Total No. of Questions—**5**] [Total No. of Printed Pages—**3**

Seat No.	

[5363]-601

B.B.A./B.C.A. (CA) (Semester-VI) EXAMINATION, 2018

601 : ADVANCED WEB TECHNOLOGIES

(2013 PATTERN)

Time : Three Hours **Maximum Marks : 80**

N.B. **:—** (*i*) *All* questions are compulsory.

(*ii*) Figures are required whenever necessary.

1. Attempt the following (any *eight*) : [2×8=16]

(*a*) Give any *two* applications of AJAX ?

(*b*) What is serialization ?

(*c*) What is XML ?

(*d*) Enlist the HTTP Request methods.

(*e*) What is SOAP ?

(*f*) Which are the databases supported by PHP ?

(*g*) Enlist the method of DOM parser.

(*h*) What is web services ?

(*i*) What is setcookie () function ?

(*j*) Enlist different attributes for ready state.

2. Attempt the following (any *four*) : [4×4=16]

(*a*) Define constructor. Explain it with the help of program.

P.T.O.

(*b*) What is self-processing form ? Explain with the help of program.

(*c*) Explain AJAX web application model.

(*d*) Write a PHP program to accept two strings from user and check whether entered strings are matching or not ?

(Use sticky form concept).

(*e*) Write a PHP script to demonstrate the concept of introspection for examining object.

3. Attempt the following (any *four*) : [4×4=16]

(*a*) Explain simplexml extension with the help of example.

(*b*) Explain how Ajax works ?

(*c*) What is DOM ? Explain it with the help of program.

(*d*) Write a simple PHP program which implements Ajax for addition of two numbers.

(*e*) Create a XML file which gives details of books available in "ABC Bookstore" from the following categories :

(*i*) Technical

(*ii*) Cooking

(*iii*) Yoga.

4. Attmept the following (any *four*) : [4×4=16]

(*a*) Give an example of PHP and Ajax application for searching.

(*b*) What is XML–RPC ?

(*c*) Explain how to link CSS to XML.

(*d*) Create Student table as follows :

Student (Sno, Sname, per)

Write Ajax program to select the student name and print the selected student's details.

(*e*) Consider the following relational database :

Project (P-Group-No, Project-Title)

Student (Seat No, Name, Class, P-Group-No).

Write a PHP script to accept project title and display list of students those who are working in a particular project.

5. Write short notes on (any *four*) : [4×4=16]

(*a*) Introspection

(*b*) XML decument structure

(*c*) Redirection

(*d*) WSDL

(*e*) Multivalued parameter.

Total No. of Questions—**5**] [Total No. of Printed Pages—**3**

Seat No.	

[5363]-602

B.C.A./B.B.A (CA) (Semester-VI) EXAMINATION, 2018

602-ADVANCED JAVA

(2013 PATTERN)

Time : Three Hours **Maximum Marks : 80**

N.B. :— (*i*) *All* questions are compulsory.

(*ii*) Figures to the right indicate full marks for the questions.

1. Attempt the following (any *eight*) : [2×8=16]

(*a*) What is Thread ? How to set the priority of Thread.

(*b*) What is RMI Registry.

(*c*) What is the role of Prepared Statement ?

(*d*) Explain the types of Servlet.

(*e*) What is the use of for Name() method ?

(*f*) Write names of JSP Directives.

(*g*) What is Cookie ?

(*h*) What is the use of manifest.txt file ?

(*i*) What is the use of setMaxInactiveInterval () method.

(*j*) What is the use of getLocalHost () method ?

2. Answer the following (any *four*) [4×4=16]

(*a*) Explain JDBC Drivers.

P.T.O.

(*b*) Explain RMI Architecture with suitable diagram.

(*c*) Explain the difference between TCP/IP and UDP.

(*d*) Write a JDBC program to accept the details of customer (CID, CName, Address, Ph_No.) and store it into the database (Use Prepared Statement interface).

(*e*) Write a Multithreading program in Java to display the numbers between 1 to 100 continuously in a TextField by clicking on button. (use Runnable Interface).

3. Answer the following (any *four*) : [4×4=16]

(*a*) What is Thread ? Explain thread life cycle with diagram.

(*b*) Explain JSP tags with example.

(*c*) Explain servlet life cycle with suitable diagram.

(*d*) Write a Java program using multithreading to execute the threads sequentially (Use Synchronized Method)

(*e*) Write a JDBC program in Java to update an address of given customer (cid, cname, address) and display updated details.

4. Attempt any *four* : [4×4=16]

(*a*) State purpose of :

(*i*) Statement

(*ii*) Connection

(*iii*) Result set

(*iv*) Driver Manager.

(*b*) What is Java Beans ? Explain the advantages of Java Beans.

(*c*) Explain thread Synchronization in detail.

(*d*) Write a JSP program to calculate sum of first and last digit of a given number. Display sum in Red Color with font size 18.

