BCA (Part II) Examination, 2011
Communication Skills

Time allowed: Three Hours
Max. Marks: 50
Attempt any five questions. All questions carry equal marks.

Part - A

1. Write the definition of communication.

2. What are the two types of written communication?

3. What do you mean by report writing?

4. Write any two types of formal communication.

5. Give any three parts of the structure of business letter.

6. Write any two types of formal report.

7. Appendix is used in which section of formal report.

8. Mention any two important points that should always be incorporated in resume writing.

9. Write any two items that points that should always be incorporated in agenda writing.

10. Write any two barriers of effective communication.

Part - B

1. Write the purpose of a circular in an organisation.

2. What do you mean by tender notice?

3. What is the difference between formal report and informal report?

4. What is the difference between quotation and order?

5. What do you mean by minutes of meeting?

Part - C

1. Explain the term communication and write the important differences between oral and written communication.

   OR

   Describe the important characteristics of minute writing.

2. Write an application for the post of personal secretary in a reputed company.
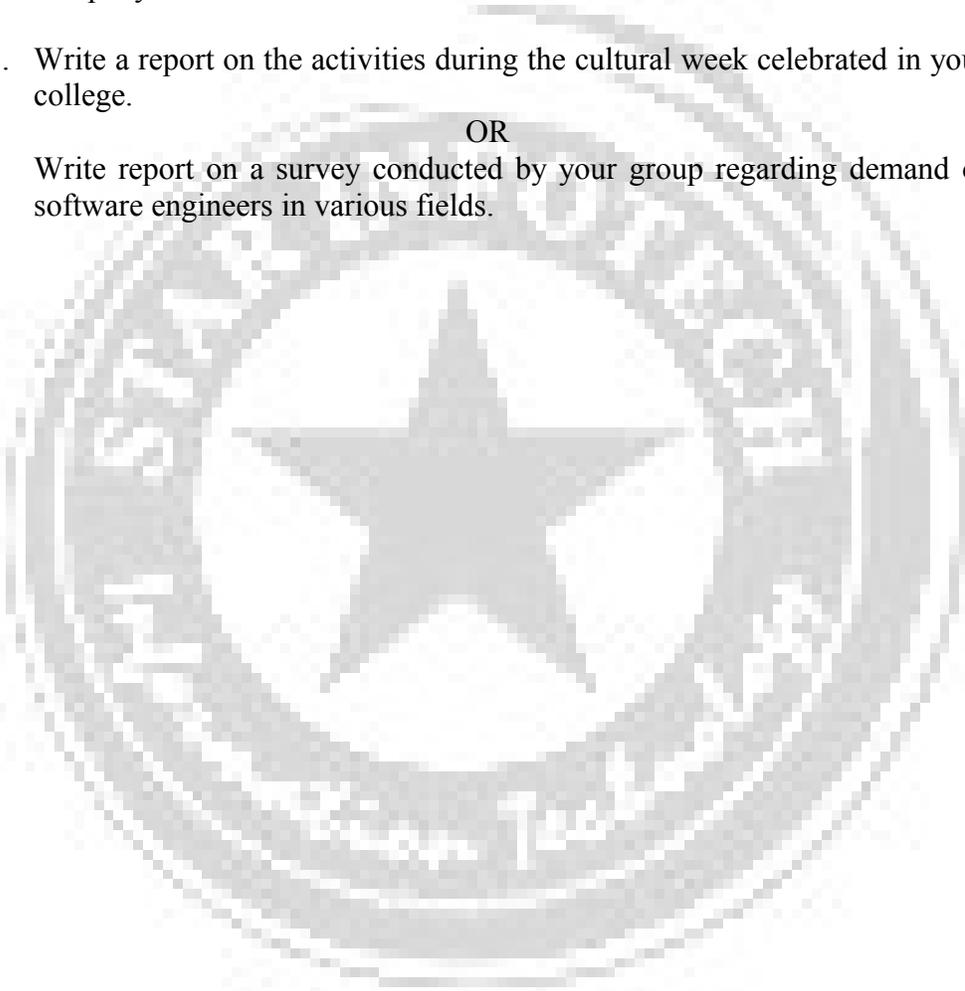
   OR

   Prepare your resume for the post of sales manager in a television company.

3. Write a report on the activities during the cultural week celebrated in your college.

   OR

   Write report on a survey conducted by your group regarding demand of software engineers in various fields.

BCA (Part II) Examination, 2011
Database Management System

Time allowed: Three Hours
Max. Marks: 50
Attempt any five questions. All questions carry equal marks.

