachelor of Computer Application (CBCS)NEP (96658) R Programming Part 3 SEM 6





SG-318

Total No. of Pages : 3

Seat  
No.

Oct.-Nov. 2024 Examination

B.C.A. (CBCS) PART-III Semester-VI

R Programming

Subject Code: 88296

Day and Date : Wednesday, 27-11-2024

Total Marks : 70

Time : 02:30 pm to 05:30 pm

**Instructions:**

- 1) Que. 1 and Que. 6 are compulsory
- 2) Attempt any three Questions from Que. No.2 to Que. No. 5.
- 3) Figures to the right indicate marks.

**Q1 A Choose the correct answer in each of the following questions: 10**

1. How do you insert COMMENTS in R-code?
  - a) # This is a comment
  - b) /\* This is a comment
  - c) // This is a comment
  - d) None of the above
2. Data frames can be converted to a matrix by calling data.....
  - a) matr()
  - b) mat()
  - c) matrix()
  - d) All of the mentioned
3. .... operator is used to create integer sequences.
  - a) -
  - b) :
  - c) ;
  - d) ~





10. Which of the following statement would print "0" "1" "2" "3" "4" "5" "6" for the following R code?

x <- 0:6

- a) as.character(x)
- b) as.logical(x)
- c) as.numeric(x)
- d) as.num(y)

**B) Attempt any two questions. 10**

- 1) Explain features of R.
- 2) Describe Matrix transpose with example.
- 3) Illustrate Histogram in R.

**Q.2 Explain different looping statements in R programming. 10**

**Q.3 What is missing data? Explain inbuilt functions to find the missing values.10**

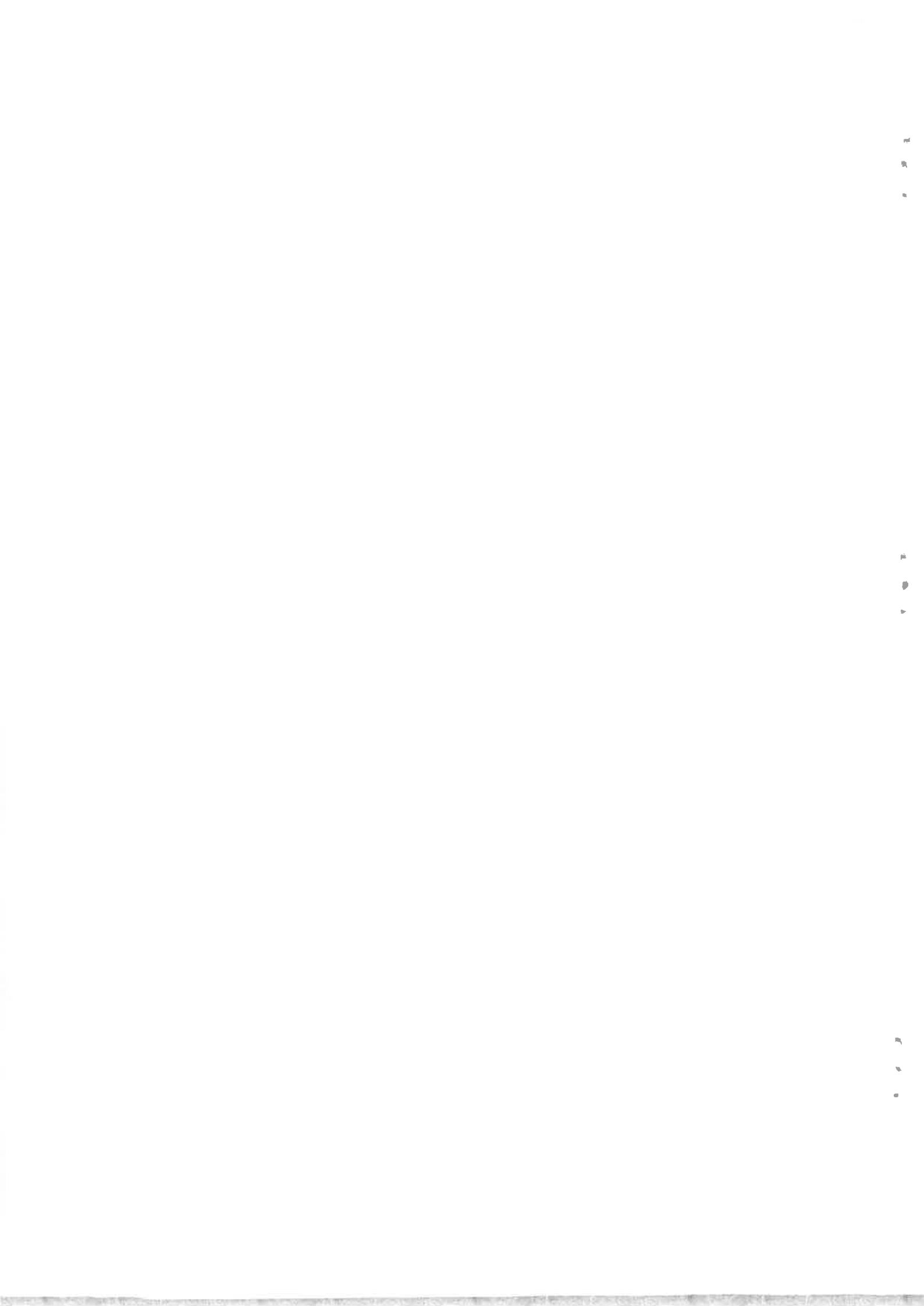
**Q.4 Write program to find the sum of first 10 Natural numbers. 10**

