



**B.C.A. – III<sup>rd</sup> Year**

**SEM – V & VI**

**Previous Year**

**Question Papers**

**Academic Year**

**(2023-24)**





**B.C.A. – III<sup>rd</sup> Year**

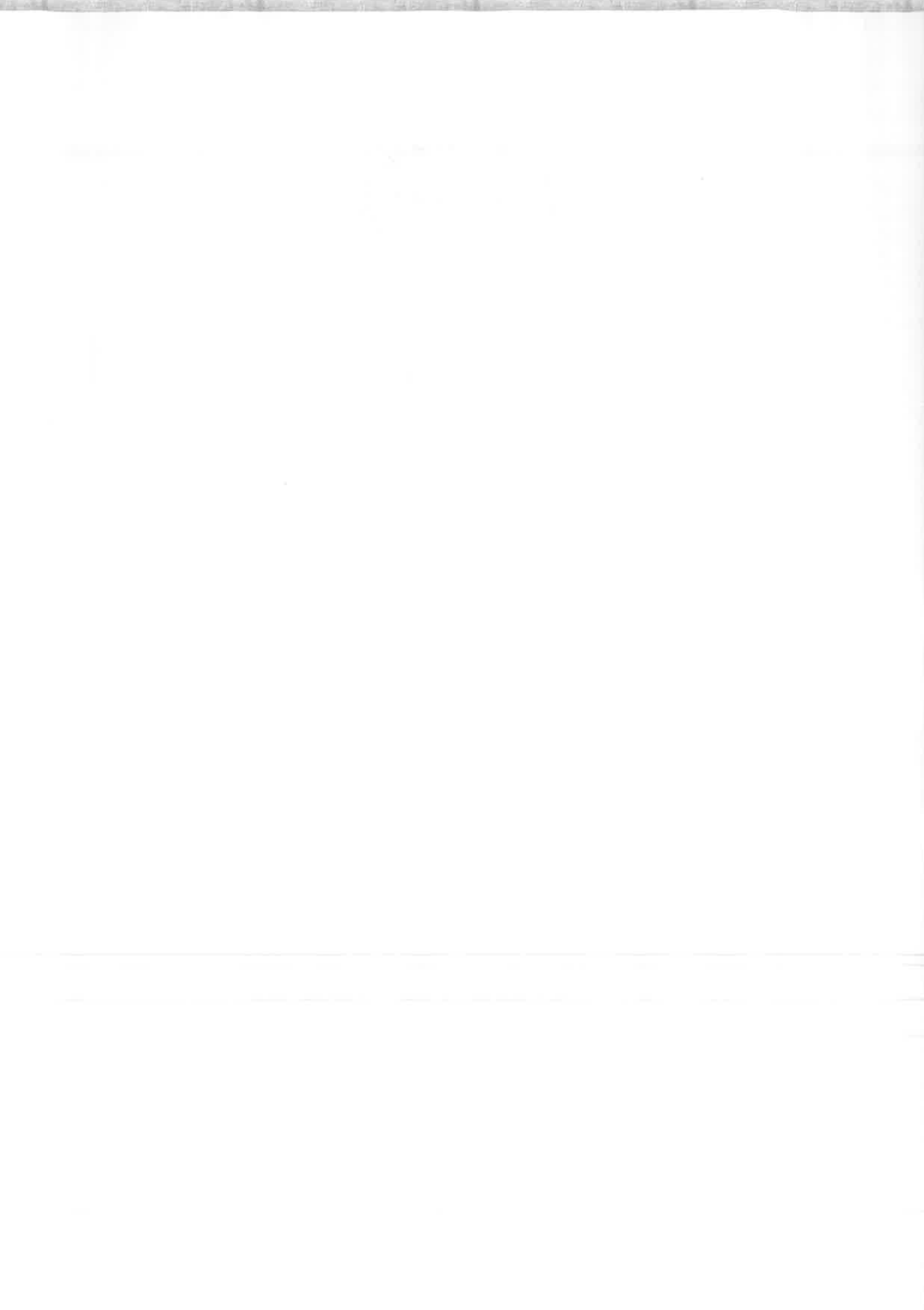
**SEM – V**

**Previous Year**

**Question Papers**

**Academic Year**

**(2023-24)**





QP Code: 7597QP

Total No. of Pages: 3

Seat No. **BCA-III, Sem.-V**

## Winter Examination Oct/Nov 2023

Subject Name: B.C.A. (CBCS)\_88232\_88658 - Java Programming\_25.10.2023\_02.30 PM To 05.30 PM

Subject Code: 88232

Day and Date: - Wednesday, 25-10-2023

Total Marks: 70

Time: - 02:30 pm to 05:30 pm

### Instructions.:

1) Figures to the right indicate full marks

### Special Instruction.:

Instructions: 1) Q.1 and Q. 6 are compulsory and attempt any three Questions from Q. 2 to Q. 5.

### Q.1. A. Multiple Choice Questions( 10)

[20]

1. Which environment variable is used to set the java path?

- a) JAVA\_Path
- b) JavaPATH
- c) JAVA
- d) JAVA\_HOME

2. Which statement is true about Java?

- a) Java is a sequence-dependent programming language
- b) Java is a code dependent programming language
- c) Java is a platform-dependent programming language
- d) Java is a platform-independent programming language

3. What is not the use of "this" keyword in Java?

- a) Referring to the instance variable when a local variable has the same name
- b) Passing itself to the method of the same class
- c) Passing itself to another method
- d) Calling another constructor in constructor chaining

4. Which exception is thrown when java is out of memory?

- a) MemoryError
- b) OutOfMemoryError
- c) MemoryOutOfBoundsExpection
- d) MemoryFullExpection

5. Which of these statements is incorrect about Thread?

- a) start() method is used to begin execution of the thread
- b) run() method is used to begin execution of a thread before start() method in special cases
- c) A thread can be formed by implementing Runnable interface only
- d) A thread can be formed by a class that extends Thread class

6. Which are passive controls that do not support any interaction with the user? [20]

- a. Choice
- b. List
- c. Labels
- d. Checkbox

7. Which package provides many event classes and Listener interfaces for event handling?

- a. java.awt
- b. java.awt.Graphics
- c. java.awt.event
- d. None of the above



8. Which inheritance in Java programming is not supported?

- a. Multiple inheritance using classes.
- b. Multiple inheritance using interfaces.
- c. Multilevel inheritance.
- d. Single inheritance.

9. Which of the following is an incorrect statement about packages?

- a. Package defines a namespace in which classes are stored.
- b. A package can contain other package within it.
- c. Java uses file system directories to store packages.
- d. A package can be renamed without renaming the directory in which the classes are stored.

10. Which of these keywords are used for generating an exception manually?

- a. try
- b. catch
- c. throw
- d. check

**B. Short answer Questions ( Solve Any Two )**

1. Explain History and different features of Java in details?
2. what is synchronization? Give its types and explain.
3. Explain different Layout Managers in java?

Q.2. What are Java Selection Statements? Explain each one with syntax and example. [10]

Q.3. What is the multiple inheritance ? Write a java program to implement multiple inheritance [10]

Q.4. Explain about Event Delegation Model in Event Handling with example [10]

Q.5. Define exception in Java?. Explain in details Java exception Hierarchy [10]

**Q.6. Write notes on (Any Four out of Six)**

**[20]**

- a) IS-A and HAS-A Relationship**
- b) Thread Life Cycle**
- c) Types of polymorphism**
- d) Differentiate between AWT and Swing**
- e) different data types supported by Java**
- f) types of Constructors**





Seat No.	
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**B.C.A. (Commerce and Management) Part-III Semester-V  
Examination, March 2024.**

**JAVA PROGRAMMING (CC 501)**

**Sub. Code : 88232**

**Day and Date: Tuesday, 26-03-2024**

**Total Marks: 70**

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

- Instructions:**
- 1) Q.1 and Q.6 are **COMPULSORY** and attempt **ANY THREE** questions from Q.2 to Q.5.
  - 2) Figures to the right indicate full marks.

