



BCA (Part II) Examination, 2010

Communication Skills

Time allowed: Three Hours

Max. Marks: 50

Attempt any five questions. All questions carry equal marks.

1. Define communication. Explain various types of barriers to good communication.
2. Differentiate between verbal and non-verbal communication.
3. Write a business letter to a builder of the construction of apartments in your land of approx. 1500 sq. yards.
4. Write an agenda for a meeting of changing syllabus and pattern of examination.
5. Prepare a notice for the schedule of sports week in your college.
6. Write an information report on "Recent Trends" in Information Technology".
7. Prepare your resume for sending to a company for the post of software developer.
8. What are the factors for preparing an effective report? And also explain various types of reports.
9. Prepare a circular to inform all the colleges regarding admission policy.
10. Prepare minutes of meeting held for deciding the candidature for the post of President in University Elections.



BCA (Part II) Examination, 2010
Database Management System

Time allowed: Three Hours

Max. Marks: 50

Attempt any five questions. All questions carry equal marks.

- | | |
|--|-----|
| 1. a) What do you understand by DDL and DML? | 5 |
| b) What are file systems? Write a note on database files. | 5 |
| 2. a) What do you mean by hashing? What is exception handling? | 5 |
| b) Draw and discuss the client-server architecture. | 5 |
| 3. a) What are object oriented languages? Give suitable examples. | 5 |
| b) What are different types of database models? | 5 |
| 4. a) What are E-R diagrams? Discuss entity and attributes. Draw an E-R diagram for an automobile company. | 5 |
| b) Define Information Technology. | 5 |
| 5. Write short notes on following: | |
| a) Referential Integrity | |
| b) Data Security | 5,5 |
| 6. a) What is the concept of key in a table? Mention different kinds of keys of a database. | 5 |
| b) What are the prime responsibilities of D.B.A.? | 5 |
| 7. a) What are different types of reports in FoxPro? How a report is created in FoxPro? | 5 |
| b) Define Sorting and Indexing. Give examples. | 5 |
| 8. a) What are the different normalization forms? What is BCNF? | 5 |
| b) Write the syntax and use of 3 FoxPro | |

Star Infotech College

Anasagar Link Road, Ajmer 305001 Ph:2425579 Website www.starinfotechcollege.com



commands.

5

9. Create a database file and write a program in FoxPro which will input Employee's Name, Serial No., Basic Pay, HRA, DA, PF dedn and print out the salary slip of the employee. 10

10. a) What is Data Flow Diagram? How it is drawn?

Give example.

5

b) What are different types of loop statements

used in FoxPro?

5





BCA (Paet II) Examination, 2010

Client Server Technology

Time allowed: Three Hours

Max. Marks: 50

Attempt any five questions. All questions carry equal marks.

1. What is client/server computing? Give any two examples that represent the client-server. 5+5

2. Explain various development tools of client/server technology and its advantage. 6+4

3. Describe the types of client-server application. Describe the characterization of client-server computing with client-server database. 5+5