Part - A
(Answer all 10 questions)

1. What do you mean by a database?

2. Write any two drop commands with meaning.

3. Explain SELECT command.

4. List any seven advantages of DBMS system.

5. What do you mean by an entity?

6. What do you mean by ER Model?

7. Write syntax of BROWSE command.

8. Write any five functions of FoxPro.

9. Explain documentation in a FoxPro program.

10. Write format of @ command of FoxPro.

Part - B
(Answer all 5 questions)

1. Explain distributed database.

2. Explain network model.

3. Explain dependencies.

4. Write DCL commands.

5. Write differences between SORT and INDEX command.

Part - C
(Answer any 3 questions)

1. Write responsibilities of DBA.

2. Explain relation algebra.

3. Explain various locks.

4. Write a FoxPro program to find LCM from two given numbers.

5. Write a menu driven program in FoxPro.

BCA (Part II) Examination, 2011
Client Server Technology

Time allowed: Three Hours
Max. Marks: 50
Attempt any five questions. All questions carry equal marks.

Part - A
(Answer all 10 questions)

1. What is FAT server?

2. What is CORBA?

3. What do you mean by 3-Tier?

4. What is OSI?

5. Name various development tools in Client/Server technology.

6. What is the role of server in Client/Server computing?

7. What is the purpose of LAN manager?

8. What is IPC?

9. What is the use of APIs in Client/Server computing?

10. What do you mean by dynamic data exchange?

Part - B
(Answer all 5 questions)

1. Which of the OSI layer determines the route to use in the subnet?

2. Discuss the characteristics of Client/Server computing.

3. List the benefits of CORBA ORB.

4. What are the components of Client/Server application?

5. Explain the characteristics of server operating system.

Part - C
(Answer all 3 questions)

1. Compare two tier and three tier architecture. Discuss when we should use 3-tier architecture.

2. Discuss what server and client programs expect from their operating system.

3. Write short notes on:
   a) Remote Procedure Call (RPC)
   b) Web Servers.

BCA (Part II) Examination, 2011
Java Programming
Time allowed: Three Hours
Max. Marks: 50
Attempt any five questions. All questions carry equal marks.

Part - A
(Answer all 10 questions)

1. Give different datatypes of Java.

2. What do you understand by polymorphism?

3. What is overloading?

4. Differentiate between class and structure?

5. What is thread?

6. What is API?

7. Differentiate between string and string buffer.

8. Write names of any five utility classes.

9. Define ODBC.

10. Explain the need of interfaces.

Part - B
(Answer all 5 questions)

1. Give difference between Java and C++.

2. Write a program for method overriding.

3. What is local and remote applet?

4. What is the advantage of vector?

5. Explain the structure of CGI.

Part - C
(Answer all 3 questions)

1. (a) What is JVM? Explain the advantages of JVM. Also give functionality of loader.
   (b) Write a program to sort elements of one dimensional array. Alse include exception handling code in program.

OR

(a) What is inheritance? Explain different types of inheritance with example.

(b) What is multithreading? Write a program to implement multithreading.

2. (a) What is package? Write steps to create and run a package. Also give advantage of package.
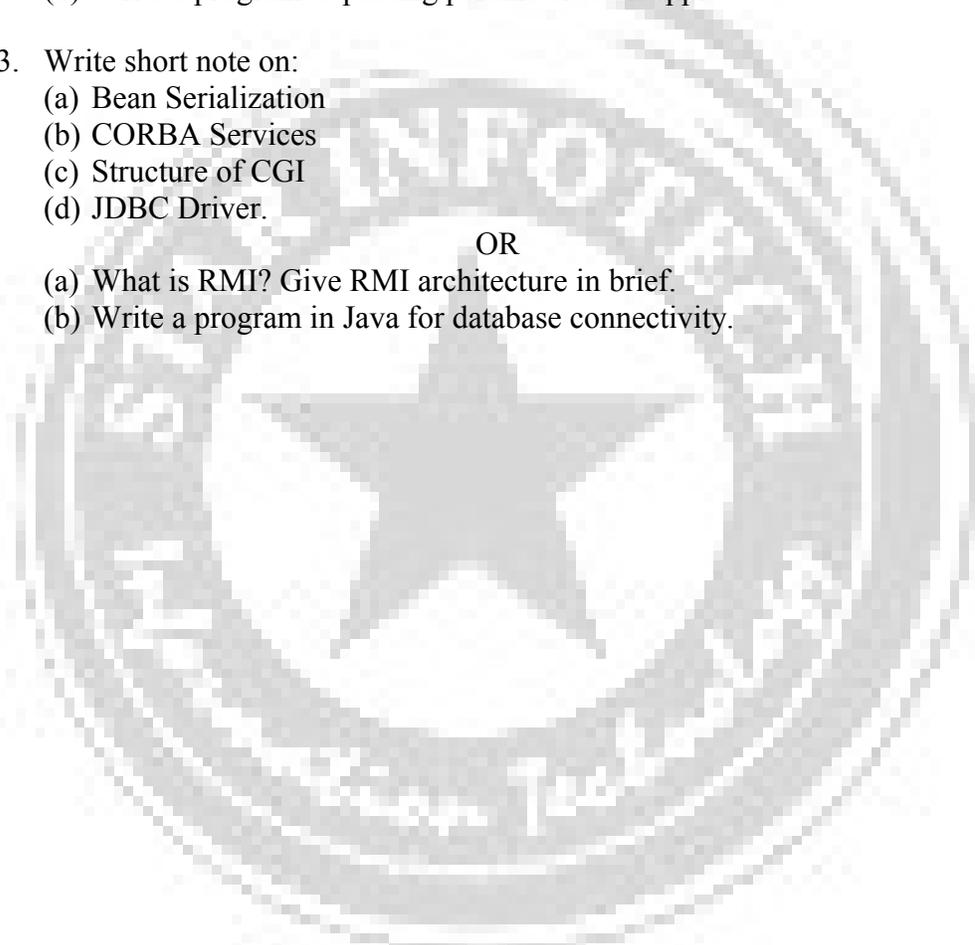
(b) Write a program for stack using stack class.