**Q.5 Explain different operators in R. 10**

**Q.6 Write notes on (Any Four) 20**

- 1) Next statement in R
- 2) Recursive function
- 3) Data frame
- 4) Importing data In R
- 5) Vector arithmetic
- 6) Pie chart

◆◆◆



Seat No. 

BCA-III sem VI

**MAR-APR 2025 SUMMER EXAMINATION**  
**11949 Bachelor of Computer Application(BCA) NEP 2.0**  
**Sub. Name: IT Security**  
**Sub. Code: 110995/110739/96655**



Total Marks: 80

Day and Date: APRIL ,26-04-2025

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) Multiple Choice Questions (12 questions for 1 mark each)

[12]

- i. What does IT Security primarily aim to protect?
  - A. Only hardware
  - B. Only software
  - C. Information and assets
  - D. Only networks
  
- ii. Which of the following is a logical asset in IT security?
  - A. Server
  - B. Switch
  - C. Software
  - D. Printer
  
- iii. What is the main purpose of ensuring confidentiality in IT Security?
  - A. Ensure systems work continuously
  - B. Ensure only authorized users access data
  - C. Ensure data is accurate
  - D. Ensure backups exist
  
- iv. Why is IT security becoming more significant today?
  - A. Decrease in the number of users
  - B. Increase in paper records
  - C. Rise in cyber threats and digital dependency
  - D. Reduction in hardware cost
  
- v. Which of the following is an example of a passive attack?
  - A. Phishing
  - B. Sniffing
  - C. Eavesdropping
  - D. Denial of Service



- vi. What type of attack involves sending fraudulent emails to trick users into revealing sensitive information?
- A. Spoofing
  - B. Phishing
  - C. Sniffing
  - D. Spamming
- vii. Which of the following is NOT a source of security threats?
- A. Hackers
  - B. Software updates
  - C. User errors
  - D. Environmental hazards
- viii. A worm differs from a virus in that it:
- A. Needs a host program
  - B. Cannot replicate
  - C. Spreads without user intervention
  - D. Is always harmless
- ix. Which security control detects and blocks suspicious network activity in real-time?
- A. Firewall
  - B. Intrusion Detection System (IDS)
  - C. Intrusion Prevention System (IPS)
  - D. Antivirus
- x. What does a firewall primarily protect against?
- A. Physical damage
  - B. Unauthorized network access
  - C. Biometric failure
  - D. Data formatting errors
- xi. Cyber security standards help organizations to:
- A. Replace all software
  - B. Improve internet speed
  - C. Protect systems and data from cyber threats
  - D. Design websites
- xii. Which of the following is a challenge in enforcing IT laws?
- A. Rapidly evolving technologies
  - B. Physical infrastructure cost
  - C. Employee punctuality
  - D. Software development process

