

Total No. of Questions : 5]

SEAT No. :

PA-1983

[Total No. of Pages : 2

**[5954]-601**

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

**RECENT TRENDS IN INFORMATION TECHNOLOGY**

**(2019 Pattern) (Semester - VI) (CA-601)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates :*

- 1) *Questions : Total Number of Questions are 5 (Five).*
- 2) *Total Marks assigned: 70*
- 3) *Time assigned: 2½ Hours.*

**Q1) Attempt any EIGHT of the following (Out of TEN) : [8 × 2 = 16]**

- a) What is artificial intelligence?
- b) Explain component of spark.
- c) What is data mart?
- d) List any two applications of data warehouse.
- e) Define OLTP.
- f) Define ETL tools.
- g) Define Data mining.
- h) What is a Ridge in artificial intelligence?
- i) What is natural language processing?
- j) Define Meta data.

**Q2) Attempt any FOUR of the following (Out of FIVE) : [4 × 4 = 16]**

- a) Describe the Architecture of data warehouse.
- b) Explain briefly the various components of spark.
- c) Explain the three important artificial intelligence techniques.

*P.T.O.*

- d) What are the disadvantages of Depth First Search?
- e) What are the difference between OLTP and OLAP?

**Q3) Attempt any FOUR of the following (Out of FIVE) : [4 × 4 = 16]**

- a) Explain the various search and control strategies in artificial intelligence.
- b) Describe technique of data mining.
- c) Explain any four uses of data warehouse.
- d) What is the philosophy of artificial intelligence?
- e) Write down the steps of KDD process.

**Q4) Attempt any FOUR of the following (Out of FIVE) : [4 × 4 = 16]**

- a) What is a heuristic function?
- b) What is multidimensional data model? Explain.
- c) Define data cleaning. Describe various method of data cleaning.
- d) Explain briefly with solution Missionaries and Cannibals Problem Statement.
- e) Explain Graph mining in brief

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

- a) State the 'Water Jug Problem' in artificial intelligence with the help of diagrams and propose a solution to the problem.
- b) Data mining task.
- c) ROLAP and HOLAP.



Total No. of Questions : 5]

SEAT No. :

PA-1984

[Total No. of Pages : 2

[5954]-602

B.B.A. (C.A.)

**CA-602 : Software Testing  
(2019 Pattern) (Semester - VI)**

*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 EIGHT of the following (out of TEN) :

**[8 × 2 = 16]**

- a) What is Software Testing?
- b) What is Static testing?
- c) State the advantages of manual testing.
- d) What are formulae for calculating Cyclomatic complexity?
- e) What is Gray-box testing?
- f) Define validation Testing.
- g) What is Debugging?
- h) Explain terms- Error, Fault and Failure.
- i) Define regression testing.
- j) What is software metric?

**Q2)** Attempt any FOUR of the following (out of FIVE) :

**[4 × 4 = 16]**

- a) Write difference between verification and validation.
- b) Explain Software testing life cycle with diagram.
- c) Explain Boundary-Value analysis in details.
- d) Explain Acceptance testing in details.
- e) Explain Test Case Design along with example.

**P.T.O.**

**Q3)** Attempt any FOUR of the following (out of FIVE) : **[4 × 4 = 16]**

- a) Explain any four testing principles in detail.
- b) Explain white box testing and its techniques.
- c) Explain Sandwich and Big-Bang approach of Integration testing.
- d) Explain load and Smoke testing in detail.
- e) Write difference between Static and Dynamic testing.

**Q4)** Attempt any FOUR of the following (out of FIVE) : **[4 × 4 = 16]**

- a) Explain test case design for the login process.
- b) Stub and Driver concept in Unit testing.
- c) Explain GUI testing in details.
- d) What is difference between client/server and web-Based testing?
- e) Calculate the cyclometric complexity of a code which accepts 3 integer values and print the highest and lowest value.

**Q5)** Write a short note on Any TWO of the following (out of THREE) : **[2 × 3 = 6]**

- a) Testing for Real-Time system.
- b) Stub and Driver concept in Unit testing.
- c) Load Runner



Total No. of Questions : 5]

SEAT No. :

PA-1985

[Total No. of Pages : 2

**[5954]-603**

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

**CA - 603 : ADVANCED JAVA  
(2019 Pattern) (Semester - VI)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

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

**Q1)** Answer the following (any eight) :

**[8×2=16]**

- a) Write down 2 methods of connection interface.
- b) What is sleep() method in multithreading.
- c) What is the method to set the thread priority.
- d) Write down 2 classes used in socket programming.
- e) What is IP address.
- f) What is doGet () method of servlet?
- g) What are the parameters of service() method of servlet.
- h) What is JSP?
- i) What is Hibernate?
- j) What is getConnection method?