(*e*) Write a JDBC program to delete the rocords of employees whose names are starting with 'A' character.

5. Attempt the following (any *two*) : [2×8=16]

(*a*) Write a SERVLET application to accept username and password, and search them into database, if found then display appropriate message on the browser otherwise display error message.

Or

Write a JSP program to accept the details of Account (ANo, Type, Bal) and store it into database and display it in tabular form (Use Prepared Statement interface).

(*b*) Write a Socket program in Java for simple standalone chatting application.

Or

Write a SOCKET program in Java to check whether given file is present on server or not, if it is present then display its content on the server's machine otherwise display error message.

Total No. of Questions—**5**] [Total No. of Printed Pages—**3**

Seat No.	

[5363]-603

B.C.A./B.B.A. (CA) (Semester-VI) EXAMINATION, 2018

603 : RECENT TRENDS IN IT

(2013 PATTERN)

Time : Three Hours **Maximum Marks : 80**

N.B. :— (*i*) *All* questions are compulsory.

(*ii*) *All* questions carry equal marks.

1. Attempt the following (any *eight*) : [16]

(*a*) What is Homogeneous distributed database ?

(*b*) What is Software quality assurance (SQA) ?

(*c*) List the features of data warehouse.

(*d*) Define the term Secret key.

(*e*) List the cloud services model.

(*f*) Which are the types of database fragmentation ?

(*g*) List out the software quality factors.

(*h*) Explain the term Data cleaning.

(*i*) Define the following terms :

(*i*) Encryption

(*ii*) Decryption.

(*j*) Explain the term 'GPS'.

P.T.O.

2. Attempt any *four* of the following : [4×4=16]

(*a*) Explain communication techniques used in software development process.

(*b*) Explain large object data types in detail.

(*c*) Define data mining. Give advantages and disadvantages of data mining.

(*d*) Explain symmetric key algorithm in cryptography.

(*e*) What is cloud computing ? Explain advantages and disadvantages in detail.

3. Attempt any *four* of the following : [4×4=16]

(*a*) What is Green computing ? Explain features of green computing.

(*b*) Explain the following terms :

(*i*) DES–Data Encryption Standard

(*ii*) AES–Advanced Encryption Standard.

(*c*) Explain OLAP architecture. What are the OLAP operations ?

(*d*) Write a short note on anaysis principles in software process.

(*e*) Write down the pros and cons in software prototyping.

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

(*a*) Explain Data Reduction. What are the strategies of data reduction ?

(*b*) Write a short note on RSA.

(*c*) What is soft computing ? Describe techniques of soft computing in detail.

(*d*) Explain Abstract data types.

(*e*) What are the current and future trends in mobile computing ?

5. Attempt any *four* of the following : [4×4=16]

(*a*) Explain architecture of Data Mining.

(*b*) Define :

(*i*) Active Attack

(*ii*) Passive Attack.

(*c*) What is cryptography ? Explain types of cryptography.

(*d*) Write a short note on One time pad.

(*e*) Explain applications of data warehouse.

Total No. of Questions—**5**] [Total No. of Printed Pages—**2**

Seat No.	

[5363]-604

B.C.A./B.B.A. (C.A.) (Semester VI) EXAMINATION, 2018

604 : SOFTWARE TESTING

(2013 PATTERN)

Time : Three Hours **Maximum Marks : 80**

N.B. **:—** (*i*) *All* questions are compulsory.

(*ii*) Figures to the right indicate full marks.

1. Attempt the following (any *eight*) : [8×2=16]

(1) Define Metric in terms of Software metric.

(2) State the objectives of Smoke testing.

(3) What is the objective of Testing ?

(4) State and explain nature of errors.

(5) Explain TSL.

(6) State and explain the drawbacks of Big-Bang approach of Testing.

(7) What is meant by a Driver ?

(8) Define Regression Testing.

(9) Define (α) (Alpha) Testing.

(10) Draw diagram of the Testing Process.

2. Attempt any *four* of the following : [4×4=16]

(1) Explain Recovery testing and Security testing.

(2) Explain all the testing principles in detail.

P.T.O.

(3) Explain Equivalence Class Partitioning (ECP).

(4) Explain how the testing is done for Documentation and Help facilities ?

(5) Explain Test Automation in detail.

3. Attempt any *four* of the following : [4×4=16]

(1) Explain all the factors of Testability.

(2) Explain the Top-down approach of Integration testing.

(3) Explain size-oriented metrics with an example.

(4) Explain testing for Real-time systems.

(5) Explain Rational Robot as an automation tool.

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

(1) Explain the Sandwich approach of Integration.

(2) Explain Performance Testing.

(3) Explain testing of client-server architecture.

(4) Give difference between verification and validation.

(5) Explain Tunit as a testing tool.

5. Write short notes on (any *four*) : [4×4=16]

(1) Load testing

(2) Complexity metrics with example

(3) Unit Testing

(4) White-Box testing

(5) WinRunner.