**Q.1 a) Multiple choice questions. (10 questions for 1 mark each) (10)**

- 1) Which constructor function is designed to copy objects of the same class type?  
(A) Create constructor (B) Object constructor  
(C) Dynamic constructor (D) Copy constructor
- 2) The ..... statement can be used to handle an exception that is not caught by any of the previous catch statement.  
(A) throw (B) catch  
(C) finally (D) try
- 3) ..... exception is thrown when an attempt is made to access an array element beyond the index of the array.  
(A) Throwable (B) Restricted  
(C) Security (D) ArrayIndexOutOfBounds
- 4) Which of the following will produce a value of 10 if  $x = 9.7$ ?  
(A) floor ( $x$ ) (B) abs ( $x$ )  
(C) rint ( $x$ ) (D) round ( $x$ )



- 5) The concept of multiple inheritance is implemented in Java by  
(A) extending two or more classes  
(B) extending one class and implementing one or more interfaces  
(C) implementing two or more interfaces  
(D) both B and C
- 6) Which object can be constructed to show any number of choices in the visible window?  
(A) Labels (B) Choice  
(C) List (D) Checkbox
- 7) Which are passive controls that do not support any interaction with the user?  
(A) Choice (B) List  
(C) Labels (D) Checkbox
- 8) Which of these is a mechanism for naming and visibility control of a class and its content?  
(A) Object (B) Packages  
(C) Interfaces (D) None of these
- 9) Which of the following is the correct way of implementing an interface salary by class manager?  
(A) Class manager extends salary {}  
(B) Class manager implements salary {}  
(C) Class manager imports salary {}  
(D) None of these
- 10) Which of these methods are used to register a keyboard event listener?  
(A) KeyListener () (B) AddKeyListener ()  
(C) AddKeyListener () (D) eventKeyboardListener ()

**b) Short answer questions. (Any two out of three) (10)**

- i) What is Byte Code? Why Java is platform independent?  
ii) What is constructor? Give its types with example.  
iii) Explain different types of polymorphism in detail.



## SW-108

- Q.2** State and explain different branching statements in Java with suitable examples. (10)
- Q.3** What is inheritance? Explain its different types with examples. (10)
- Q.4** What is Multithreading? Explain different ways of thread creation in Java. (10)
- Q.5** State and explain any **FIVE** swings components with examples. (10)
- Q.6** Write notes on. (Any four out of six) (20)
- i) JDK, JRE and JVM
  - ii) Interface
  - iii) Getter and setter method in Java
  - iv) Event-Delegation Model
  - v) Exception handling
  - vi) Listeners





QP Code: 7626QP

Total No. of Pages: 3

Seat No. BCA-III, Sem. V

## Winter Examination Oct/Nov 2023

Subject Name: B.C.A. (CBCS) 88233\_88659 - Data Warehousing and Data Mining\_26.10.2023\_02.30 PM  
To 05.30 PM

Subject Code: 88233

Day and Date: - Thursday, 26-10-2023

Time: - 02:30 pm to 05:30 pm



Total Marks: 70

Instructions.:

1) Figures to the right indicate full marks

Special Instruction.:

1. Que. no. 1 and 6 are compulsory. 2. Attempt any three questions from Que. 2 to 5

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

[20]

10

1. Where is data warehousing used?

- A. Transaction system
- B. Logical system
- C. Decision support system
- D. None of above

2. ....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

3. ....is defined as the heterogeneous data from multiple sources combined into a common source.

- A. Data extraction
- B. Data integration
- C. Data Modeling
- D. None of above

4. KDD stands for .....

- A. Knowledge discovery and data
- B. Knowledge discovery from data
- C. Knowledge did from data
- D. None of above

5. On what is data warehouse based?

- A. 1D model
- B. 2D model
- C. 3D model
- D. Multidimensional model

6. From where are classification rules extracted?

[20]

- A. Branches
- B. Decision tree
- C. Siblings
- D. Root node

7. Which of the following also used as the first step in the knowledge discovery process?

- A. Data selection
- B. Data cleaning
- C. Data transformation
- D. Data integration



8. Why is the snowflake schema applied?

- A. Transformation
- B. Aggregation
- C. Normalization
- D. Generalization

9. Choose incorrect property of data warehouse

- A. Volatile
- B. Subject-oriented
- C. Time variant
- D. Collection from heterogeneous sources

10. Which one of the following is not a clustering method?

- A. K- nearest neighbor method
- B. K-means method
- C. Agglomerative method
- D. All of the above

Q. 1 B Write short answers (Any two)

10

1. Explain 3 tier data warehouse architecture.
2. Discuss KDD process.
3. Explain Rule based classification

Q.2. What is graph sampling? Explain frequent sub graph mining and tree mining. [10]

Q.3. What is data mining? Discuss different applications of data mining. [10]

Q.4. What is multi-dimensional data model? Explain data cube and star model in detail. [10]

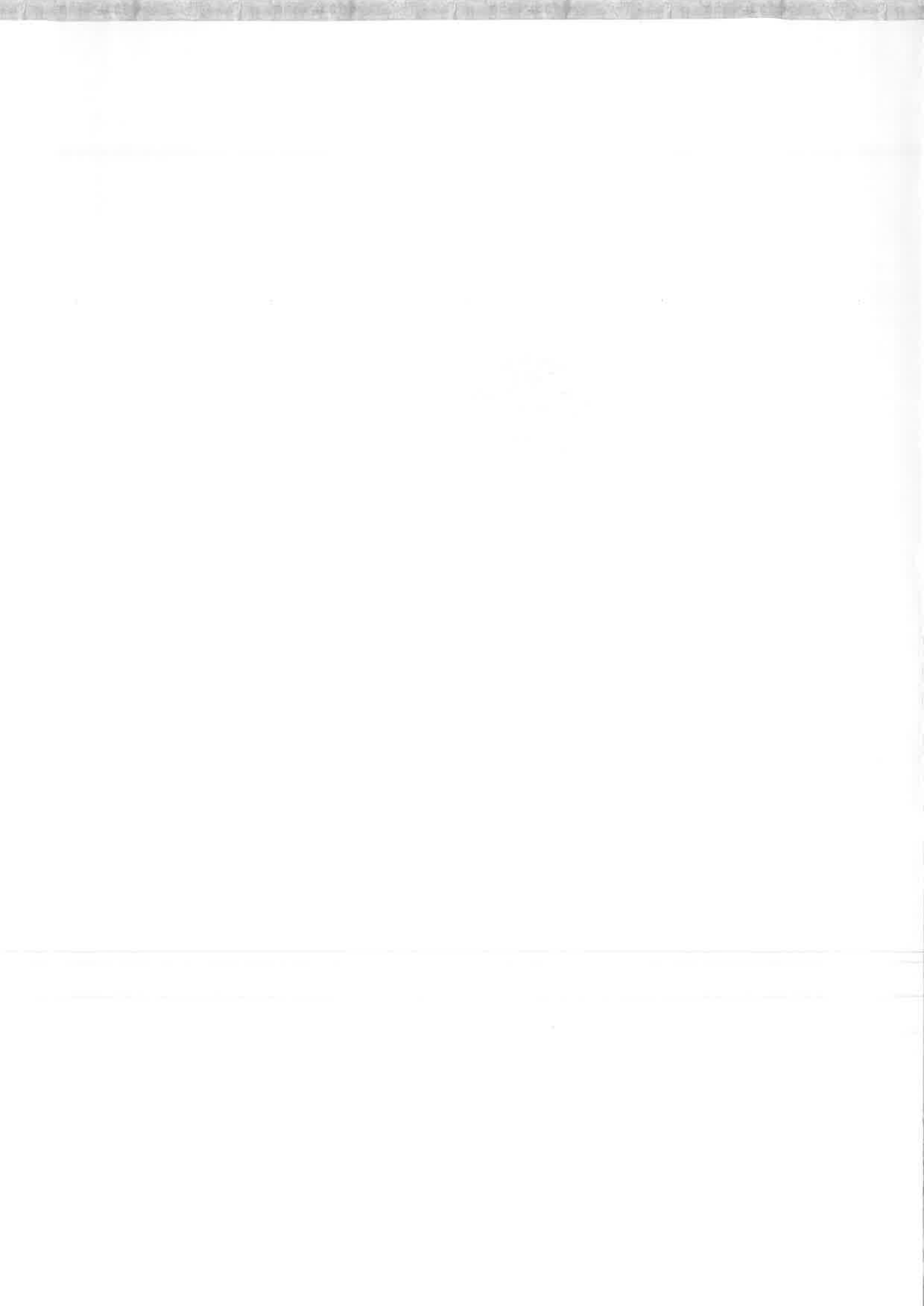
Q.5. Explain in detail partitioning methods like K-mean and K-medoids. [10]

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

**[20]**

- 1. Components of data warehousing**
- 2. Data mining tasks**
- 3. Tree algorithm**
- 4. Accuracy and error measures**
- 5. Types of data in cluster analysis**
- 6. Apriori algorithm**





Seat No.	
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**B.C.A. (COMM) (CBCS) Part-III (Sem.-V)****Examination, March 2024.****Data Warehousing And Data Mining****Sub. Code : 88233****Day and Date: Wednesday, 27-03-2024****Total Marks: 70****Time: 10.30 a.m. to 01.30 p.m.**

- Instructions:**
- 1) Q.1 and Q.6 are compulsory and attempt ANY THREE questions from Q.2 to Q.5.
  - 2) Figures to the right indicate full marks.