Q2) Explain in detail the basic concepts of Information System Security. Discuss its [16] need, significance, and current challenges faced by organizations.

- Q3) Classify IT assets into Physical and Logical categories. Explain each with at least three examples. [16]
- Q4) Explain different types of security threats with suitable examples. Categorize them into cyber threats and physical threats. [16]
- Q5) Discuss the techniques used in phishing, spoofing, and denial-of-service attacks. What preventive measures should be taken? [16]
- Q6) Describe various access control mechanisms used in IT security. [16]
- Q7) Discuss in detail the features of the Information Technology Act 2000, the need for its amendments, and its relevance in today's digital environment. [16]
- Q8) Write notes on (Any Four out of Six) [20]
- Information security dimensions [5]
  - Malicious Code [5]
  - Types of Cryptography [5]
  - Digital signature and certificate [5]
  - IS Audit [5]
  - Types of cyber crimes [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.

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- 1] (717) Bachelor of Computer Application (110995) IT Security Part 3 SEM 6
- 2] (7810) B.C.A. (CBCS) (110739) IT Security Part 3 SEM 6
- 3] (7824) Bachelor of Computer Application (CBCS)NEP (96655) IT Security Part 3 SEM 6



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Seat No. **MAR\_APR 2025 SUMMER EXAMINATION****11949 Bachelor of Computer Application(BCA) NEP 2.0****Sub. Name: Linux** *BCA-III sem III***Sub. Code: 66424/109327/108800/96647****Day and Date: APRIL ,23-04-2025****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. Which of the following is NOT a function of an operating system?
  - A. Memory Management
  - B. Process Management
  - C. Network Configuration
  - D. Hardware Manufacturing
  
- ii. The kernel in an operating system is responsible for:
  - A. Managing system resources
  - B. Sending emails
  - C. Running user applications
  - D. Opening a web browser
  
- iii. Which component of Linux acts as an interface between the user and the kernel?
  - A. Compiler
  - B. Shell
  - C. File System
  - D. Boot Loader
  
- iv. Which command is used to create a new directory?
  - A. dir
  - B. rmdir
  - C. cd
  - D. mkdir
  
- v. What does the chmod command do?
  - A. Moves a file
  - B. Changes file owner
  - C. Changes file permissions
  - D. Deletes a file



- vi. Which command is used to search for a specific pattern in a file?
- A. paste
  - B. sort
  - C. cut
  - D. grep
- vii. What are the three modes of the VI editor?
- A. Normal mode, Input mode, Command-line mode
  - B. Read mode, Write mode, Edit mode
  - C. View mode, Insert mode, Edit mode
  - D. Insert mode, Delete mode, Command mode
- viii. Which command is used to save a file in VI editor?
- A. :s
  - B. :q!
  - C. :x
  - D. :w
- ix. How do you delete a single character in VI?
- A. dd
  - B. x
  - C. d\$
  - D. dw
- x. What is a shell script?
- A. A compiled program
  - B. A text file containing a sequence of shell commands
  - C. A GUI-based script
  - D. A programming language
- xi. Which command is used to print text in a shell script?
- A. display
  - B. print
  - C. echo
  - D. show
- xii. Which command is used for conditional execution in a shell script?
- A. check
  - B. if
  - C. loop
  - D. goto

Q2) What is Operating system? Explain types of operating systems .

