

Total No. of Questions : 5]

SEAT No. :

**PB-1476**

[Total No. of Pages : 2

**[6226]-601**

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

**CA601 : RECENT TRENDS IN INFORMATION  
TECHNOLOGY**

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

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) *Questions Total Number of Questions are: 5*
- 2) *All questions are compulsory.*
- 3) *Figures to the right indicate full marks.*

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

**[8 × 2 = 16]**

- a) Define Search Strategy.
- b) Data mining is also called as?
- c) What is OLTP?
- d) Define Local Maximum in artificial intelligence.
- e) Define Metadata?
- f) Explain Apache kafka
- g) Define Expert System.
- h) Why a data warehouse is said to contain a 'time-varying' collection of data?
- i) Define Ridge.
- j) Define graph mining.

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

**[4 × 4 = 16]**

- a) Explain Face Detection and Recognition.
- b) Define 'Problem Space' in artificial intelligence.
- c) What are two advantages of Depth First Search?
- d) Explain Association rule mining with example.
- e) Explain any four uses of Data Warehouse.

**P.T.O.**

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

- a) What is the difference between Data ware house and OLAP?
- b) How do we create RDDs in Spark?
- c) What do you understand by Spark Streaming?
- d) Define Data Warehouse. State any two advantages of Data Warehouse.
- e) Explain datamining and knowledge discovery in database.

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

- a) Why RDD needs in a Spark?
- b) Explain the ‘Tower of Hanoi’ problem in artificial intelligence with the help of diagrams and propose a solution to the problem.
- c) Explain Web mining in detail.
- d) Explain AO\* Algorithm in brief.
- e) What is the major difference between star schema and snowflake schema?

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

- a) Data mining
- b) Action
- c) Spark SQL



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**PB-1477**

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**[6226]-602**  
**T.Y.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 10):**

**[8 × 2 = 16]**

- a) What is Debugging?
- b) What is verification?
- c) Define software review.
- d) What is load testing?
- e) Define regression testing.
- f) Define Stub & driver.
- g) What is dynamic testing ?
- h) What is SQA?
- i) Define Winrunner.
- j) Explain terms-Fault, Error.

**Q2) Attempt any FOUR of the following (out of 5):**

**[4 × 4 = 16]**

- a) Explain testing fundamental in detail.
- b) Explain Black box testing in detail.
- c) Explain software testing process.
- d) Explain verification and validation in detail.
- e) Explain software testing life cycle with diagram.

**P.T.O**

**Q3) Attempt any FOUR of the following (out of 5):**

**[4 × 4 = 16]**

- a) Explain unit testing.
- b) Explain integration testing with its types.
- c) Explain GUI testing in detail.
- d) Write test case design for login process.
- e) Explain acceptance testing in detail.

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

**[4 × 4 = 16]**

- a) Explain JUnit in detail.
- b) Explain CMM in detail.
- c) Explain performance testing in detail.
- d) Explain difference between static & dynamic testing.
- e) Explain any four principles of testing.

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

- a) Software review.
- b) Testing documentation.
- c) Goals of software testing.



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SEAT No. :

**PB-1478**

[Total No. of Pages : 2

**[6226]-603**

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

**CA - 603: ADVANCED JAVA**

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

*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 is servlet?
- b) What is protocol?
- c) What is socket?
- d) What is TCP/IP?
- c) What is the sleep ( ) method?
- f) List types of Result Set.
- g) List any 4 implicit objects of JSP.
- h) What is Hibernate?
- i) What is port?
- j) What is session?

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

**[4 × 4 = 16]**

- a) Explain JSP Life Cycle with diagram.
- b) List & explain JDBC drivers.
- c) Differentiate between do Get ( ) and do post ( ) methods
- d) Write a Java program to display odd numbers, between 1 to 100 in each number should display after 2 seconds (multithreading)
- e) Write a servlet application to display hello Java message on the browser.