**Q.1 a) Choose the correct options. (10)**

- 1) Where is data warehousing used?
  - (A) Transaction system
  - (B) Logical system
  - (C) Decision support system
  - (D) None of these
- 2) Data Warehouse is needed for .....
  - (A) to store historical data.
  - (B) to make strategic decisions.
  - (C) data consistency and quality.
  - (D) All of these.
- 3) Data mining is also called .....
  - (A) Online Transactional Processing
  - (B) Knowledge Discovery in Database
  - (C) Knowledge Detect from Database
  - (D) None of these
- 4) Identify the type of relationship between fact and dimension table in a star schema.
  - (A) One to one
  - (B) Many to many
  - (C) One to many
  - (D) Many to one



- 5) ..... is identified as the process of transforming data into the appropriate required form required by the mining procedure.
- (A) Selection (B) Extraction  
(C) Transformation (D) None of these
- 6) From where are classification rules extracted?
- (A) Branches  
(B) Decision tree  
(C) Siblings  
(D) Root node
- 7) What are the functions of Data Mining?
- (A) Association and correctional analysis classification  
(B) Prediction and characterization  
(C) Cluster analysis and Evolution analysis  
(D) All of these
- 8) Which of the following is also used as the first step in the knowledge discovery process?
- (A) Data selection (B) Data cleaning  
(C) Data transformation (D) Data integration
- 9) Which one of the following can be considered as the final output of the hierarchal type of clustering?
- (A) A tree which displays how close the things are to each other.  
(B) Assignment of each point to clusters  
(C) Finalize estimation of cluster centroids  
(D) None of these
- 10) DSS in data warehouse stands for .....
- (A) Decision single system  
(B) Decision support system  
(C) Data support system  
(D) Data storable system



**Q.1 b) Write short answers. (Any two) (10)**

- 1) Differentiate between database system and data warehouse.
- 2) Discuss functionalities issues in data mining.
- 3) Discuss Apriori algorithm.

**Q.2 What is data warehousing? Describe components of data warehousing. (10)**

**Q.3 Define data mining. Explain its process in detail. (10)**

**Q.4 What is classification and prediction? Discuss a classification by decision tree. (10)**

**Q.5 Discuss different clustering methods in detail. (10)**

**Q.6 Write short notes. (Any four) (20)**

- 1) Clean and transform data in data warehouse
- 2) Online analytical processing
- 3) Tree algorithm
- 4) 3 tier data warehouse architecture
- 5) Rule based classification
- 6) Cluster analysis





QP Code: 7670QP

Total No. of Pages: 2

Seat No. BCA-III, sem.- V

## Winter Examination Oct/Nov 2023

Subject Name: B.C.A. (CBCS)\_88234\_88660 - IT Security\_27.10.2023\_02.30 PM To 05.30 PM

Subject Code: 88234

Day and Date: - Friday, 27-10-2023

Time: - 02:30 pm to 05:30 pm



Total Marks: 70

Instructions.:

1) Figures to the right indicate full marks

Special Instruction.:

Q1. and Q.6 are compulsory ,Attempt any 3 from Q.2 to Q.5.

Q.1. A) Choose correct alternative for following questions.

[20]

10 Marks

1. Which of the following is considered as the unsolicited commercial email ?

a) Virus b) Malware c) Spam d) All of these

2. What is the purpose of an IS audit ?

a) To prevent hardware failure  
b) To ensure software reliability  
c) To detect and correct security vulnerabilities  
d) To recover lost data

3. Which of the following is an example of a passive security attack ?

a) Phishing b) Spoofing c) Sniffing d) Denial of service attack

4. Which of these is an antivirus program type?

a) Kaspersky b) Quick heal c) McAfee d) All of the mentioned

5. Which of the following is true about firewall ?

a) Firewalls are network-based security measures that control the flow of incoming and outgoing traffic  
b) A firewall is a program that encrypts all the programs that access the Internet.  
c) A firewall is a program that keeps other programs from using the network.  
d) Firewalls are interrupts that automatically disconnect from the internet when a threat appears

6. What are the major components of the intrusion detection system ?

a) Analysis Engine b) Event provider c) Alert Database d) All of the mentioned

7. Compromising confidential information comes under \_\_\_\_\_  
a) Bug b) Threat c) Vulnerability d) Attack

8. Which security measure helps in verifying the authenticity of digital documents ?

a) Antivirus software b) Intrusion detection system c) Cryptography d) Deception technology

9. Which of the following types of text would be transformed using the cipher algorithm ?

a) Transformed text b) Scalar text c) Complex text d) Plain text

10. Which of the following is not a valid cyber-crime under the IT Act 2000 ?

a) Hacking b) Data theft c) Email spamming d) Online fraud

B) Write a short answer of the following questions (Any Two)

10

Marks

1. Define IT security. Explain two types of active security attacks.

2. Define Cryptography. Explain different types of cryptography.

3. Explain need and significance of Deception Technology



Q.2. Explain the control measures and technologies used for IT security with [10] example.

Q.3. Explain the Significance and Challenges of IT Security. [10]

Q.4. Discuss the Physical and Logical assets in detail. [10]

Q.5. Explain the importance of information security dimensions: [10] confidentiality, integrity, and availability. Give the example of how these dimensions are maintained in an IT system.

Q.6. Write a short notes on (Any 4) [20]

1. The IT Act 2000
2. Cyber security standards
3. Malicious Code
4. Cyber crime and investigation
5. Digital signature and certificate
6. DoS attack

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**Total No. of Pages : 03**

<b>Seat No.</b>	
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**B.C.A. (Part-III) (Semester-V) (CBCS)**

**Examination, March 2024.**

**I.T. Security**

**Sub. Code : 88234**

**Day and Date: Thursday, 28-03-2024**

**Total Marks: 70**

**Time: 10.30 a.m. to 01.30 p.m.**

- Instructions:**
- 1) **Q.1 and Q.6 are compulsory.**
  - 2) **Attempt ANY THREE questions from Q.2 to Q.5.**
  - 3) **Figures to the right indicate full marks.**

**Q.1 a) Choose the correct answer in each of the following questions. (10)**

- 1) Which of the following is NOT a common security threat to IT systems?
  - (A) Malware
  - (B) Social engineering
  - (C) Frequent software updates
  - (D) Phishing attacks
- 2) How does spoofing differ from phishing?
  - (A) Spoofing involved flooding a system or network with traffic, while phishing involves intercepting network traffic.
  - (B) Spoofing involves impersonating legitimate users, while phishing involves sending fraudulent emails or messages.
  - (C) Spoofing involves creating fake websites, while phishing involves monitoring network traffic.
  - (D) Spoofing involves modifying data packets, while phishing involves creating fake websites.