[16]

Q3) What is Vi Editor? Explain different modes in VI editor.

[16]

- Q4) What is Shell Script . Explain Kernel-shell relationship. [16]
- Q5) Explain directory handling commands- cd , mkdir , rmdir,pwd . [16]
- Q6) Explain statements in shell programming - read , echo, if, case. [16]
- Q7) What is file? Explain file system tree in detail. [16]
- Q8) Write short note(Any Four ) [20]
- Features of Linux
  - grep command.
  - Features of Vi editor.
  - Functions of operating system.
  - General purpose utility commands.
  - Loops in Shell script.

## End Of Question Paper

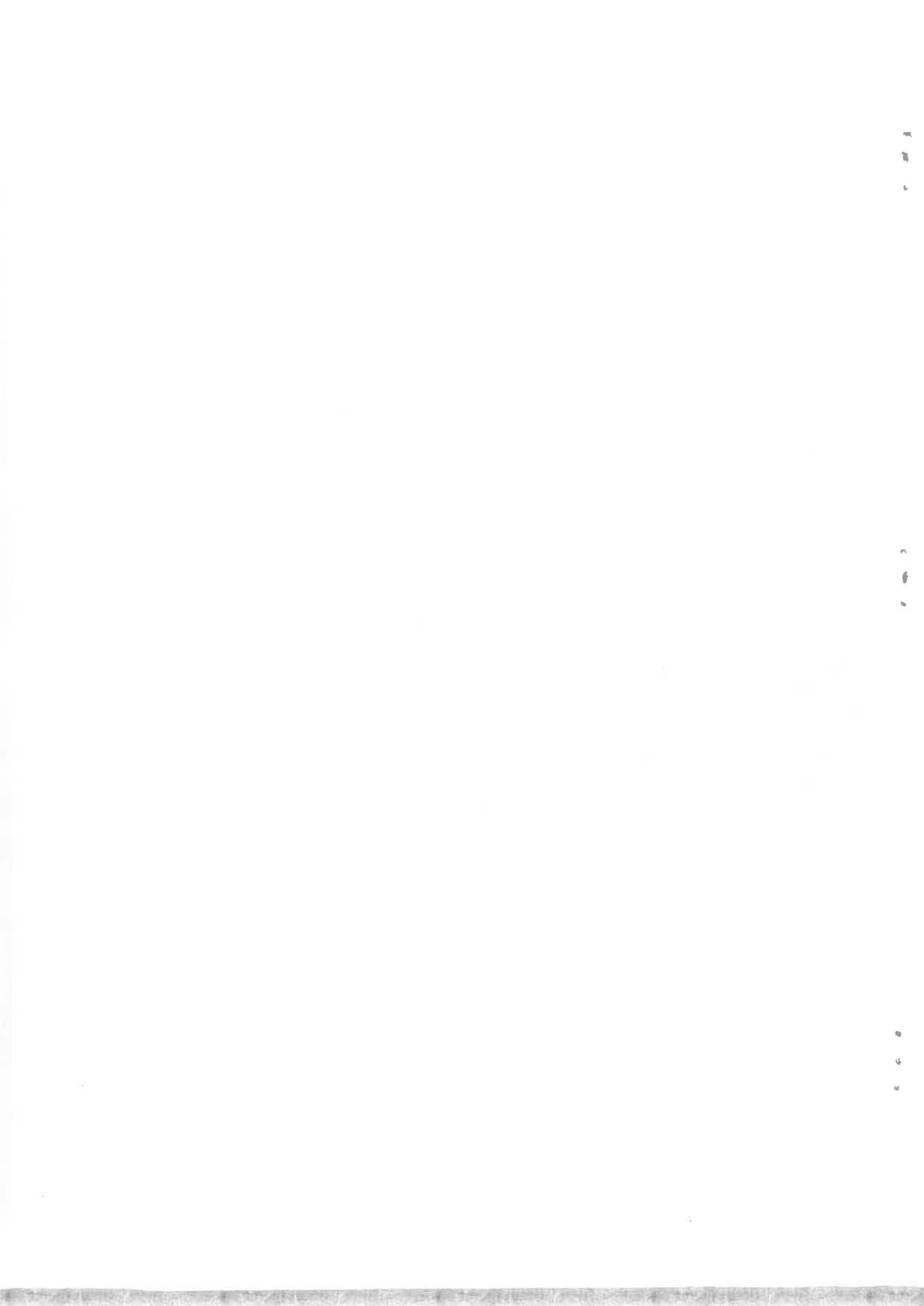
### Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -

