

Total No. of Questions : 5]

SEAT No. :

**P6015**

[Total No. of Pages : 2

**[6144]-501**  
**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 diagram must be drawn wherever necessary.*
- 3) *Figures to the right indicates full marks.*

**Q1)** Attempt any EIGHT of the following. (Out of TEN).

**[8×2=16]**

- a) What is Phishing?
- b) Define Cyber Terrorism?
- c) Define term Cyber Security.
- d) What is Public-key Certification in Digital Signature?
- e) Define term Cybercrime.
- f) What is reconnaissance?
- g) Define denial-of-service (DoS) attack.
- h) Define attack vector?
- i) What is Steganography?
- j) What is online fraud?

**Q2)** Attempt any FOUR of the following. (Out of FIVE).

**[4×4=16]**

- a) Why there is need of Computer Forensic?
- b) Discuss various password cracking techniques.
- c) Discuss different types of active attack and passive attack?
- d) Explain how botnets can be used as a fuel to cybercrime.
- e) What is SQL injection and what are the different counter measures to prevent the attack?

**P.T.O.**

**Q3)** Attempt any FOUR of the following. (Out of FIVE).

**[4×4=16]**

- a) What are the consequences of cybercrime and their associated cost?
- b) Explain in brief each type of Intellectual Property.
- c) What are the challenges to Indian Law and cybercrime scenario in India?
- d) Explain the cyber security real life incident example.
- e) What is cyber forensics explain in details?

**Q4)** Attempt any FOUR of the following. (Out of FIVE).

**[4×4=16]**

- a) Define virus. Discuss the types of viruses.
- b) What is Domain Name? Explain with example.
- c) What is CIA? Discuss three concept of CIA model.
- d) Explain different types of credit card frauds.
- e) Explain the rules of Digital Evidence.

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

- a) Copyrights.
- b) The ITA 2000 sections.
- c) Online Scams.



Total No. of Questions : 5]

SEAT No. :

P-6016

[Total No. of Pages : 2

[6144]-502

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

**CA-502 : OBJECT ORIENTED SOFTWARE  
ENGINEERING**

**(2019 Pattern) (CBCS) (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 diagrams must be drawn wherever necessary.*

**Q1) Attempt any five of the following :**

**[5 × 2 = 10]**

- a) Define forking.
- b) What is Inception?
- c) Define the term object orientation.
- d) Define Tagged value.
- e) List any four characteristics of a system.
- f) What is meant by Elaboration?
- g) Write down the purpose of the object diagram.

**Q2) Attempt any four of the following :**

**[4 × 4 = 16]**

- a) Explain UML architecture.
- b) Explain visibility modes along with labelled diagram.
- c) Describe UP phases with the help of diagram.
- d) What is risk management in project management?
- e) Explain activity diagram with Notations.

**P.T.O.**

**Q3) Attempt any four of the following :**

**[4 × 4 = 16]**

- a) Explain the concept of Aggregation with example.
- b) What is classifier? Explain different classifiers.
- c) Define the following terms :
  - i) Composition
  - ii) System boundary
  - iii) Swim lane
  - iv) Note
- d) Explain Deployment diagram. State any four notation of deployment diagram.
- e) What is SRS? Explain types of SRS specification.

**Q4) Attempt any four of the following :**

**[4 × 4 = 16]**

- a) Define thing. Explain type of things in UML.
- b) Explain Jacobson method of object oriented design.
- c) Define relationship. Explain different kinds of relationship.
- d) What is package? Explain different kinds of packages.
- e) What do you mean by task management components?

**Q5) Attempt the following :**

**[12]**

Online mobile recharge gives us the information about all the mobile service providers.

This application provides us the complete information regarding any mobile service provider in terms of their plans, options, benefits etc. suppose any Airtel customer wants to have the information of all the schemes and services provided by the company he/she can have the information and according to his convenience he can recharge the mobile from the same application. The major advantage of this purposed system is to have the recharging facility of any service provider under same roof.

Consider above situation draw the following UML diagram.

- a) Collaboration diagram
- b) Sequence diagram
- c) Activity diagram



Total No. of Questions : 5]

SEAT No. :

**P6017**

[Total No. of Pages : 2

**[6144]-503**  
**T.Y.B.B.A. (C.A.)**  
**CA 503 : CORE JAVA**  
**(2019 Pattern) (Semester -V)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

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

**Q1)** Answer any Eight:

**[8×2=16]**

- a) What is a java program structure?
- b) Define this Keyword.
- c) Explain in detail the data types in java?
- d) What is an Interface?
- e) What is the use of Reader and Writer class?
- f) Which method is used to specify containers layout with syntax.
- g) What is the default layout for Frame and Panel?
- h) Explain Modifiers and Access Controls used in java.
- i) List and explain any 2 in-built exceptions.
- j) Explain the purpose of getContentPane().

**Q2)** Attempt any four.

**[4×4=16]**

- a) Explain in detail the features of Java.
- b) What are the rules for method overloading and method overriding? Explain it with example.
- c) Differentiate between interface and abstract class.
- d) Explain the concept of exception and exception handling.
- e) What are the different types of streams? Explain in details.

