

Total No. of Questions : 5]

SEAT No. :

[Total No. of Pages :2

PC1166

[6317]-301

T.Y.B.B.A. (C.A.)

CA-501 : CYBER SECURITY

(2019 Pattern) (Semester- V)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*

Q1) Attempt any EIGHT of the following (Out of Ten).

[8×2=16]

- a) What is Cyber defamation?
- b) Define term Cyber Security.
- c) What is Cyberstalking?
- d) What is Steganography?
- e) What is Spam Laws?
- f) What is Cyber Forensic?
- g) What do you understand by term 'Trademarks'?
- h) Define attack vector.
- i) Define Spyware.
- j) What is Reconnaissance?

Q2) Attempt any FOUR of the following (Out of Five).

[4×4=16]

- a) Why do we need cyber laws in India?
- b) What is Computer forensics? Explain in details.
- c) What is proxy server? Also write the purpose of it.
- d) Explain different types of credit card frauds.
- e) Discuss various password cracking techniques.

P.T.O.

Q3) Attempt any FOUR of the following (Out of six).

[4×4=16]

- a) Explain the different real life example of Cyber Crime.
- b) What is Domain Name? Explain with example.
- c) Explain how botnets can be used as a fuel to Cybercrime.
- d) Describe active and passive attacks in details.
- e) What is SQL injection? Explain different methods to prevent SQL injection attack.
- f) What is difference between Virus and Worms?

Q4) Attempt any FOUR of the following (Out of Five).

[4×4=16]

- a) What is CIA? Discuss three concepts of CIA model.
- b) Discuss DoS attack in detail.
- c) Explain in brief the changes made to the Indian IT Act.
- d) Explain different type of Intellectual property in details.
- e) Explain organizational guidelines for internet usage.

Q5) Write a short note on Any TWO of the following (Out of Three). **[2×3=6]**

- a) Phishing
- b) Social Media Marketing.
- c) Data Diddling.



Total No. of Questions : 5]

SEAT No. :

PC1167

[Total No. of Pages : 2

[6317]-302

T.Y. B.B.A. (C.A.)

CA - 502 : OBJECT ORIENTED SOFTWARE ENGINEERING

(2019 CBCS Pattern) (Semester - V)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) All questions are compulsory.*
- 2) Neat diagram must be drawn wherever necessary.*
- 3) Figures to the right indicate full marks.*

Q1) Attempt any Five of the following:

[5×2 = 10]

- a) What is Object Orientation?
- b) What is actor?
- c) Explain Tagged Value.
- d) Explain notations of use case diagram.
- e) Explain term Join and Fork.
- f) Define swim lane.
- g) What is system boundary?

Q2) Attempt any Four of the following:

[4×4 = 16]

- a) Explain five UP work flows of UP in detail.
- b) Draw state chart diagram for ATM system.
- c) Describe the Rambaugh method in detail.
- d) Define things. Explain types of things in UML.
- e) Explain Object oriented Design in detail.

P.T.O.

Q3) Attempt any Four of the following: [4×4 = 16]

- a) What is mean by Iterative Development? States its various advantages.
- b) Define UML. Explain architecture of UML.
- c) Explain class diagram with example.
- d) Explain relationship types in detail.
- e) Explain Booch method in detail.

Q4) Attempt any Four of the following: [4×4 = 16]

- a) What is SRS? Explain types of SRS specification.
- b) What is risk management in project management?
- c) Explain visibility modes along with well labelled diagram.
- d) What is class diagram. Explain with Notations.
- e) Draw a collaboration diagram for ATM system.

Q5) Attempt the following: [3×4 = 12]

Railway reservation system is a system used for booking tickets over internet -any customer can book tickets for different trains. Customer can book a ticket only if tickets are available. Customer searches for the availability of ticket then if the tickets are available the books the ticket by initially filling details in a form. Tickets can be booked in two ways buy i-ticket or e-ticket booking.

In case of e-ticket booking Customer can book the ticket online and the tickets are couriered to particular customer at their address, but in case of e-ticket booking and cancelling ticket are booked and cancelled online sitting at the home and customer himself has to take print of the ticket but in both the cases amount for tickets are deducted from customer's amount.

For cancellation of ticket the customer's has to go at reservation office then fill cancellation form and ask the clerk to cancel the ticket then the refund is transferred to customer's account. After booking ticket, the customer has to check out by paying fare amount to clerk.

Consider above situation. Draw the following diagram:

- a) Use case diagram
- b) Class diagram
- c) Activity diagram



Total No. of Questions : 5]

SEAT No. :

PC1168

[Total No. of Pages : 2

[6317]-303

T.Y.B.B.A. (C.A.)

CA 503 : CORE JAVA

(2019 Pattern) (Semester-V)

Time : 2 ½Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*
- 3) *Neat diagrams must be drawn wherever necessary.*

Q1) Attempt any Eight of the following: [Out of Ten]

[8×2=16]

- a) Describe any two features of Java programming Language.
- b) Define Collection.
- c) Define Static Keyword.
- d) What is difference between Array and Array List?
- e) Write advantages of Inheritance.
- f) What is use of New operator?
- g) How to create and access package in java.
- h) What is difference between paint() and repaint().
- i) What is Finalize() Method?
- j) Write any two advantages of Inner Class.

Q2) Attempt any four of the following: [Out of Five]

[4×4=16]

- a) Write a Java program using AWT to display details of Customer (cust_id, cust_name, cust_addr) from user and display it on the next frame.
- b) Differentiate between interface and abstract class.
- c) Write a java program to count number of Lines, words and characters from a given file.