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सदरची प्रश्नपत्रिका खालील विषयांकरिता वितरित करता येईल.

- 1] (717) Bachelor of Computer Application (66424) Linux Operating System Part 3 SEM 6
- 2] (7824) Bachelor of Computer Application (CBCS)NEP (96647) Linux Part 3 SEM 5
- 3] (717) Bachelor of Computer Application (109327) Linux Part 3 SEM 5
- 4] (7810) B.C.A. (CBCS) (108800) Linux Part 3 SEM 5





Seat No. 

**MAR\_APR 2025 SUMMER EXAMINATION**  
**11949 Bachelor of Computer Application(BCA) NEP 2.0**

Sub. Name: Python

Sub. Code: 110994/96654/110738

BCA-III sem- VI



Total Marks: 80

Day and Date: APRIL ,21-04-2025

Time: 02:30 PM To 05:30 PM

Instructions: 1. Figures to the right indicate full marks

Special Inst.: 1) Que. No.1 and Que.No. 8 are compulsory

2) Attempt any three Questions from Que. No.2 to Que. No. 7.

Q1) Solve following MCQ.

[12]

- i. Which widget is used to get the data from the user?
  - A. Entry
  - B. Label
  - C. Button
  - D. None of the above
- ii. What is the output of the expression round(4.576)?
  - A. 4.5
  - B. 5
  - C. 4
  - D. 4.6
- iii. Which of these about a set is not true?
  - A. Mutable data type
  - B. Does not allow duplicate values
  - C. Data type with unordered values
  - D. Immutable data type
- iv. How we import a tkinter in Python program?
  - A. import tkinter
  - B. import tkinter as t
  - C. from tkinter import \*
  - D. All of the above
- v. Which of the following statements create a dictionary?
  - A. d = {}
  - B. d = {"john":40, "peter":45}
  - C. d = {40:"john", 45:"peter"}
  - D. All of the mentioned
- vi. What will be the output of the following code?



T=(1, 2, 3, 4, 5)

T.pop()

print(T)

- A. (1, 2, 3, 4)
- B. (2, 3, 4, 5)
- C. (1, 2, 3, 4, 5)
- D. Error

vii. What will be the output of the following Python code?

```
x = ['ab', 'cd']
```

```
for i in x:
```

```
    i.upper()
```

```
print(x)
```

- A. ['ab', 'cd']
- B. ['AB', 'CD']
- C. [None, None]
- D. none of the mentioned

viii. Which of the following is the correct way to declare a variable in Python?

- A. int x = 10
- B. x := 10
- C. x = 10
- D. var = 10

ix. What is the output of print(type("Hello"))?

- A. <class 'int'>
- B. <class 'str'>
- C. <class 'float'>
- D. <class 'list'>

x. What will be the output of the following Python code?

```
t1 = (1, 2, 4, 3)
```

```
t2 = (1, 2, 3, 4)
```

```
t1 < t2
```

- A. True
- B. False
- C. Error
- D. None

xi. GUI stands for----- .

- A. Global user interaction
- B. Graph user interaction
- C. Graphical user interaction
- D. Graphical user interface

xii. Suppose listExample is ['h', 'e', 'l', 'l', 'o'], what is len(listExample)?