**P.T.O.**

**Q3) Attempt any four.**

**[4×4=16]**

- a) Write a java program to display alternate character from a given string.
- b) Write a Java program to calculate area of Circle, Triangle & Rectangle. (Use Method Overloading).
- c) Write a java program to search given name into the array, if it is found then display its index otherwise display appropriate message.
- d) Write a java program to display ASCII values of the characters from a file.
- e) Write a java program to display multiplication table of a given number into the List box by clicking on button.

**Q4) Attempt any four :**

**[4×4=16]**

- a) What is collection? Explain Collection framework in details.
- b) Difference between Swing and AWT.
- c) Create a package named Series having three different classes to print series:
  - i) Fibonacci series
  - ii) Cube of numbers
  - iii) Square of numbers

Write a java program to generate 'n' terms of the above series

- d) Write a 'java' program to check whether given number is Armstrong or not. (Use static keyword)
- e) Write a 'java' program to copy only non-numeric data from one file to another file.

**Q5) Write short note any two :**

**[2×3=6]**

- a) Define new operator.
- b) Define term finalize () method.
- c) Define package with all the steps for package creation.



Total No. of Questions : 5]

SEAT No. :

**P-6018**

[Total No. of Pages : 2

**[6144]-504**

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

**CA-504 : 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) :**

**[16]**

- a) What is JSON?
- b) Challenges for Data Modelling in Mongo DB.
- c) Explain use of Mongo DB Shell.
- d) Describe Mongo DB utility.
- e) What is mapreduce?
- f) Explain transaction.
- g) Write a syntax of 'InsertOne'.
- h) Explain lock in MongoDB.
- i) Describe Delete command.
- j) Explain use of pretty function

**Q2) Answer the following (Any 4) :**

**[16]**

- a) Why use NoSQL database.
- b) What is the Embedded Data Modeling Approach.
- c) Write a short note on Mongo Shell commands with examples.
- d) Define the aggregation used in Mongo DB.
- e) Write on the 'deleteMany()' operation

**P.T.O.**

**Q3) Answer the following (Any 4) :**

**[16]**

- a) Write the difference between MongoDB and SQL.
- b) Write a short note on various types of NoSQL databases.
- c) Write applications of NoSQL.
- d) Describe the Compound index with a suitable example.
- e) What is the role of the profiler in MongoDB?

**Q4) Solve the following :**

**[16]**

- a) Create a collection 'Hospital'.
- b) Create a new document in the 'Hospital' collection having ID=01.
- c) Write a command to show the details of 'Hospital'.
- d) Show the details of 'Hospital' by FIND command.
- e) Display the detail of 'Hospital' by the 'FINDONE' command.
- f) Display the detail of 'Hospital' whose OPD charges are free.
- g) Display ID, Hospital NAME, FEE, and use 'PRETTY()'.
- h) Display details of hospitals, where Fee is less than 200.

**Q5) Solve the following (Any 2) :**

**[6]**

- a) Write in detail MongoDB Index types.
- b) Write a short note on Compass used in MongoDB.
- c) Explain advantages of NoSQL databases.





Total No. of Questions : 5]

SEAT No. :

**P-6019**

[Total No. of Pages : 2

**[6144]-505**

**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 are compulsory.*
- 2) Figures to the right indicate full marks.*

**Q1) Attempt any eight of the following :**

**[8 × 2 = 16]**

- a) What are the advantages of Pandas?
- b) State the uses of Tensor flow.
- c) Write Syntax of Raise Statement.
- d) List out any 4 label option.
- e) What are the properties of Dictionary?
- f) List out geometry management methods.
- g) Difference between python list and numpy array.
- h) What is the use of random() in random module?
- i) Explain any two tuple operations with on example.
- j) List out any 5 button options in Python.

**Q2) Attempt any four of the following :**

**[4 × 4 = 16]**

- a) Explain Frame widget in thinker with example.
- b) Explain function Arguments in details.
- c) Explain any three built in dictionary function with example.
- d) Write a python program to display current date and time.
- e) Write an anonymous function to find area of rectangle.

**P.T.O.**

**Q3) Attempt any four of the following :**

**[4 × 4 = 16]**

- a) What are lists and tuples? What is the key difference between these two?
- b) Explain the concept of inheritance with example.
- c) Explain the features of Numpy.
- d) Write Python GUI program to create back ground with changing colors.
- e) Write a Python Program to implement the concept of queue and list.

**Q4) Attempt any four of the following :**

**[4 × 4 = 16]**

- a) Explain the features of pandas in python.
- b) Explain Exception handling in python with example.
- c) Explain methods for geometry management in tkinter with example.
- d) Write a python program to swap the values of two variables.
- e) Explain difference between local and global variable with example.

**Q5) Write short note on any two :**

**[2 × 3 = 6]**

- a) Raise Statement
- b) Package
- c) HAS-A Relationship