**P.T.O.**

- 3) What is the primary motivation behind most cyber-attacks?
- (A) Financial gain
  - (B) Personal entertainment
  - (C) Academic research
  - (D) Political activism
- 4) What is the purpose of implementing data backup and recovery procedures in IT security?
- (A) To prevent unauthorized access to IT systems and networks
  - (B) To encrypt sensitive data transmissions
  - (C) To ensure that data can be restored in the event of data loss or corruption
  - (D) To control access to IT resources based on user roles and permissions
- 5) 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
- 6) Which of the following is a proactive approach to malware detection?
- (A) Signature-based detection
  - (B) Heuristic analysis
  - (C) Behavior-based detection
  - (D) Limiting access to specific IP addresses
- 7) What is the primary purpose of biometric verification in IT security?
- (A) To encrypt sensitive data transmission
  - (B) To limit access to specific IP addresses
  - (C) To authenticate individuals based on unique biological characteristics
  - (D) To monitor physical access to IT facilities
- 8) Which of the following biometric characteristics is NOT commonly used for verification purposes?
- (A) Hair color
  - (B) Retina scan
  - (C) Iris pattern
  - (D) Voice recognition



- 9) What dimension of information security focuses on ensuring that security measures are compliant with laws, regulations and industry standards?
- (A) Compliance (B) Confidentiality  
(C) Integrity (D) Availability
- 10) Which of the following is NOT a common type of malware detected by malware detectors?
- (A) Viruses (B) Trojans  
(C) Encryption algorithms (D) Ransomware

**b) Attempt ANY TWO questions. (10)**

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

**Q.2 Describe need and significance of IT security. (10)**

**Q.3 What is security threat? Explain different types of security threats. (10)**

**Q.4 What is IT security control measure? Explain biometric verification in detail. (10)**

**Q.5 Explain IT Act, 2000 along with its features. (10)**

**Q.6 Write notes. (Any four) (20)**

- a) Challenges of IT Security
- b) Cyber-crimes under Information Technology Act, 2000
- c) Digital signature and certificate
- d) IT assets
- e) Sources of threat
- f) Multilevel authentication





QP Code: 7847QP

Total No. of Pages: 2

Seat No. **BCA-III, S:- V**

## Winter Examination Oct/Nov 2023

Subject Name: B.C.A. (CBCS)\_88235\_88661 \_ Python Programming\_28.10.2023\_02.30 PM To 05.30 PM

Subject Code: 88235

Day and Date: - Saturday, 28-10-2023

Time: - 02:30 pm to 05:30 pm



Total Marks: 70

Instructions.:

1) Figures to the right indicate full marks

Special Instruction.:

Que.1 and Que. 6 are compulsory . Attempt any three Questions from Que. No.2 to Que. No. 5.

**Q.1. Q.1) A] Choose correct option. 10 [20]**

1) Which of the following statements is used to create an empty set in Python?

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

2) What arithmetic operators cannot be used with strings in Python?

- a) \*
- b) -
- c) +
- d) All of the mentioned

3) Python supports the creation of anonymous functions at runtime, using a construct called \_\_\_\_\_

- a) pi
- b) anonymous
- c) lambda
- d) none of the mentioned

4) Which of the following character is used to give single-line comments in Python?

- a) //
- b) #
- c) !
- d) /\*

5) Which keyword is used for function in Python language?

- a) Function
- b) def
- c) Fun
- d) Define



- 6) All keywords in Python are in \_\_\_\_\_
- Capitalized
  - lower case
  - UPPER CASE
  - None of the mentioned
- 7) Which of the following is the correct extension of the Python file?
- .python
  - .pl
  - .py
  - .p
- 8) Which of the following is a Python tuple?
- [1, 2, 3]
  - (1, 2, 3)
  - {1, 2, 3}
  - { }
- 9) Which of the following functions is a built-in function in python?
- seed()
  - sqrt()
  - factorial()
  - print()
- 10) What is the output when we execute list("hello")?
- ['h', 'e', 'l', 'l', 'o']
  - ['hello']
  - ['llo']
  - ['olleh']

Q. 1) B] Write short answers (Any two)

10

- 1) Explain how to create list and access list items.
- 2) Explain date time and math module in python.
- 3) Discuss applications of python.

- Q.2. Explain function with argument and lambda function in python in detail. [10]
- Q.3. Explain with example different data types and operator in python. [10]
- Q.4. Explain basic tuple operations, indexing and slicing with example. [10]
- Q.5. What is dictionary? Explain built in dictionary functions and methods. [10]
- Q.6. Write short note on (Any Four) [20]
- 1) GUI in python
  - 2) Set operations
  - 3) Reading and writing files
  - 4) Escape character
  - 5) Continue and pass statements
  - 6) Features of python

Seat No.	
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**B.C.A. (CBCS) (Part-III) (Semester-V)****Examination, March 2024.****PYTHON PROGRAMMING****Sub. Code : 88235****Day and Date: Saturday, 30-03-2024****Total Marks: 70****Time: 10.30 a.m. to 01.30 p.m.**

- Instructions:**
- 1) Q.1 and Q.6 are compulsory.
  - 2) Attempt ANY THREE questions from Q.2 to Q.5.
  - 3) Figures to the right indicate full marks.

**Q.1 a) Choose the correct answer in each of the following questions. (10)**

1) How to output the string "Python Programming" in Python?

- (A) print("Python Programming")  
(B) echo("Python Programming")  
(C) System.out("Python Programming")  
(D) printf("Python Programming")

2) What is the maximum possible length of an identifier?

- (A) 31 characters (B) 63 characters  
(C) 79 characters (D) None of these

3) What will be the datatype of the var in the below code snippet?

```
var = 10  
print(type(var))  
var = "Hello"  
print(type(var))
```

- (A) str and str (B) int and int  
(C) int and str (D) float and str



- 4) Amongst the following, who is the developer of Python programming?  
(A) Guido van Rossum (B) Denis Ritchie  
(C) Y.C. Khenderakar (D) None of these
- 5) List, tuple and range are the ..... of Data Types.  
(A) Sequence Types (B) Binary Types  
(C) Boolean Types (D) None of these
- 6) The % operator returns the .....  
(A) Quotient (B) Divisor  
(C) Remainder (D) None of these
- 7) Python Dictionary is used to store the data in a ..... format.  
(A) Key value pair (B) Group value pair  
(C) Select value pair (D) None of these
- 8) Conditional statements are also known as ..... statements.  
(A) Decision-making (B) Array  
(C) List (D) None of these
- 8) In Python, ..... defines a block of statements.  
(A) Block (B) Loop  
(C) Indentation (D) None of these
- 10) The ..... is a built-in function that returns a range object that consists series of integer numbers, which we can iterate using a for loop.  
(A) set() (B) range()  
(C) dictionary {} (D) None of these

**b) Attempt ANY TWO questions.**

**(10)**

- 1) Explain the import statement in Python.
- 2) Describe lambda function with appropriate example.
- 3) Explain Escape characters in Python.



## SW-110

- Q.2** Demonstrate GUI in Python with appropriate example. (10)
- Q.3** Describe different types of operators in Python. (10)
- Q.4** What is Tuple? Explain basic tuple operations with an example. (10)
- Q.5** Explain different looping statements in Python with an example. (10)
- Q.6 Write notes. (Any four) (20)**
- 1) Calendar module
  - 2) Comment
  - 3) Dictionary
  - 4) Built-in String Methods
  - 5) Set Operations
  - 6) Features of Python





Seat  
No.

SR-337

Total No. of Pages : 4

**Shivaji University, Kolhapur**  
**Oct.- Nov. 2023 Examination**  
**Class : BCA III Sem V**  
**Subject:- Digital Marketing**  
**Subject Code : 88238**



**Day and Date : Monday, 30/10/2023**  
**Time : 02:30 pm to 05:30 pm**

**Total Marks : 70**

**Instructions:** 1) Question No.1 and Q.No. 6 are compulsory  
2) Attempt any 3 questions from Q. 2 to Q. 5  
3) Figures to the right indicate marks

**Q.1 A Choose correct alternative for following questions**

**10 Marks**

- Which component of the POEM framework represents content and assets that a company owns and controls?
  - Paid
  - Owned
  - Earned
  - Media
- Which of the following is NOT a key element of a Digital Marketing Strategy?
  - Identifying target audience
  - Creating a marketing budget
  - Setting clear objectives and goals
  - Implementing SEO techniques
- Which of the following is an example of consumer behavior in the digital age?
  - Buying products only from physical stores
  - Ignoring online reviews and ratings
  - Comparing prices and reading reviews online before making a purchase
  - Using traditional advertising channels exclusively

4. What is Search Marketing?
  - a. Marketing products through television ads
  - b. Marketing products using search engines
  - c. Marketing products through social media influencers
  - d. Marketing products through print media
5. What is the primary purpose of SEO (Search Engine Optimization)?
  - a. To increase the cost of advertising
  - b. To rank higher in search engine results and drive organic traffic
  - c. To directly sell products and services
  - d. To create engaging social media content
6. What does SEM stand for in the context of online marketing?
  - a. Search Engine Management
  - b. Social Engagement Marketing
  - c. Search Engine Marketing
  - d. Social Media Optimization
7. What is Google Ad Words?
  - a. A free search engine
  - b. A social media platform
  - c. Google's advertising platform for PPC campaigns
  - d. A content management system



8. Which type of mobile marketing involves sending promotional messages to a list of subscribers via text messages?
- App marketing
  - Mobile advertising
  - SMS marketing
  - Social media marketing
9. Which social media platform is primarily focused on professional networking and B2B marketing?
- Facebook
  - Instagram
  - Snapchat
  - LinkedIn
10. In Affiliate Marketing, who are the parties involved?
- Customers, marketers, and advertisers
  - Customers, publishers, and influencers
  - Advertisers, publishers, and consumers
  - Advertisers, influencers, and marketers



**Q.1B Write the answers of following questions in brief. (Any two) 10Marks**

1. Explain Digital Marketing Strategy with its need and significance.
2. Write Difference between SEO and SEM.
3. What are the technological advancements in Digital Marketing?