P.T.O.

- d) What is exception? Explain its keyword with example.
- e) Why the main() method is public static? Can we overload it? Can we run java class without main() method?

Q3) Attempt any four of the following: [Out of Five]

[4×4=16]

- a) Explain java.util Package.
- b) Write a package MCA which has one class student. Accept student details through parameterized constructor. Write display() method to display details. Create a main class which will use package and calculate total marks and percentage.
- c) How Multiple Inheritance is achieved in java? Explain.
- d) What is 'this' keyword? Explain with suitable example.
- e) What is recursion in Java? Write a Java Program to find factorial of a given number using recursion.

Q4) Attempt any four of the following: [Out of Five]

[4×4=16]

- a) Explain method overloading and method overriding in detail.
- b) Write a Java program to design email registration form. (Use swing components)
- c) What is Layout Manager? Explain any one in detail.
- d) How to create String in java? Explain any four functions of String.
- e) Write a java program to accept 'n' integers from the user & store them in an ArrayList Collection. Display the elements of ArrayList collection in reverse order.

Q5) Write short note on any two: [Out of Three]

[2×3=6]

- a) Vector
- b) Types of constructor.
- c) Anonymous class.



Total No. of Questions : 5]

SEAT No. :

PC1169

[6317]-304

[Total No. of Pages : 2

T.Y.B.B.A. (Computer Application)

CA-504 (A) : MONGO DB

(2019 Pattern) (Semester-V)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*
- 3) *Neat diagram must be drawn wherever necessary.*

Q1) Answer the following: (Any 8)

[8×2=16]

- a) List types of NoSQL databases.
- b) Explain Aggregation Pipeline in MongoDB.
- c) Explain collStats command.
- d) Define Horizontal Scaling.
- e) List the different command-line utilities of MongoDB.
- f) What is Multikey Index?
- g) Explain Monitoring tools related to MongoDB.
- h) Write the syntax of insertMany method.
- i) Explain any two features of MongoDB.
- j) Explain one to one relationship in Embedded Documents.

Q2) Answer the following: (Any 4)

[4×4=16]

- a) How the Runtime Configuration of MongoDB is handled? Explain in detail.
- b) Explain MongoDB CRUD Concerns (Read and Write Operations).
- c) List and explain different MongoDB shell commands related to database.
- d) Explain the different indexing reference methods in detail.
- e) Explain Cursor used in MongoDB.

P.T.O.

Q3) Answer the following: (Any 4)

[4×4=16]

- a) Explain Graph Database in detail.
- b) Explain analogy between RDBMS and MongoDB Data Model.
- c) Explain Batch Insert with an example.
- d) Explain MongoDB Architecture.
- e) What is Page Fault? How to get details of Page Fault in MongoDB?

Q4) Answer the following:

[8×2=16]

Write statement in MongoDB to do the following:

- a) Create a collection 'Employee' with fields ID, EmployeeName, Designation and Salary.
- b) Create a new document in the 'Employee' collection having ID=01.
- c) Write a command to show the details of 'Employee' collection.
- d) Display EmployeeName, Designation, Salary of Employees having ID=05.
- e) Display ID, EmployeeName, Designation, Salary of Employees in which designation ends with "ger".
- f) Display ID, EmployeeName, Designation of Employees whose salary is greater than 50000.
- g) Display ID, Employee Name, Salary of all Employees in readable format.
- h) Update salary of Employee having ID=05 to 75000.

Q5) Solve the following: (Any 2)

[2×3=6]

- a) Explain Monitoring at Server.
- b) Explain Delete Commands.
- c) Explain Partial Indexes.



Total No. of Questions : 5]

SEAT No. :

[Total No. of Pages : 2

PC1170

[6317]-305

T.Y.B.B.A. (C.A.)

CA -504 : PYTHON

(2019 Pattern) (Semester-V)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions is compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Attempt any eight of the following.

[8×2=16]

- a) Write any three functions of Math module.
- b) What is the use of random () in random module?
- c) Name any four widgets available in Tkinter
- d) What is class variable?
- e) What is the use of try-finally block?
- f) Write the syntax of exception.
- g) State the features of Keras.
- h) What are the properties of a Python list?
- i) What is the use of pass and break statement?
- j) What is the difference between append () and extend () methods in Python lists?

Q2) Attempt any four of the following.

[4×4=16]

- a) What is dictionary? Explain three built-in dictionary functions with examples.
- b) What are the differences between global and local variables in Python? Provide examples.
- c) Explain IS-A relationship and HAS-A relationship with example.
- d) Explain frame widget in tkinter with example.
- e) What is Data Visualization? List any 4 data visualisation libraries.

P.T.O.

Q3) Attempt any four of the following.

[4×4=16]

- a) Write a Python script using class to reverse the string word by word.
- b) How does Python static method works?
- c) Explain the methods for Geometry Management.
- d) Describe string manipulation techniques in Python with examples.
- e) Write a Python program that accepts a list of numbers and returns a new list containing only the even numbers.

Q4) Attempt any four of the following.

[4×4=16]

- a) What is Python? What are the benefits of using Python?
- b) Write a Python program to check if a string is a palindrome.
- c) Explain user defined functions with example.
- d) Write a Python GUI program to accept dimension of a cylinder and display the surface area and the volume of cylinder.
- e) Explain the delete () and insert () method of entry widget.

Q5) Write short note on any two.

[2×3=6]

- a) Python package
- b) Class method
- c) Raise statement

