B.C.A (Part II) Examination, 2012

COMMUNICATION SKILLS
Tenth Paper

Time Allowed: Three Hours
Maximum Marks: 50

PART – A (Compulsory) (Marks: 10)

Answer all **ten** questions (20 words each).
Each question carries equal marks.

PART – B (Compulsory) (Marks: 10)

Answer all **five** questions (50 words each).
Each question carries equal marks.

PART – C (Marks: 30)

Answer all **three** questions (400 words each).
Each question carries equal marks.

PART A

1. What do you understand by the term 'Communication'?
2. Define the term 'Formal Communication'.
3. What is Report Writing? Mention the names of various types of reports.
4. Write the names of various parts of a business letter.
5. What do you mean by Minutes Writing?
6. What are the salient features of a good report?
7. Define Agenda writing.
8. Mention important characteristics of Minutes writing.
9. How and why are notices written?
10. What s the purpose of circulars?

PART B

1. Mention any three points you will keep in mind while preparing your Curriculum Vitae.
2. State the difference between Oral and Written Communication.
3. How can you make a business letter effective? Explain
4. Differentiate between formal report and informal report.

5. What is the importance of effective communication?

PART C

1. Elaborate the different barriers to effective communication and also explain how can these barriers be overcome?

OR

What are the advantages and disadvantages of written communication? Elucidate.

2. Write an application for the post of Sales Manager in a reputed washing powder company and also prepare your resume for the same. [Do not give any real information].

OR

What is Resume Writing? What are the major points that shold essentially be incorporated in Resume Writing?

3. Write a lucid report on the students' activities during the cultural festival celebrated in your esteemed college.

OR

Prepare a notice for the schedule of sports week in your college.

(B.C.A) (Part II) Examination, 2012

DATABASE MANAGEMENT SYSTEM
Eleventh Paper

Time Allowed: Three Hours
Maximum Marks: 50

PART – A (Compulsory) (Marks: 10)
Answer all **ten** questions (20 words each).
Each question carries equal marks.

PART – B (Compulsory) (Marks: 10)
Answer all **five** questions (50 words each).
Each question carries equal marks.

PART – C (Marks: 30)
Answer all **three** questions (400 words each).
Each question carries equal marks.

Part –A 10 * 1 =10

1. Differentiate between data and information.
2. What is a system?
3. What is security
4. What is a database file?
5. What is data abstraction?
6. Define Network Database.
7. Explain the syntax of 3 FoxPro commands.
8. What is the concept of Recursion?
9. What is OLAP?
10. What is broad bank technology?

Part-B 5*2 =10

11. Discuss the client-serer architecture in detail.
12. What do you mean by Normalization forms?
13. What is the concept of D.C.L.?
14. What are the functions performed by D.B.A.

15. Differentiate between physical and logical data independence.

Part-C

16. Discuss in detail the programming facility available in Foxpro. What is file in FoxPro?

OR

What do you understand by Referential Integrity? Give examples.

17. What is entity-relationship model? What are its components?

OR

What is Relational Model of D.B.M.S.? Write a note on Relational Algebra.

18. What is the meaning of concurrency and concurrency control?

OR

What are searching commands of FoxPro? Write a note on multi-valued dependencies.

B.C.A (Part II) Examination, 2012

JAVA PROGRAMMING
Thirteenth Paper
(BCA XIII)
Time Allowed: Three Hours
Maximum Marks: 50

PART – A (Compulsory) (Marks: 10)

Answer all **ten** questions (20 words each).
Each question carries equal marks.

PART – B (Compulsory) (Marks: 10)

Answer all **five** questions (50 words each).
Each question carries equal marks.

PART – C (Marks: 30)

Answer all **three** questions (400 words each).
Each question carries equal marks.