- A. 5
- B. 4
- C. None
- D. Error

- Q2) A.** Explain the import statement in Python. [8]  
**B.** What is a Dictionary? Explain Accessing Values in Dictionary. [8]
- Q3) A.** What are Python features? [8]  
**B.** What is function? Explain function with arguments with example. [8]
- Q4) A.** Write a Python program to calculate the factorial of a given number. [8]  
**B.** What is set? Explain different operations on set with examples. [8]
- Q5)** Write a program to demonstrate file input and output in Python. [16]
- Q6) A.** What is the list? Explain list slicing with examples. [8]  
**B.** Describe applications of Python. [8]
- Q7)** Illustrate different looping statements used in Python. [16]
- Q8)** Write short note on any four. [20]
- a. Escape Characters
  - b. GUI In Python
  - c. Tuples Operations
  - d. Lambda Function
  - e. Math Module
  - f. Break and Continue

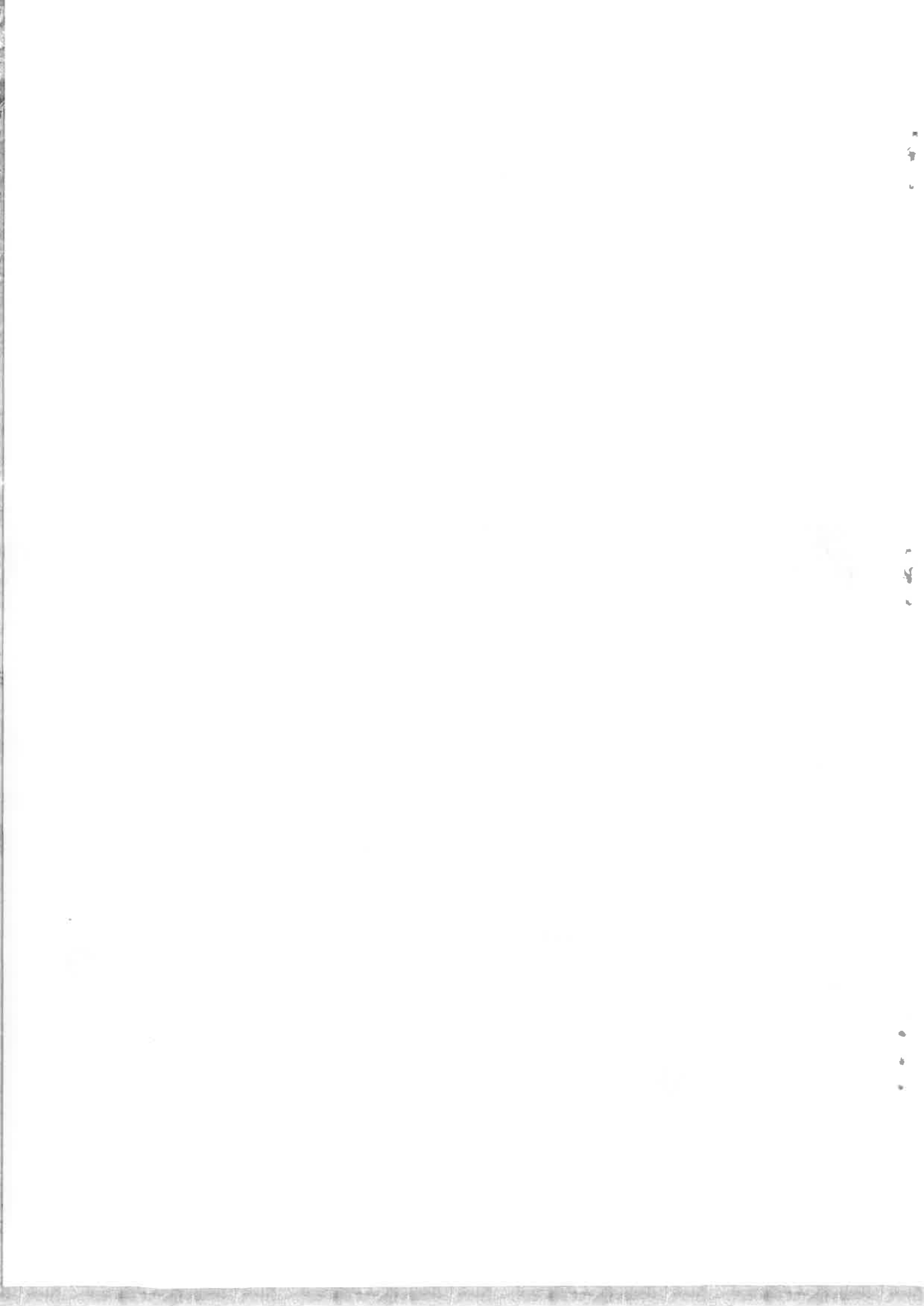
## End Of Question Paper

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

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

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- 1] (717) Bachelor of Computer Application (110994) Python Part 3 SEM 6
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Total No. of Pages : 4

Seat  
No.

Oct.-Nov. 2024 Examination  
B.C.A. (PART-III) (Sem-VI)  
Enterprise Resource Planning (ERP) Paper I  
Sub. Code: 88298

Day and Date : Thursday, 28-11-2024

Total Marks : 50

Time : 10:30 am to 12:00 pm

**Instructions:**

- 1) Que.1 and Que. 6 are compulsory and attempt any three Questions from Que. No.2 to Que. No. 5.
- 2) Figures to the right indicate marks.

**Q.1 A Multiple Choice Questions (10 questions for 1 mark each) 10**

- 1) Material Requirement Planning(MRP) utilizes software applications for scheduling .....
  - A. Sales management.
  - B. Production processes.
  - C. Marketing techniques.
  - D. Human resource management.
- 2) ERP package will handle .....business functionalities.
  - A. One.
  - B. Two.
  - C. Three.