4. Explain the following:
 - a) CORBA
 - b) Components of client/server

5. Explain the role of client and describe various request for service. 10

6. Write short-notes on:
 - a) Features of server machine
 - b) Remote File Transfer
 - c) Novel Network

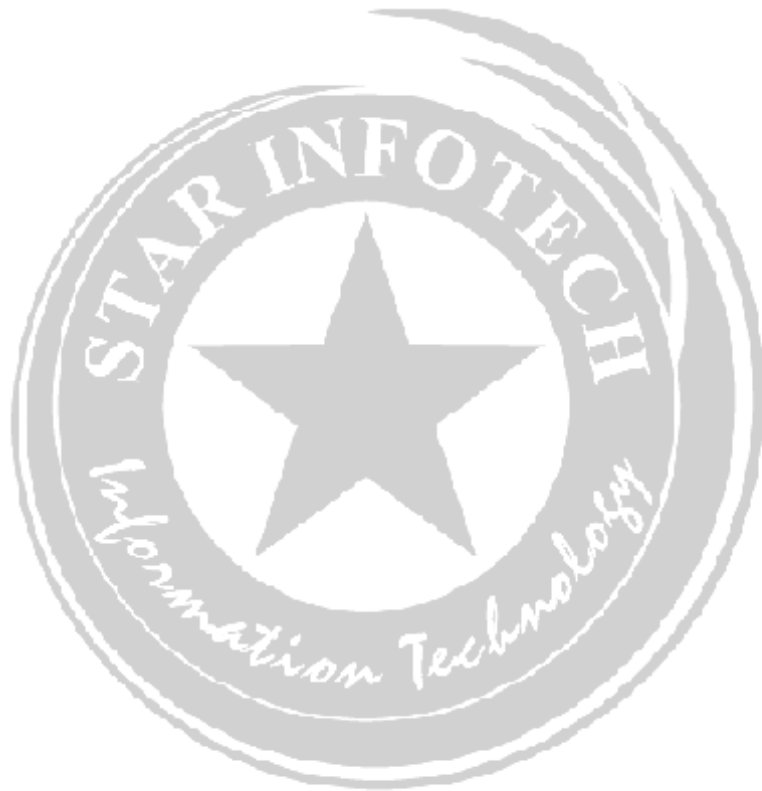
7. Explain the following:
 - a) DLL
 - b) Firewall
 - c) API
 - d) IPC
 - e) Encryption 5X2

Star Infotech College

Anasagar Link Road, Ajmer 305001 Ph:2425579 Website www.starinfotechcollege.com



8. Draw OSI model and write functions of each layer. 4+6
9. Explain the various remote access protocols. 10
10. Write down about server operating system with the reference of OS/2.0 and window NT. 10





BCA (Part II) Examination, 2010

Java Programming

Time allowed: Three Hours

Max. Marks: 50

Attempt any five questions. All questions carry equal marks.

1. a) What is Object Oriented Programming Paradigm? Explain briefly some features of Java language.
b) What is JVM? Explain concept of bytecode generation in Java.
2. a) What is datatypes? Explain various data types of Java.
b) Write a program to sort 10 numbers in ascending order.
3. What is a package? How user defined package is created? Discuss them with example.
4. Explain briefly:
 - a) Garbage Collector
 - b) Abstract class
 - c) Super Keyword
 - d) This keyword
 - e) Throws
5. a) What is a thread? Explain life cycle of multithreading.
b) Write short note on:
 - i) Runnable Interface
 - ii) Synchronization in threads
6. Explain all drivers of JDBC with example. What is the role of Driver Manager Class in JDBC? Explain it with example.
7. a) What is Event? Explain role of adaptor classes for event handling.
b) Explain applet tag in HTML page with example.
8. a) Write a program to check inputted string is palindrome or not.
b) Write a program to check that a given matrix is symmetric or not.
9. Design an applet to input text into a textbox and reverse it into another textbox.
10. Explain briefly
 - a) Java beans
 - b) Structure of RMI



BCA (Part II) Examination, 2010

C++ Programming

Time allowed: Three Hours

Max. Marks: 50

Attempt any five questions. All questions carry equal marks.