**Q.2** What is social Media Marketing? Explain different social Media channels.

**Q.3** What is affiliate marketing? Explain types of affiliate marketing

**Q.4** What is digital Marketing? Discuss Scope and advantages of digital Medium over other medium.

**Q.5** What is Mobile Marketing? Explain mobile marketing Eco system with its significance.

**Q.6** Write notes on (Any four)

**20 Marks**

1. Future of digital Marketing
2. Display Marketing
3. SEO
4. POEM Framework
5. Content Marketing
6. Email Marketing

◆◆◆





- iv) What is the purpose of conversion optimization in digital marketing?
- a) Increasing website traffic
  - b) Improving user experience and website performance
  - c) Enhancing social media engagement
  - d) All of these
- v) What is another term for "Social media"?
- a) Advertising socialization
  - b) Consumer generated media
  - c) Media optimization
  - d) Consumer media advertising
- vi) Content marketing is NOT?
- a) A strategic marketing approach.
  - b) Just another name for social media marketing
  - c) Focused on creating and distributing valuable, relevant and consistent content.
  - d) Able to attract and retain a clearly defined audience.
- vii) What are the goals that marketers should strive for in email marketing?
- a) Spend less time on email marketing
  - b) Increase open rates and click rates
  - c) Increase spam rates
  - d) Decrease deliverability rates
- viii) Which of the following is the form of mobile marketing?
- a) Text
  - b) Voice call
  - c) Graphic
  - d) All of these
- ix) Which of the following is/are the goal(s) of e-mail marketing??
- a) Increasing your product and service signups
  - b) For the purpose of generating new sales leads
  - c) Attend your event to react the maximum number of attendees
  - d) All of these



x) Affiliates receive a percentage of each sale's .....

- a) Profit
- b) Loss
- c) Average Profit
- d) Average Loss

**Q.1) B. Write the answers of following questions in brief. (Any two) [10]**

- a) How do digital marketing differ from traditional marketing?
- b) Explain search engine marketing.
- c) Explain different kinds of mobile marketing.

**Q.2) Explain poem framework in digital marketing strategy. [10]**

**Q.3) What is SEO? What factors should we consider while planning SEO for any Website? [10]**

**Q.4) Explain e-mail marketing in detail. [10]**

**Q.5) Explain practical applications of digital marketing. [10]**

**Q.6) Write short notes on (Any four) [20]**

- a) Future of digital marketing
- b) Measuring social media ROI
- c) Content marketing
- d) Affiliate marketing
- e) Types of SEM
- f) Keywords research and analysis







Shivaji University, Kolhapur

BCA III (Semester V) Practical Examination

Subject-Lab Course-IX Based on CC501 Paper No CCL 506

(Java Programming)

Day and Date: *Friday ; 24/11/2023*

Total Marks: 50

Time: *10.00 AM TO 01.00 PM*

Instructions:

- 1) All questions are compulsory
- 2) Each question carries 15 marks, 10 marks for journal and 10 marks oral Examination

Q1. Write a Java program to check year is leap year or not.

OR

Q.1 Write a Java program to display Fibonacci series.

Q2. Write a Java program to calculate area of rectangle and circle by implementing Interface.

OR

Q.2 Write a Java program demonstrates multithreading.





**B.C.A. – III<sup>rd</sup> Year**

**SEM – VI**

**Previous Year**

**Question Papers**

**Academic Year**

**(2023-24)**



Seat No.	
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**SR-299**

**Total No. of Pages : 2**

**B.C.A. (Part - III) (Semester - VI) (Revised) Examination,  
October - 2023**

**COMMERCE**

**Java Programming (Paper - 604)**

**Sub. Code : 66425**

**Day and Date : Friday, 27 - 10 - 2023**

**Total Marks : 80**

**Time : 10.30 a.m. to 01.30 p.m.**

- Instructions :**
- 1) **Q.No.8 is compulsory**
  - 2) **Solve any 4 questions from Q.No.1 to Q.No.7.**
  - 3) **All questions carry equal marks.**

- Q1) a) How Java is different from other languages? Explain with its features. [8]**  
b) Explain how to compile and run a Java program with an example. [8]
- Q2) a) What is constructor? Write a program to implement constructor in Java. [8]**  
b) What is the difference between function overloading and function overriding? [8]
- Q3) What is an interface? How to achieve multiple inheritance using interface in Java? Explain with example. [16]**
- Q4) a) Write a Java program which handles any type of exception in Java. [8]**  
b) What is an Applet? How to compile and run Applet in Java? [8]
- Q5) a) Explain 5 keywords used in exception handling. [8]**  
b) Write a program to implement multi threading in Java. [8]

**P.T.O.**



**SR-299**

- Q6)** a) Write a Java program to implement function overriding. [8]  
b) Explain the use of throw and finally keywords in Java. [8]
- Q7)** a) Write a Java program to find factorial of given number. [8]  
b) Differentiate between class and interface in Java. [8]
- Q8)** Attempt any TWO from the following : [16]  
a) Thread Priority  
b) AWT  
c) Type casting in Java  
d) Operators in Java



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**Total No. of Pages : 02**

<b>Seat No.</b>	
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**B.C.A. (Part-III) (Semester-VI)**

**Examination, March 2024.**

**JAVA PROGRAMMING**

**Sub. Code : 66425**

**Day and Date: Saturday, 30-03-2024**

**Total Marks: 80**

**Time: 02.30 p.m. to 05.30 p.m.**

- Instructions:**
- 1) Each question carries 16 marks.
  - 2) Solve ANY FOUR questions from Q.1 to Q.7.
  - 3) Q.8 is compulsory.

- Q.1**
- a) List and explain different features of Java. (8)
  - b) Explain looping statements used in Java with an example. (8)
- Q.2**
- a) Explain compilation and execution process of Java program. (8)
  - b) What is method overloading? Explain with an example. (8)
- Q.3**
- a) What is applet? Explain life cycle of Applet. (8)
  - b) What is package? Explain different types of built-in packages in Java. (8)
- Q.4**
- a) What is Inheritance? Explain hierarchical inheritance with an example. (8)
  - b) How do you use throw, throws and finally keywords in exception? (8)
- Q.5**
- a) Describe various operators used in Java with an example. (8)
  - b) What is multithreading? Explain thread priority in detail. (8)



**P.T.O.**

- Q.6** a) Explain type casting with an example. (8)  
b) Write a Java program which uses try and catch for exception handling. (8)
- Q.7** What is constructor? Describe default and parameterized constructor with an example. (16)
- Q.8** Write short notes on. (Any four) (16)
- a) Difference between C++ and Java
  - b) Destructor in Java
  - c) Stopping and blocking a thread
  - d) Abstract window toolkit
  - e) Interface



Seat No.	
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**SR-298**

**Total No. of Pages : 2**

**B.C.A. (Part - III) (Semester - VI) Examination,  
October - 2023**

**LINUX OPERATING SYSTEM (Revised)**

**Sub. Code : 66424**

**Day and Date : Thursday, 26 - 10 - 2023**

**Total Marks : 80**

**Time : 10.30 a.m. to 01.30 p.m.**

- Instructions :**
- 1) Attempt any 4 questions from Q.1 to Q.7
  - 2) Q. 8 is compulsory.