  - D. All.
- 3) The most important step of ERP implementation is .....phase.
  - A. Installing.
  - B. Training.
  - C. Gap analysis.
  - D. Testing.



- 4) Organizations are using the ERP system in order to improve their
- A. Business transactions
  - B. Worth
  - C. Knowledge
  - D. All of the above
- 5) Which of the following modules are included in ERP system?
- A. Materials management
  - B. Financial accounting
  - C. Human resource management
  - D. All of the above
- 6) .....is the first phase in BPR.
- A. Begin organizational change.
  - B. Identifying bpr opportunities.
  - C. Reengineering the process.
  - D. Blueprint the new business system.
- 7) Data mining is a powerful new technology to .....from large databases.
- A. Extraction of hidden predictive information.
  - B. Generating reports.
  - C. Retrieving data.
  - D. Show result.



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- 8) .....is one of the benefits of supply chain management.
- A. Easy process.
  - B. Manufacturing make-to-stock products.
  - C. Minimum time.
  - D. Faster response-to-market changes.
- 9) .....is a track-proven technology applicable to every company.
- A. Olap.
  - B. Supply chain management.
  - C. Data mining.
  - D. Data warehousing.
- 10) The cost of ERP is .....
- A. Depends on the package.
  - B. Depends on available resources.
  - C. Technology used
  - D. All the above.

**B) Short answer question (Any two out of three) 10**

- A. Explain role of consultant in ERP?
- B. Explain ERP evolution?
- C. Explain definition of BPR and need of BPR

**Q.2 Explain Different phases in an ERP implementation? 10**

**Q.3 Explain the concept of Supply Chain Management? State its benefits 10**

**Q.4 What is SAP? Discuss advantages and disadvantages of SAP. 10**

Q.5 Explain Critical success and failure factors of ERP.

10

Q.6 Write Short Notes (Any two out of Three)

20

- A. Reasons for growth of ERP
- B. Conceptual ERP model
- C. Oracle ERP
- D. Mobile erp
- E. BPR phase
- F. HR module in erp