**P.T.O.**

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

**[4 × 4 = 16]**

- a) Explain thread synchronization with example.
- b) What is cookies? Explain use of cookies in session tracking with example.
- c) Explain JSP directives in detail.
- d) Write a JSP script to display factorial of a given number.
- e) Write a Java program to display date of server machine on client's machine.

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

**[4 × 4 = 16]**

- a) Explain statement interface in detail along with prepared statement and callable statement.
- b) Explain any 4 methods used in thread life cycle
- c) Write a JDBC program to insert record into student table. (Assume student table is already created having columns rno, name, percentage)
- d) Write a java program using multithreading to print "Hello Java" message for 500 times.
- e) Explain socket of Server Socket class in detail.

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

**[2 × 3 = 6]**

- a) Hibernate
- b) Connection interface
- c) Thread Priorities



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SEAT No. :

**PB-1479**

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**[6226]-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 Multiple Choice Questions (Any 8): [8 × 2 = 16]**

- a) What is Activity?
- b) What is UI?
- c) What is Thread?
- d) Write a brief note on Options Menu?
- e) Explain features of toast?
- f) Define types of layouts?
- g) Define attribute of Widgets?
- h) What is Mobility?
- i) What is hand-off?
- j) What do you mean by Wireless Devices?

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

**[4 × 4 = 16]**

- a) Write advantages of mobile computing?
- b) What are uses of intent & types of intent
- c) What is toast in android?
- d) Write a Program for list View
- e) What is Menu? Explain types of menu.

**P.T.O.**

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

**[4 × 4 = 16]**

- a) What are json types?
- b) Create a Simple Application Which Send —Hello message from one activity to another with help of Button (Use Intent).
- c) Create alert dialog box?
- d) Explain UI thread with example?
- e) Discuss Components of Android Application.

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

**[4 × 4 = 16]**

- a) What are different types of layout? Explain any two types in brief?
- b) Explain event Handling in brief?
- c) Define methods of AsyncTask?
- d) Write program for Date picker?
- e) Describe mobile and Wireless devices with example.

**Q5) Write a short note on (any 2):**

**[2 × 3 = 6]**

- a) Activity lifecycle with diagram.
- b) Step create and send notification.
- c) Short Note on Toast





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SEAT No. :

**PB-1480**

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**[6226]-605**

**B.B.A. (CA)**

**CA-604 :DOT Net Framework  
(Semester-VI) (CBCS) (2019 Pattern)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) All questions are compulsory.*
- 2) Neat diagrams must be drawn wherever necessary.*

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

**[8 × 2 = 16]**

- a) How to declare a constant?
- b) What is garbage collection?
- c) Enlist any four errors in VB.Net.
- d) Define MSIL.
- e) List any 4 properties of form.
- f) What is CLS?
- g) What is method overloading?
- h) What is destructor?
- i) What is event? List any two mouse events in VB.Net.
- j) Explain any two properties of data grid.

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

**[4 × 4 = 16]**

- a) Explain features of Dot Net
- b) Explain scrollbar control with its property and methods.
- c) What are the ADO. Net components?

**P.T.O.**

- d) Design GUI and write a code using Rich Text Box
  - i) Add font size in combobox
  - ii) Select size and change text size in textbox.
- e) Write a VB.Net program to display the numbers continuously in textbox by clicking on button.

**Q3) Attempt the following (any 4):** **[4 × 4 = 16]**

- a) Write a VB.Net program to accept a character from the keyboard and check whether it is vowel or consonant.
- b) Write a program in c#.Net to find the sum of all elements of the array.
- c) Write a c#.Net program to display fibonacci series.
- d) Write a c#.Net program to find given number is prime or not.
- e) Write a VB.Net program to find given number is perfect or not.

**Q4) Attempt the following (any 4):** **[4 × 4 = 16]**

- a) Explain various built in dialog boxes.
- b) Explain ASP.Net life cycle events.
- c) What is validation in ASP.Net? Explain any 2
- d) Write a VB.Net program for blinking an image.
- e) Write a c#.Net program to sort the given array.

**Q5) Write a short note on (any 2):** **[2 × 3 = 6]**

- a) Crystal Reports
- b) Conductor
- c) Command object