**Q1)** Explain directory structure of Linux operating system and various directory handling commands in Linux. **[16]**

**Q2)** a) Explain is command in Linux with its options. **[8]**  
b) Explain vi editor with its three modes. **[8]**

**Q3)** a) How file permissions are changed in Linux? Explain it with example. **[8]**  
b) Explain various features of Linux Operating System. **[8]**

**Q4)** a) Write a shell script to print 10 numbers of Fibonacci series. **[8]**  
b) Explain cursor movement command in Linux. **[8]**

**Q5)** Write a shell script to perform the following operations on file : **[16]**

- i) Check the file exist or not
- ii) Count the words, characters and lines
- iii) Search for particular pattern

**Q6)** a) What is shell? Explain importance and types of shell in Linux. **[8]**  
b) Explain any five file handling commands in Linux. **[8]**

**P.T.O.**



**SR-298**

**Q7)** a) Explain the for loop with example. [8]

b) Write a shell script to find entered number is Armstrong or not. [8]

**Q8)** Write short notes on (Any two) : [16]

- a) General Purpose Utilities
- b) Ex Mode
- c) Command Line Arguments
- d) Pipe Operator



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**Total No. of Pages : 02**

<b>Seat No.</b>	
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**B.C.A. (Part-III) (Semester-VI)**

**Examination, March 2024.**

**LINUX OPERATING SYSTEM (Paper - 603)**

**Sub. Code : 66424**

**Day and Date: Thursday, 28-03-2024**

**Total Marks: 80**

**Time: 2.30 p.m. to 5.30 p.m.**

- Instructions:**
- 1) Attempt ANY FOUR questions from Q.1 to Q.7.
  - 2) Q.8 is compulsory.

**Q.1 a) Explain pipe (|) operator with an example. (8)**

**b) Explain basic file attributes of file. (8)**

**Q.2 What is Operating System? Explain different types of Operating System in detail. (16)**

**Q.3 a) Explain loop in Linux with an example. (8)**

**b) Explain chmod command with an example. (8)**

**Q.4 a) Explain login and logout procedure. (8)**

**b) What are the features of Linux Operating System? (8)**

**Q.5 a) Explain the following commands. (8)**

(i) read

(ii) pwd

(iii) echo

(iv) rmdir

**b) Write a shell script to check maximum among three numbers. (8)**



**P.T.O.**

- Q.6** a) Explain **ls** command with all options. (8)
- b) Explain input mode of VI editor. (8)
- Q.7** a) Explain command substitution with an example. (8)
- b) Explain **grep** filter with its options. (8)
- Q.8** Write short notes on. (Any two) (16)
- a) Meta characters
- b) ex mode
- c) kernel-shell relationship
- d) General Purpose Utilities



77784

Seat No.

**Winter Examination Oct/Nov 2023**

Subject Name: B.C.A. (CBCS) 88298\_90551 - ERP\_26.10.2023\_10.30 AM To 01.30 PM

Subject Code: 88298

Day and Date: - Thursday, 26-10-2023

Time: - 10:30 am to 01:30 pm



Total Marks: 70

**Instructions.:**

1) Figures to the right indicate full marks

**Special Instruction.:**

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

**Q.1. A) Choose appropriate alternative for following questions from given options. (10) [20]**

1) \_\_\_\_\_ is the first phase in BPR

- a) Begin organizational change.
- b) Identifying bpr opportunities.
- c) Reengineering the process.
- d) Blueprint the new business system.

2) Which of the following is the best explanation of business process reengineering?

- a) Redesigning the organizational structure of a business
- b) Redesigning workflow
- c) Redesigning products
- d) Transformation of business processes for more effective achievement of business goals

3) What is at the heart of any ERP system?

- a) Information
- b) Employees
- c) Customers
- d) Database

4) Which of the following describes an ERP system?

- a) ERP systems provide a foundation for collaboration between departments
- b) ERP systems enable people in different business areas to communicate
- c) ERP systems have been widely adopted in large organisations to store critical knowledge used to make the decisions that drive the organisation's performance
- d) All of the above

5) ERP is combination of \_\_\_\_\_ and \_\_\_\_\_.

- a. technology, assessment
- b. assessment, management
- c. management, technology
- d. technology, business process



- 6) The cost of ERP is \_\_\_\_\_.
- a) depends on the package.
  - b) depends on available resources.
  - c) technology used
  - d) all the above.

- 7) Which among the following is not an ERP module?
- a) Human Resource
  - b) Purchasing
  - c) Inventory
  - d) None of these

- 8) The most important step of ERP implementation is \_\_\_\_\_ phase.
- a) Installing.
  - b) Training.
  - c) Gap analysis.
  - d) Testing

- 9) What does SAP stand for?
- a) Systems Applications and Products for Data Processing
  - b) Systems Applications and Products for Data Warehousing
  - c) Systems Applications and Products for Data Maintaining
  - d) Systems Applications and Products for Data collecting

- 10) Which of the following is type of ERP?
- a) SAP
  - b) Baan
  - c) Siebel
  - d) All of the above

**B) Write the answers of following question in brief (Any two) (10)**

- i) What is BPR?
- ii) Explain the ERP conceptual model .
- iii) Comment on Changing ERP Market

- Q.2. What are the different phases involved in Business Process Reengineering? [10]
- Q.3. Explain ERP implementation Life cycle in detail. [10]
- Q.4. Explain different ERP models in detail. [10]
- Q.5. What is an ERP? State and explain various benefits of ERP. [10]

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

**[20]**

**i) SAP**

**ii) Costs in ERP Implementation**

**iii) Oracle ERP packages**

**iv) Role of consultant in ERP implementation**

**v) Failure factors of ERP implementation**

**vi) Gap Analysis**





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Total No. of Pages : 03

Seat No.	
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**B.C.A. Part-III (Semester-VI) (CBCS)**

**Examination, March 2024.**

**ERP**

**Sub. Code : 88298**

**Day and Date: Thursday, 28-03-2024**

**Total Marks: 70**

**Time: 2.30 p.m. to 5.30 p.m.**

- Instructions:**
- 1) Q.1 and Q.6 are compulsory.
  - 2) Attempt ANY THREE questions from Q.2 to Q.5.
  - 3) Figures to the right indicate full marks.

**Q.1 a) Multiple choice questions. (10)**

- 1) What is at the heart of any ERP system?  
(A) Information (B) Employees  
(C) Customers (D) Database
- 2) ERP is a combination of ..... and .....  
(A) technology, assessment (B) assessment, management  
(C) management, technology (D) technology, business process
- 3) ..... is the first phase in BPR.  
(A) Begin organizational change (B) Identifying BPR opportunities  
(C) Reengineering the process (D) Blueprint the new business system
- 4) Which of the following describes an ERP system?  
(A) ERP systems provide a foundation for collaboration between departments.  
(B) ERP systems enable people in different business areas to communicate.  
(C) ERP systems have been widely adopted in large organisations to store critical knowledge used to make the decisions that drive the organisation's performance.  
(D) All of the above



**P.T.O.**

- 5) Which of the following is the best explanation of business process reengineering?
- (A) Redesigning the organizational structure of a business
  - (B) Redesigning workflow
  - (C) Redesigning products
  - (D) Transformation of business processes for more effective achievement of business goals.
- 6) The cost of ERP .....
- (A) depends on the package.
  - (B) depends on available resources.
  - (C) is technology used.
  - (D) is all of the above
- 7) Which among the following is not an ERP module?
- (A) Human Resource
  - (B) Purchasing
  - (C) Inventory
  - (D) None of these
- 8) Which of the following is type of ERP?
- (A) SAP
  - (B) Baan
  - (C) Siebel
  - (D) All of these
- 9) What does SAP stand for?
- (A) Systems Applications and Products for Data Processing
  - (B) Systems Applications and Products for Data Warehousing
  - (C) Systems Applications and Products for Data Maintaining
  - (D) Systems Applications and Products for Data Collecting
- 10) The most important step of ERP implementation is ..... phase.
- (A) installing
  - (B) training
  - (C) gap analysis
  - (D) testing

**b) Write short answers. (Any two)**

**(10)**

- 1) What is BPR?
- 2) Explain ERP conceptual model in short.
- 3) Comment on Changing ERP Market.