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

**[4×4=16]**

- a) What is statement? Explain the types of statements in JDBC.
- b) Explain thread life cycle with diagram.
- c) What are the implicit objects in JSP. Explain any 4.
- d) Write down the difference between doGet() and doPost()method.
- e) Write a java program to count number of records in a table.

**P.T.O.**

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

**[4×4=16]**

- a) Explain Architecture of libernate.
- b) What is Result set interface in JDBC? Explain methods in Resultset interface.
- c) Explain JSP life cycle with diagram.
- d) Write a java program in to print from 100 to 1. (use sleep() method)
- e) Write a java program to create table student with attributes Rno, Sname, Per.

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

**[4×4=16]**

- a) What are the states of the object in hibernate?
- b) What is session tracking? What are the different ways of session tracking in servlet.
- c) What is thread Priority? How to set the thread priorities?
- d) Write a JSP application to accept a user name and greet the user.
- e) Write a java program to display IP address of a machine.

**Q5)** Write a short note on any two of the following.

**[2×3=6]**

- a) Connection interface.
- b) Runnable interface.
- c) Thread synchronization.



Total No. of Questions : 5]

SEAT No. :

PA-1986

[Total No. of Pages : 2

**[5954]-604**

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

**CA-604 : ANDROID PROGRAMMING**

**(2019 Pattern) (CBCS) (Semester - VI)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates :*

- 1) *All questions are compulsory.*
- 2) *Draw neat diagrams wherever necessary.*

**Q1) Answer the following questions (Any 8) :**

**[8 × 2 = 16]**

- a) What is Android?
- b) Enlist android versions.
- c) Define user interface.
- d) What is Date Picker Dialog?
- e) Describe Array Adapter.
- f) What are the layers present in the android architecture?
- g) What is cursor?
- h) What is Toast?
- i) What is Android ISON?
- j) What is Text Fields?

***P.T.O.***

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

**[4 × 4 = 16]**

- a) Describe activity Life cycle.
- b) What is spinner? How to create it? Explain with Example.
- c) How to create database in SQLite? Explain with Example.
- d) Define AsyncTask? How it works? Explain with Example.
- e) Describe Bounded and Unbounded service in detail.

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

**[4 × 4 = 16]**

- a) Create linear layout for student registration page in Android with its component properties.
- b) Create an Android application that demonstrate Time Picker.
- c) Write a program to create the custom dialog in Android.
- d) Write a program to implement map in Android.
- e) Create an Android App with login screen on successful login, gives message go to next activity [Without using Database and use Table layout].

**Q4) Answer the following (Any 4) :**

**[4 × 4 = 16]**

- a) What is Dialog Box? Explain with example.
- b) Discuss about views and view groups.
- c) Create a simple application, which read a positive number from the user and display its factorial value in another activity.
- d) What is Content Providers? Explain with example.
- e) Develop a simple calculator using table layout.

**Q5) Write a short note of the following (Any 2) :**

**[2 × 3 = 6]**

- a) List view.
- b) Google Maps.
- c) Intent.





Total No. of Questions : 5]

SEAT No. :

PA-1987

[Total No. of Pages : 2

**[5954]-605**

**B.B.A. (Computer Application)**  
**CA - 604 : DOT NET FRAMEWORK**  
**(2019 Pattern) (Semester - VI)**

*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 CTS?
- b) State any two advantages of .Net.
- c) What is Event Driven Programming?
- d) Explain difference between menu and popup menu in .Net.
- e) List any two properties of Radio Button Control.
- f) What do you mean by value type and Reference type?
- g) What is boxing in C#?
- h) What is mean by ADO.Net?
- i) Enlist any four data types used in .Net?
- j) What is use of 'this' keyword in C#?

**Q2) Attempt any Four of the following (out of Five) :**

**[4 × 4 = 16]**

- a) Explain ASP .NET page life cycle in detail.
- b) What are the classes in ADO.Net. Explain in detail.
- c) How to create menus in VB.Net?
- d) Enlist and explain various objectives of .Net frameworks.
- e) State and explain various statements used in VB.Net.

**P.T.O.**

**Q3) Attempt any Four of the following (out of Five) :** **[4 × 4 = 16]**

- a) Write a program in C# for multiplication of two numbers.
- b) Write a program in C# to calculate area of a square.
- c) Write a VB .NET program to check given number is palindrome or not.
- d) Write a VB.NET program to print Yesterday's date on screen.
- e) Write a VB.NET program to display Studentid. Student Name and student course and student fees.

**Q4) Attempt any Four of the following (out of Five) :** **[4 × 4 = 16]**

- a) What are the HTML controls? Explain.
- b) Write steps to connect to database using ADO.Net.
- c) Explain Common Type Systems (CTS) and Common Language Specification (CLS).
- d) Write a program to show list of doctors visiting to "Sahyadri Multispecialty Hospital".
- e) Write a program to find prime numbers bet<sup>n</sup> 2 to 20.

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

- a) Inheritance.
- b) ASP.Net server controls.
- c) Constructor and Destructor.