PART A

1. How CLASS PATH is set for packages?
2. How inheritance is implemented by interface?
3. What is the role of finally
4. What are the limitations of applet?
5. What object reference is different from actual object?
6. Define instance operator.
7. Define relational operators and Boolean logic operators.
8. What is the difference b/w type conversion and type casting in Java?
9. What is ODBC?
10. What is JVM?

PART B

1. Differentiate between use of ‘throw and ‘throws’.
2. A class declared n a package have following form :

```
class sample in pack
{
```

int mem-1;
public int mem-2;
protected int mem-3;
private int mem-4;
}

Explain how these members are accessed from a class outside this package.

3. What is CGI? Explain the structure of CGI.
4. Give difference between distributed and non distributed Java Programs.
5. How can you implement an array in Java, whose size may change during execution of a program?

PART C

1. Briefly explain ;
   i. Thread synchronization
   ii. Thread execution

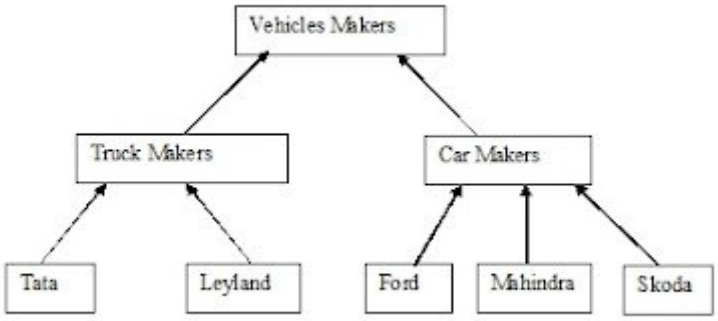
OR

Write a detail note on byte streams and character streams in Java

2. Explain paint methods to draw rectangles, round rectangles and arcs. Give details of each parameter used in these methods.

OR

Write a code for an applet to generate a bar chart for given data in one dimensional array of size 5.



3.

Implement the above class hierarchy in Java. Use appropriate data members and member functions for the above classes.

OR

Write a program in Java first by using the string class and then by using the peer class of string class i.e. string buffer class and thus show the differences between them.

B.C.A (Part II) Examination, 2012

C++ PROGRAMMING
Fourteenth Paper
B.C.A (XIV)

Time Allowed: Three Hours
Maximum Marks: 50

PART – A (Compulsory) (Marks: 10)
Answer all **ten** questions (20 words each).
Each question carries equal marks.

PART – B (Compulsory) (Marks: 10)
Answer all **five** questions (50 words each).
Each question carries equal marks.

PART – C (Marks: 30)
Answer all **three** questions (400 words each).
Each question carries equal marks.

PART A

1. List a few areas of application of OOP technology.
2. Write any two applications of scope resolution operator :: in c++?
3. What are the objects? How they are created?
4. How do we invoke a constructor function?
5. When do we make a class virtual?
6. What does this pointer point to?
7. What are the input and output streams?
8. Identify the error in the following program:

```
# include <iostream.h>
void main()
{
          int num[]={1,2,3,4,5,6}
          mum[1] = =[1]num ? cout <<”success”;
          cout>>”error”;
}
```

9. Describe the mechanism of accessing data members and member functions in following case:
   Inside a member function of the same class.
10. A class alpha has a constructor as follows:

```
alpha (int a, double b);
```

   Can we use this constructor to covert types?

PART B

1. What do you mean by dynamics binding? How is it useful in OPP?
2. What is overloading of a function? When do we use this concept?
3. How is dynamic initialization of objects achieved?
4. In what order are the class constructors called when a derived class object is created?
5. How do the following two statements differ in operation?

```
cin>>c;
cin.get(c ) ;
```

PART C

1. What is object oriented programming? How it is different from the procedure oriented programming? What are the unique advantages of an object oriented programming paradigm?

OR

Distinguish between the following:

(a) Objects and classes
(b) Data abstraction and data encapsulation.
(c) Dynamic binding and Message passing.