- Q.2** Explain Business Process Reengineering in detail. (10)
- Q.3** Explain how to implement ERP in detail. (10)
- Q.4** Explain different ERP modules in detail. (10)
- Q.5** State and explain different advantages and disadvantages of using ERP. (10)
- Q.6 Write a note on. (Any four) (20)**
- 1) Oracle ERP packages
  - 2) ERP vs BPR
  - 3) Use of SAP
  - 4) Role of consultant in ERP implementation
  - 5) Failure factors of ERP implementation
  - 6) Costs in ERP implementation





QP Code: 7609QP

Total No. of Pages: 2

Seat No. BCA-III, Sem.-VI

## Winter Examination Oct/Nov 2023

Subject Name: B.C.A. (CBCS)\_88296\_90549 - R Programming\_25.10.2023\_10.30 AM To 01.30 PM

Subject Code: 88296

Day and Date: - Wednesday, 25-10-2023  
Time: - 10:30 am to 01:30 pm

Total Marks: 70



### Instructions.:

1) Figures to the right indicate full marks

### Special Instruction.:

1) Que. No.1 and Que. No. 6 are compulsory 2) Attempt any three Questions from Que. No.2 to Que. No. 5.

### Q.1. A Multiple Choice Questions.(10 Marks)

[20]

1 If you explicitly want an integer, you need to specify the \_\_\_\_ suffix.

a) D b) R c) L d) K

2 The \_\_\_\_\_ function can be used to create vectors of objects by concatenating things together.

a) cp() b) c() c) concat() d) con()

3 What will be the output of the following R code?

```
x = 6
```

```
print(class(x))
```

a) "integer" b) "numeric" c) "real" d) "imaginary"

4 Which of the following is used for generating sequences?

a) seq() b) sequence() c) order() d) orderasc()

5 What will be the output of the following R code?

```
m <- 1:10
```

```
print(m)
```

a) 1 2 3 4 5 6 7 8 9 10

b) 1 2 3 4 5 6 7 8 9 10 11

c) 0 1 2 3 4 5 6 7 8 9 10

d) 10 9 8 6 5 4 2 3 1 2

6 Find the following type of vector?

```
a = c(1,2,5.3,6,-2,4)
```

a) Numeric b) Character c) Integer d) Logical

7 \_\_\_\_\_ are similar to matrices but can have more than two dimensions.

a) Functions b) Packages c) Arrays d) Columns

8 A \_\_\_\_\_ is a two-dimensional rectangular data set.

a) Vector b) Lists c) Matrix d) Functions

9 By what function we can create data frames?

a) Data.frames() b) Data.sets () c) Function () d) C ()

10 A data frame is a special type of list where every element of the list has \_\_\_\_\_ length.

a) Same b) Different c) May be different d) May be same

### B Attempt any two questions.(10 Marks)

a) Explain data frame with example.

b) Describe data types in R Programming.

c) Explain installation process of R.

Q.2. What is importing data? Explain process to import data from CSV to data frame in R.

[10]

- Q.3. Describe looping statements in R with appropriate example. [10]
- Q.4. Explain scatter plot and bar plot with example. [10]
- Q.5. Write program to print first 10 terms of the Fibonacci Sequence. [10]
- Q.6. Write notes on (Any Four) [20]
- a) paste() function
  - b) String manipulation
  - c) Input in R
  - d) NA values
  - e) Operations on Vectors
  - f) R installation



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Total No. of Pages : 02

Seat No.	
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**B.C.A. (CBCS) Part-III (Semester-VI)**

**Examination, March 2024.**

**R PROGRAMMING**

**Sub. Code : 88296**

**Day and Date: Wednesday, 27-03-2024**

**Total Marks: 70**

**Time: 02.30 p.m. to 05.30 p.m.**

- Instructions:**
- 1) Q.1 and Q.6 are compulsory.
  - 2) Attempt ANY THREE questions from Q.2 to Q.5.
  - 3) Figures to the right indicate full marks.
  - 3) Draw a diagram where it is necessary.

**Q.1 Choose the correct answer in each of the following questions. (10)**

- 1) Which function is used to draw points (markers) in a diagram?  
(A) d() (B) draw() (C) plot() (D) canvas()
- 2) The following values: 10.5, 55 and 787, belongs to which data type?  
(A) numeric (B) integer (C) complex (D) All of these
- 3) Which operator can be used to compare two values?  
(A) = (B) <> (C) == (D) ><
- 4) How do you call a function in R?  
(A) my\_function() (B) my\_function;  
(C) my\_function[] (D) (my\_function);
- 5) What is the correct way to create a vector of strings?  
(A) fruits <- v("banana", "apple", "orange")  
(B) fruits <- c("banana", "apple", "orange")  
(C) fruits <- list("banana", "apple", "orange")  
(D) fruits <- listOF("banana", "apple", "orange")
- 6) A ..... is a variable that holds one value at a time.  
(A) High (B) Vector  
(C) Duplex (D) Scalar variable



- 7) What will be the output of the following R code?  
sqrt(-17)
- (A) NaN            (B) 3.67            (C) 4.02            (D) -4.02
- 8) Which function takes a dim attribute which creates the required number of dimensions?
- (A) Array            (B) Lists            (C) Matrix            (D) Vector
- 9) Which statement is used to stop a loop?
- (A) stop            (B) exit            (C) break            (D) return
- 10) Which function is often used to concatenate elements?
- (A) join()            (B) merge()            (C) paste()            (D) concat()

**Q.1 b) Attempt ANY TWO questions. (10)**

- 1) Explain variables and constants in R Programming.
- 2) Illustrate String manipulation.
- 3) Describe basic operations on data frames.

**Q.2 Write program to convert Decimal number into Binary number using Recursion in R. (10)**

**Q.3 What is a Matrix? Explain different operations on Matrices with an example. (10)**

**Q.4 What is user defined function? Explain formal and actual arguments in detail. (10)**

**Q.5 Illustrate any five Built-in function in R with an example. (10)**

**Q.6 Write short notes. (Any four) (20)**

- 1) User input in R programming
- 2) Extracting a subset of a data frame.
- 3) Bar plot
- 4) Named arguments in function
- 5) If...else
- 6) Vectors in R.





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Total No. of Pages : 2

Seat No.	
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**B.C.A. (Part - III) (Faculty of Commerce) (Semester - VI)**  
**Examination, October - 2023**  
**DATA MINING AND DATA WAREHOUSING (Paper-602)**  
**Sub. Code : 66423**

Day and Date : Wednesday, 25- 10 - 2023

Total Marks : 80

Time : 10.30 a.m. to 01.30 p.m.

- Instructions :
- 1) Attempt any Four Questions from Q. 1 to Q. 7.
  - 2) Q.8 is compulsory
  - 3) Figures to the right indicate full marks.

- Q1)** a) What is data mining? Explain data mining Metrics. [8]  
b) Define dimensional modeling. Explain its types with example. [8]
- Q2)** What is mean by KDD. Explain KDD process with neat diagram. [16]
- Q3)** a) Explain difference between OLAP and OLTP. [8]  
b) What is Data Processing? Explain its need and importance in data mining. [8]
- Q4)** What is Data warehouse? Explain architecture of data warehouse with neat diagram. [16]
- Q5)** a) What is association rule mining? Explain Apriori algorithm in data mining. [8]  
b) Explain importance and working of Naïve Bayes theorem with example. [8]
- Q6)** Define clustering. Which are the different types of clustering? Explain K-means algorithm of clustering with example. [16]
- Q7)** a) What is graph mining? Explain frequent sub graph mining. [8]  
b) What is regression? Explain linear regression with example. [8]

P.T.O.

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[16]

Q8) Write Short Note On-(Any 2)

- a) Weka
- b) Sequence Mining
- c) Decision Tree
- d) Machine learning



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**Total No. of Pages : 02**

<b>Seat No.</b>	
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**B.C.A. (Part-III) (Semester-VI)**

**Examination, March 2024.**

**Data Mining and Data Warehousing**

**Sub. Code : 66423**

**Day and Date: Wednesday, 27-03-2024**

**Total Marks: 80**

**Time: 02.30 p.m. to 05.30 p.m.**

- Instructions:**
- 1) Solve ANY FOUR questions from Q.1 to Q.7.
  - 2) Q.8 is compulsory.
  - 3) Figures in the right side indicate full marks.