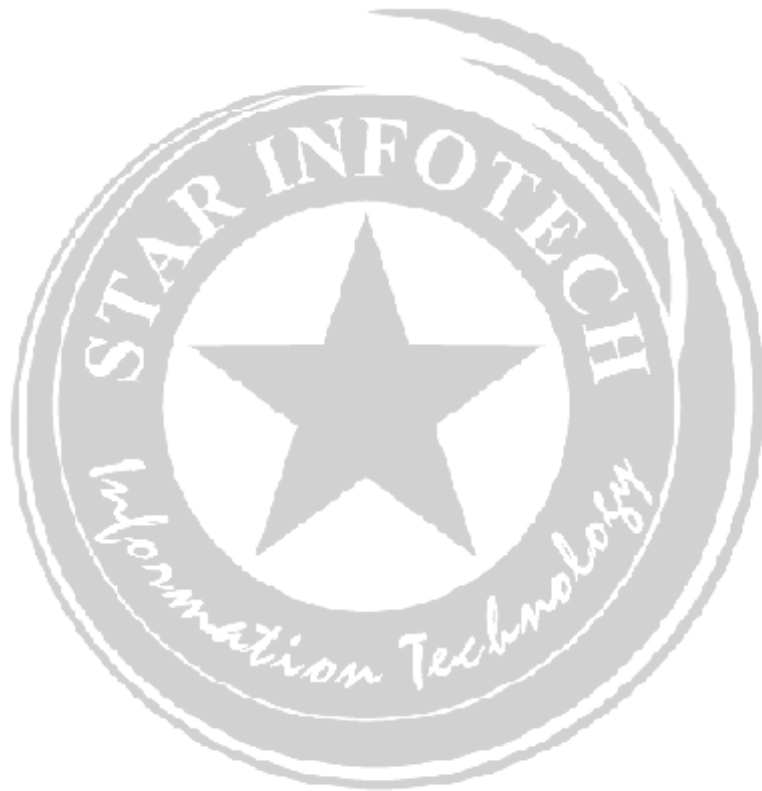
1. a) What is abstraction in an Object Oriented language? Describe the important types of abstraction with the help of an example each. 5
 b) Write a program in C++ that accepts the name of a file as input and prints the number of lines in it. Define necessary classes. 5
2. a) How is object-oriented programming different from procedural programming? Explain the features of object-oriented programming languages. 7
 b) Write at least two difference between subclass and superclass. 3
3. a) Does C++ supports modular programming? Justify your answer. 4
 b) Explain the use of “?” operator in C++ programs with an example. 3
 c) Explain at least one advantage of virtual function, with help of an example. 3
4. a) Write a program in C++, that accepts two strings s1 and s2 as input and checks whether s1 is a substring of s2. It should print appropriate message. Don't use any library function for checking for the substring. Define appropriate classes. 6
 b) Define Multiple Inheritance. Write an example program using multiple Inheritance. 4
5. “Overloading is a type of polymorphism.” With the help of an example program for each explain the function overloading and operator concepts. 10
6. a) Write a program for sorting a list of numbers in C++. 5
 b) Write a program in C++ to add two complex numbers. Use appropriate classes including the constructors, destructors and member functions. 5
7. Given the class “Book” with attribute title, authors (one or more), publisher, ISBN no., price, no. of pages and weight, write the class definition in C++. Number of pages and weight are private attributes. Two methods used by this class are : get_no_of_authors () and calculate_carriage_cost (). The second method uses no. of pages and weight of the book to calculate carriage cost. 10
8. a) How are objects created and initialized? Explain with the help of an example. 5

Star Infotech College

Anasagar Link Road, Ajmer 305001 Ph:2425579 Website www.starinfotechcollege.com



- b) Write a program which will accept a string from the user, reverse it and find whether the string is palindrome or not. 5
9. a) How are arrays declared in C++? How can pointers manipulate array elements? 5
b) Define a friend function. Explain the access rights of a friend function with respect to public and private data members of a class with the help of an example. 5
10. a) Write any differences between 'C' and 'C++'. 3
b) Write a program in C++ to compute the factorial of the input integer. 3
c) Write a function in C++ to swap two integer values. Don't use third variable. 4





BCA (Part II) Examination, 2010

Computer Graphics

Time allowed: Three Hours

Max. Marks: 50

Attempt any five questions. All questions carry equal marks.

1. Describe the functional characteristics of the following:
 - (i) Data Glove
 - (ii) Data Tablet
 - (iii) Image Scanner 3+4+3

2. What are Hard Copy devices? What are plotters? Explain different types of plotters. 2+2+6

3. a) Explain the working principle of Plasma Display. 4
 b) Write down and explain the working of random-scan display systems with the help of diagram. 6

4. Write short-note on:
 - (i) Raster Scan Systems
 - (ii) Random Scan Systems
 - (iii) Graphics Monitors 4+3+3

5. a) Write down an algorithm for Scan Converting a Line. 5
 b) Discuss various methods of Character representation. 5

6. a) What is virtual reality? Discuss its application in short. 6
 b) Write short note on 3-D view devices. 4

7. a) Explain Homogeneous Co-ordinate System in detail. 5
 b) Describe any Line Clipping Algorithm. 5

8. Write short note on:
 - i) Reflection
 - ii) Shearing
 - iii) Area filling techniques 3+3+4

Star Infotech College

Anasagar Link Road, Ajmer 305001 Ph:2425579 Website www.starinfotechcollege.com



9. Discuss the general procedure for translation, rotation and scaling parameters to repositioning a two Dimension objects. 10
10. Explain the Sutherland-Hodgeman method for polygon clipping.10