2. Define a class string. Use overloaded = = operator to compare two strings.

OR

What does polymorphism mean? How is polymorphism achieved at

(a) Compile time
(b) and Run time

3. What are the steps involved in using a file? What is difference between opening a file with constructor and opening a file with open () function? When is one methods preferred over the other?

OR

Write source code to define copy constructor.

B.C.A. (Part II) Examination, 2012

CLIENT SERVER TECHNOLOGY

(Twelth Paper)

Time allowed: Three Hours
Maximum Marks: 50

Part – A (Compulsory) (Marks: 10)
Answer all **ten** questions (20 words each).
Each question carries equal marks.

Part – B (Compulsory) (Marks: 10)
Answer all **five** questions (50 words each).
Each question carries equal marks.

Part – C (Marks: 30)
Answer all **three** questions (400 words each).
Each question carries equal marks.

Part A

1. What is client computing?
2. Write a short note on DDE.
3. What do you mean by Firewall?
4. What is windows API?
5. Explain the need of Inter Process Communication (IPC).
6. What is Network Operating System?
7. Explain the role of clients.
8. What is Novel Network?
9. What is OLE?
10. Discuss three service provided by Client Server Technology.

Part B

1. Explain the the work of data link layer in OSI model.
2. What are the goals of CORBA?
3. Discuss the issues related to managing a LAN-Network.
4. Explain dynamic data exchange.
5. Explain various functions of client server approach.

Part C

1. Explain the components of client-server application in detail.

OR

Explain various characteristics of client-server system.

2. Discuss the key layers in the OSI model and write a function of each layer.

OR

What is communication between client-server? Describe the communication protocol with help of OSI.

3. What do you mean by client-server approach? And also explain the concept of CORBA with complete description.

OR

What do you understand by two layer three layer architecture? And also explain use of middleware technology in client-server system.

COMPUTER GRAPHICS (Twelth Paper)

Time allowed: Three Hours

Maximum Marks: 50

Part – A (Compulsory) (Marks: 10)

Answer all **ten** questions (20 words each).

Each question carries equal marks.

Part – B (Compulsory) (Marks: 10)

Answer all **five** questions (50 words each).

Each question carries equal marks.

Part – C (Marks: 30)

Answer all **three** questions (400 words each).

Each question carries equal marks.

Part A

1. What are the two principle applications of image processing? Give name.
2. What is difference between image processing and computer graphics? (any two difference)
3. How many k bytes does a frame buffer need in a 600 x 400 pixel?
4. What is clipping?
5. What are inverse transformation?
6. Why do all use Homogeneous coordinates?
7. What are the no. of bits per inch (bpi) in dot matrix printer?
8. What is the condition of point clipping?
9. What is the function of laser printer?
10. What is resolution?

Part B

1. What is the difference between impact and non-impact printers?
2. What are the features of inkjet printers?
3. Compute the size of a 640 x 480 image at 240 pixels per inch and also explain the aspect ratio.
4. What are the advantages of electrostatic plotters? Explain its functions.
5. Consider three different raster system with resolution of 640 x 480, 1280 x 1024 and 2560 x 2048.
   (i) What size is frame buffer (in bytes) for each of these systems to store 12 bits per pixel?
   (ii) How much storage (in bytes) is required for each system if 24 bits per pixel are to be stored?

Part C

1. Discuss and explain Bresenham's algorithm for line generation. How DDA differs from Bresenham's line drawing algorithm?

OR

Describe the role of animation in entertainment and scientific visualization. And how is digital image processing different from computer graphic methods?

2. Given ellipse radii $r_x = 8$ and $r_y = 6$ illustrate the steps for mid point ellipse algorithm in 1 quadrant.

OR

What are the disadvantages of scan conversion process? And explain how the effects can be minimized.

3. Explain process of displaying objects in vector display and raster display. Draw block diagrams of the architectures of both the display system.

OR

Write short note on:

(a) Digitizer
(b) Anti-aliasing technique for visual realism
(c) Image scanner
(d) Inkjet printer