[6034]-601
T.Y.B.B.A.(C.A.)
Recent Trends in Information Technology
(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 (Out of Ten)**   **[2 × 8 = 16]**

    a)   What is OLTP?

    b)   Define artificial intelligence.

    c)   Define Data Frames.

    d)   What is a Data Mart?

    e)   Define OLAP.

    f)   What is Robotics?

    g)   Define spark.

    h)   List any two applications of artificial intelligence.

    i)   Which type of model is a Decision Tree?

    j)   What is full form ETL?

Q2) **Attempt any Four of the following (Out of Five)**   **[4 × 4 = 16]**

    a)   Differentiate between OLAP and OLTP

    b)   Explain FP tree algorithm.

    c)   Explain different RDD operations in spark.

    d)   What are the disadvantages of 'Hill Climbing' in artificial intelligence?

    e)   Explain briefly data mining task

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

   a)   How is Apache Spark different from Map Reduce?

   b)   What is data preprocessing? Explain

   c)   Write down the algorithm of Breadth-First Search with is advantages.

   d)   Explain the various search and control strategies in artificial intelligence.

   e)   How does Spark work? Explain with the help of its Architecture?

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

   a)   What is Data ware house? Sate any two advantages.

   b)   What is a heuristic function?

   c)   What are the two advantages of 'Depth First Search' (DFS)?

   d)   Explain the three important artificial intelligence techniques.

   e)   Explain briefly State Space Representation of Water Jug Problem.

Q5) **Write a short note on any Two of the following (Out of Three)**

[3 × 2 = 6]

   a)   'Means End Analysis' (MEA) in artificial intelligence

   b)   ETL Process

   c)   MOLAP server

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[6034]-602

T.Y.B.B.A./B.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) *Figures to right indicate full marks.*
3) *Neat diagram must be drawn wherever necessary.*

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.

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) How to calculate the cyclometric complexity of a code? Explain with example.

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.

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[6034]-603

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

CA-603: ADVANCED JAVA

(2019 Pattern) (Semester - VI) (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)   List types of Resultset.

    b)   What is IP Address?

    c)   What is JDBC?

    d)   What is servlet?

    e)   What is cookies?

    f)   What is UDP?

    g)   What is thread?

    h)   What is socket?

    i)   List the directives in JSP.

    j)   What is networking?

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

    a)   List & explain all the interfaces used in JDBC.

    b)   Differentiate between HTTP servlet and Generic servlet.

    c)   Explain life cycle of JSP with suitable diagram.

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d) What is synchronization? Explain.

e) Write a java program to count number of records in a table?

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

a) Explain statement interface in detail.

b) Explain Thread priority in detail.

c) Differentiate between TCP socket and UDP socket.

d) Write a java program to print "Hello Java" message 10 times.

e) Write a java program to delete salary column from Emp table. Assume Emp table with attributes ENo, EName and salary is already created.

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

a) Write a java program to display IP Address of a Machine.

b) Explain Architecture of Hibernate.

c) Explain life cycle of servlet with suitable diagram.

d) What is multithreading? Explain.

e) Write a java servlet program to accept name from user & display on browser [use HTML].

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

a) notify( ), notify All( ) & wait( )

b) Applications of spring.

c) Connection Interface.

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[6034]-604

T.Y.B.B.A. (Computer Application)
CA - 604 : ANDROID PROGRAMMING
(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.*

Q1) Attempt any eight of the following.   **[8×2=16]**

   a)   What is view?

   b)   What is Intent?

   c)   What is activity?

   d)   List features of Android Operating System.

   e)   Define Android Virtual Devices (AVD).

   f)   What is Layout Manager?

   g)   What is Dialog Box in Android?

   h)   Define SQLite Database.

   i)   What is Toast?

   j)   What is Text view?

Q2) Attempt any four of the following.   **[4×4=16]**

   a)   What is android.xml or manifest file?

   b)   Explain progress bar with example.

   c)   Differentiate between JVM & DVM?

   d)   Explain Date & Time picker with its methods.

   e)   Explain android Architecture in detail with suitable diagram.

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

   a)   Explain activity life cycle with example.

   b)   Explain types of Intent in detail with example.

   c)   What is android layout? Explain its types in detail.

   d)   Explain Toggle Button control with example.

   e)   Create a simple application which send - Hello message from one activity
        to another with the help of button (use intext).

Q4) Attempt any four of the following.   [4×4=16]

   a)   Explain service life cycle in detail.

   b)   Explain AsynTask in detail.

   c)   What is content provider? Explain in detail.

   d)   What is Mapview? Explain in detail.

   e)   Create an android application to accept two numbers from user and find
        multiplication. Display the result on the next activity on button click.

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

   a)   Android JSON

   b)   Bounded service

   c)   Context menu

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[6034]-605

T.Y.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)   *Figures to the right indicate full marks.*

Q1) Attempt any Eight of the following.   **[8×2=16]**

    a)   Enlist concatenation operators invb.Net.

    b)   List properties of Array in C#.

    c)   What do you mean by constructor?

    d)   What is ADO.Net Dataset?

    e)   Write any two string functions in C#.

    f)   Enlist any four data types used in Vb.Net.

    g)   What is use of virtual keyword?

    h)   List any four common web controls.

    i)   What is use of site Mappath control.

    j)   List any four properties of combobox control.

Q2) Attempt any four of the following.   **[4×4=16]**

    a)   Explain data Gridview control.

    b)   Explain the architecture of ASP.Net.

    c)   Explain classes in ADO.Net.

    d)   What are the properties and methods of server object?

    e)   Explain message Box function in detail.

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

    a)   Write Vb.Net program to accept character from user and check whether it is vowel or not.

    b)   Write program in C# to create function to find factorial of given number.

    c)   Write Vb.Net program to accept the details of Employee (Eno, Ename, salary).

    d)   Write C# program to find armstrong number of given number.

    e)   Write Vb.Net program to display today's date on the screen.

Q4) Attempt any four of the following.   **[4×4=16]**

    a)   Explain advantages of Dot.Net.

    b)   Explain any four properties of text Box control.

    c)   Explain pop menus in VB.Net.

    d)   Write a c # program to find length of string.

    e)   Write a c # program to calculate area of circle.

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

    a)   Event Driven programming

    b)   JIT compilers

    c)   Method overloading

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