OR

(a) Give a brief description of Java library.

(b) Write a program to passing parameter to an applet.

3. Write short note on:
(a) Bean Serialization
(b) CORBA Services
(c) Structure of CGI
(d) JDBC Driver.

OR

(a) What is RMI? Give RMI architecture in brief.

(b) Write a program in Java for database connectivity.

BCA (Part II) Examination, 2011
C++ Programming
Time allowed: Three Hours
Max. Marks: 50
Attempt any five questions. All questions carry equal marks.

Part - A
(Answer all 10 questions)

1. What is object oriented paradigm?

2. Why do we need the pre-processor directive #include<iostream.h>?

3. What are the advantages of using new operator as compare to the function malloc().

4. What are the main advantages of passing arguments by reference?

5. When do we declare a member of a class static?

6. What are objects? How are they created?

7. Find out the errors:
```
#include<iostream.h>
Class Room
{
    int length;
    int width;
public:
    Room(int l, int w=0);
    Width(w);
    length(l)
    {
    }
};
void main()
{
    Room objRoom1;
    Room objRoom2(12, 8);
}
```

8. What is inline function?

9. What does *this* pointer point to?

10. Why it is necessary to overload an operator.

Part - B

1. When is a friend function compulsory? Give an example.

2. What is containership? How does it differ from inheritance?

3. What are the main differences between constructor and destructor?

4. What is the difference between opening a file with a constructor function and opening a file with open() function? When one method is preferred over other.

5. Write a program to swap two numbers with the help of pointers.

Part - C
(Answer any 3 questions)

1. (a) What is OOPS? Write difference between functional programming and OOPS programming.
   (b) Write difference between C and C++.

2. What is inheritance? Explain each type of inheritance with suitable example.

3. (a) What is function overloading and overriding? Differentiate between them.
   (b) Create a class FLOAT that contains one float data member. Overload all four arithmetic operators so that they operate on the objects of FLOAT.

4. (a) Write a program to calculate factorial of a given number with the help of recursion function.
   (b) Write a program to reverse a string using pointer and arrays.

BCA (Part II) Examination, 2011
Computer Graphics

Time allowed: Three Hours
Max. Marks: 50
Attempt any five questions. All questions carry equal marks.

Part - A
(Answer all 10 questions)

1. Write the functional characteristics of light pen.

2. Differentiate between impact and non-impact printers.

3. Define virtual reality.

4. What are the characteristics of a laser printer?

5. Write down the parts of CRT monitor.

6. What is a workstation?

7. What is a difference between a keyboard and a touch panel?

8. Define translation.

9. List the parts of an image scanner.

10. What is a joystick?

Part - B
(Answer all 5 questions)

1. Differentiate between random and raster scan display.

2. Differentiate between Cartesian and Homogeneous co-ordinate system.

3. What do you understand by shearing?

4. What is digitizer?

5. List the various area filling techniques.

Part - C
(Answer any 3 questions)

1. Describe Bresenham's algorithm for filling/line clipping.

2. Describe any one algorithm for translation and scaling.

3. Explain the working of an inkjet printer.

4. Explain any one algorithm for scan conversion.

5. Explain the working of direct view storage tube and CRT.

6. Explain all parts of virtual reality.