- Q.1** a) With a neat diagram, explain the architecture of data warehouse. (8)
- b) Explain Decision tree. Describe the construction of Decision tree. (8)
- Q.2** a) What is data mining? Explain various issues in data mining. (8)
- b) What is Dimensional Data Modelling? Explain star and snowflake schemas. (8)
- Q.3** a) Discuss Bayesians theorem. Explain importance of Bayesians Classification in data mining. (8)
- b) Discuss tree mining and sequence mining. (8)
- Q.4** a) What are the different issues in data mining? Explain with example. (8)
- b) Define Association. Explain working of Apriori algorithm with example.
- Q.5** a) What is Weka tool of data mining? List its different versions and its features. (8)
- b) List and explain various application tools used for data mining in Enterprise. (8)



- Q.6 a) What is Clustering? Discuss K-means clustering. (8)
- b) Discuss Hierarchical clustering. Give the classification of Hierarchical clustering. (8)
- Q.7 a) What is regression? Explain linear regression and non-linear regression used in data mining. (8)
- b) Explain the terms: Classification and prediction with respect to data mining. (8)
- Q.8 Write short notes. (Any four) (16)
- a) Data cleaning
- b) Pattern matching
- c) Expectation - Maximization
- d) Agglomerative method of Hierarchical clustering
- e) Frequent item set





Seat No.	
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QP Code: 7434QP  
Total No. of Pages: 3

**Winter Examination Oct/Nov 2023**

Subject Name: B.C.A. (CBCS) 88293\_90543 - Cloud Computing 23.10.2023\_10.30 AM To 01.30 PM  
Common Code: 88293/90543

Day and Date: - Monday, 23-10-2023  
Time: - 10:35 am to 01:30 pm

Total Marks:80

**Instructions.:**

1) Figures to the right indicate full marks

**Special Instruction.:**

1. Que. no. 1 and 6 are compulsory. Attempt any Three questions from Que. no. 2 to 5.

Q.1.	<p><b>Q.1) Solve the following questions.</b></p> <p><b>A) Multiple choice questions.</b></p> <p><b>10</b></p> <p><b>1) Which of the following is the application of cloud computing?</b></p> <p>a) Adobe b) Paypal c) Google G Suite d) All of the above</p> <p><b>2) Which of the following is an essential concept related to Cloud?</b></p> <p>a) Reliability b) Abstraction c) Productivity d) All of the mentioned</p> <p><b>3) Which one of the following is Cloud Platform by Amazon?</b></p> <p>a) AWS b) Cloudera c) All of the mentioned d) Hide</p> <p><b>4) Which of the model involves the special types of services that users can access on a Cloud Computing platform?</b></p> <p>a) Service b) Planning c) Deployment d) Application</p>	[20 ]
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[20  
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5) Which one of the following can be considered as the example of the Front-end?

- a) Web Browser
- b) Google Compute Engine
- c) Cisco Metapod
- d) Amazon Web Services

6) Which one of the following cloud concepts is related to sharing and pooling the resources?

- a) Polymorphism
- b) Virtualization
- c) Abstraction
- d) None of the mentioned

7) Which of the following is the correct statement?

- a. Cloud computing presents new opportunities to users and developers
- b. Service Level Agreements (SLAs) is small aspect of cloud computing
- c. Cloud computing does not have impact on software licensing
- d. All of the mentioned

8) Cloud computing is a concept that involves pooling physical resources and offering them as which sort of resource?

- a. cloud
- b. real
- c. virtual
- d. none of the above

9) SaaS stands for

- a) Service as a Software
- b) Software as a Service
- c) Sales as a Service
- d) None of above

10) Which of the following is an example of a SaaS cloud service?

- a) Google Workspace
- b) Dropbox
- c) Salesforce
- d) All of the above

B) Write short answers (Any Two)

10

- 1) Define layers of cloud?
- 2) Explain infrastructure as a service.
- 3) Discuss social applications in cloud computing?

Q.2. Define Cloud computing and explain the features of cloud computing. [10]

Q.3. Explain any Application of Cloud Computing. [10]



- Q.4. Explain the concept of virtualization with its benefits. [10]
- Q.5. Explain the concept of CPU virtualization, [10]
- Q.6. Write short note on (any four) [20]
- a) Virtual cluster
  - b) Resource Management
  - c) SaaS
  - d) Paypal
  - e) PaaS
  - f) Architecture of cloud



**SW-116**

**Total No. of Pages : 02**

<b>Seat No.</b>	
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**B.C.A. (CBCS)**  
**Examination, March 2024.**  
**CLOUD COMPUTING**  
**Sub. Code : 88293**

**Day and Date: Tuesday, 26-03-2024**

**Total Marks: 70**

**Time: 2.30 p.m. to 5.30 p.m.**

- Instructions:**
- 1) Q.1 and Q.6 are **COMPULSORY**.
  - 2) Attempt **ANY THREE** questions from Q.2 to Q.5.
  - 3) Figures to the right indicate full marks.

**Q.1 a) Multiple choice questions. (10)**

- 1) Which of the following is a type of cloud computing service?  
(A) Service-as-a-Software (SaaS) (B) Software-and-a-Server (SaaS)  
(C) Software-as-a-Service (SaaS) (D) Software-as-a-Server (SaaS)
- 2) Which of the following is required by Cloud Computing?  
(A) That the identity be authenticated. (B) That the authentication be portable.  
(C) That you establish an identity. (D) All of the mentioned
- 3) Which of the following is an example of a SaaS cloud service?  
(A) Google Workspace (B) Dropbox  
(C) Salesforce (D) All of the above
- 4) Which of the following type of virtualization is also characteristic of cloud computing?  
(A) Storage (B) Application (C) CPU (D) All of these
- 5) The technology used to distribute service requests to resources is referred to as .....  
(A) load performing (B) load scheduling  
(C) load balancing (D) All of these
- 6) Which of the following provide system resource access to virtual machines?  
(A) VMM (B) VMC (C) VNM (D) All of these



**P.T.O.**

- 7) Cloud computing is a kind of abstraction which is based on the notion of combining physical resources and represent them as ..... resources to users.  
(A) real (B) cloud (C) virtual (D) none of these
- 8) Which one of the following cloud concepts is related to sharing and pooling the resources?  
(A) Polymorphism (B) Virtualization  
(C) Abstraction (D) None of these
- 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

**b) Give short answers. (Any two) (10)**

- i) Explain the architecture of cloud.  
ii) What is meant by cloud virtualization?  
iii) Explain the implementation levels of virtualization.

**Q.2** Explain virtualization at OS model level. (10)

**Q.3** Explain virtualization of memory and IO devices. (10)

**Q.4** What is virtual cluster? (10)

**Q.5** Explain platform as service. (10)

**Q.6** Write short notes on. (Any four) (20)

- i) Explain various features of cloud  
ii) SAAS  
iii) PAAS  
iv) Explain sales force application  
v) AWS  
vi) Mailchimp



No.-

PRN. No.

Student Sign.

Supervisor Sign.

Examiner Sign.

Total Marks

/50

Shivaji University, Kolhapur  
Centre - Smt. Mathubai Garware Kanya Mahavidyalaya, Sangli  
**B.C.A. III Sem. VI (CBCS) March 2024**  
**Skill Development Courses (SDC)**

**Sub- Interview & Personal Presentation Skill**

- सूचना:-
- प्रश्नपत्रिकेतील २५ प्रश्न सोडविणे आवश्यक आहे.
  - प्रत्येक प्रश्न २ गुणांचा आहे.
  - a, b, c, d पर्याया पैकी बरोबर पर्याय प्रश्नांसमोरील चौकोनामध्ये न खाडाखोड करता लिहिणे.

Date- 27/03/2024

Time- 5.30 to 6.30

- and writing are the two mediums of language.
- a) Speech      b) Listening      c) Reading      d) None of these
- Comparing is commonly ----- in events.
- a) used      b) unused      c) misused      d) unwanted
- is less permanent.
- a) Listening      b) Speech      c) Reading      d) Writing
- The tone of the speaker should be -----
- a) unclear      b) vague      c) murky      d) clear
- The ----- introduces the theme of the events.
- a) participants      b) members      c) people      d) host
- A presentation is a form of oral communication in which a person shares factual information with ----- audience
- a) large      b) mixed      c) specific      d) small
- An interview in which you ask about a candidates behavior in a certain given situation.
- a) situational interview      b) behavior tests
- c) situational tests      d) job related questions
- For an interview, one should carry -----
- a) a file with certificates      b) curriculum Viate(C.V)
- c) an application letter      d) all of the above
- A job interview is an interview in which a conversation occurs between -
- a) an employer and a job applicant
- b) an employer and a receptionist
- d) a job applicant and other candidates
- One should know ----- of the interview.
- a) day & date      b) time
- c) venue      d) all of these
- What is the best way to make a good impression during an interview?
- a) Be aggressive
- b) Shake hands with your interviewers before and after the interview
- c) make negative comments
- d) exaggerate your answer



