

B.C.A. (Part II) Examination, 2014

Communication Skills

Time allowed : Three Hours

Max. Marks : 50

Part-A (Compulsory)

(Marks : 10)

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

- Q.1 What do you understand by the term communication?
- Q.2 Write the names of various parts of a business letter.
- Q.3 Define the term 'Formal Communication'.
- Q.4 What is report writing? Mention the names of various types of reports.
- Q.5 What do you mean by minutes writing?
- Q.6 Define agenda writing.
- Q.7 Why do we write notices?
- Q.8 What are the salient features of a good report?
- Q.9 What is the purpose of circulars?
- Q.10 Write the important characteristics of resume writing.

Part-B (Compulsory)

(Marks : 10)

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

- Q.1 State the difference between oral communication and written communication.
- Q.2 Write the importance of effective communication.
- Q.3 How can you make a business letter effective? Explain.
- Q.4 Discuss various types of reports.
- Q.5 Explain various points you will keep in mind while preparing your curriculum vitae.

Part-C (Compulsory)

(Marks : 30)

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

Q.1 Write in detail the advantages and disadvantages of written communication.

OR

Discuss in detail the different barriers to effective communication and also explain how these barriers can be overcome.

Q.2 Write a lucid report on the various activities of students during the cultural festival celebrated in your college.

OR

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

Q.3 Discuss in detail the structure of a business letter.

OR

Write an application along with a brief resume to the personnel Manager, Rastogi Intercontinental, Mumbai for the post of secretary. (Do not disclose your real identify)

B.C.A. (Part II) Examination, 2014

Client Server Technology

Time allowed : Three Hours

Max. Marks : 50

Part-A (Compulsory)

(Marks : 10)

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

- Q.1 What is meant by client server?
- Q.2 What is web server?
- Q.3 Define IPC.
- Q.4 What is dynamic data exchange?
- Q.5 What do you understand by application partitioning?
- Q.6 What is firewall?
- Q.7 What is the peer-to-peer communication?
- Q.8 What is LAN manager?
- Q.9 What do you mean by network traffic?
- Q.10 Define OLE.

Part-B (Compulsory)

(Marks : 10)

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

- Q.1 Differentiate between two tier and three tier client/server architecture.
- Q.2 Differentiate between authentication and authorization.
- Q.3 What are general middleware in client/server environment?
- Q.4 What is a transaction in client/server environment?
- Q.5 What is the purpose of server operating system?

Part-C (Compulsory)

(Marks : 30)

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

Q.1 What are characteristics of client/server computing? Also explain its environment in detail.

OR

What are the advantages and disadvantages of client server architecture.

Q.2 Explain various types of clients. What is the role of client in client/server computing?

OR

Explain the types of server with their main functions.

Q.3 Explain CORBA with its application area.

OR

Explain the purpose and architecture of OSI.

B.C.A. (Part II) Examination, 2014

C++ Programming

Time allowed : Three Hours

Max. Marks : 50

Part-A (Compulsory)

(Marks : 10)

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

- Q.1 What do you mean by reusability?
- Q.2 What are the user defined data types?
- Q.3 What is the difference between keyword and identifier?
- Q.4 Define expression.
- Q.5 What is storage class?
- Q.6 What is member function?
- Q.7 What is the difference between overloading and overriding?
- Q.8 What is dynamic memory allocation?
- Q.9 What is container class?
- Q.10 Explain pure virtual function.

Part-B (Compulsory)

(Marks : 10)

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

- Q.1 What is recursion? Explain.
- Q.2 Explain reference variable by suitable example.
- Q.3 Explain write() and read() function in C++.
- Q.4 Explain scope resolution operator in brief.
- Q.5 Explain pointer to class and pointer to object.

Part-C (Compulsory)

(Marks : 30)

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

Q.1 What do you mean by object oriented analysis and design? What are various characteristics and features of object oriented programming?

OR

Differentiate and explain function and operator overloading with one example of each.

Q.2 Discuss the principles of abstraction. How do we achieve this in OOP? Discuss class declaration with an example.

OR

Discuss the structure of a C++ program using an example. What is a compile time error and what is a runtime error? Give an example of each.

Q.3 Using C++ program fragment differentiate between passing simple data types by value and by reference.

OR

What is a constructor? How is constructor function invoked? Give a suitable C++ program fragment which explain how construction functions are invoked.

B.C.A. (Part II) Examination, 2014

Java Programming

Time allowed : Three Hours

Max. Marks : 50

Part-A (Compulsory)

(Marks : 10)

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

- Q.1 What do you understand from Object Oriented Programming?
- Q.2 What is AWT?
- Q.3 Write all the types of inheritance supported by Java.
- Q.4 What is polymorphism in Java?
- Q.5 What are Applets?
- Q.6 What do you understand from Bytecode?
- Q.7 What is JVM?
- Q.8 What is command line argument? Explain with an example.
- Q.9 What is JDBC?
- Q.10 Explain the use of 'Static' keyword.

Part-B (Compulsory)

(Marks : 10)

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

- Q.1 Explain all the uses of 'Final' keyword with an example.
- Q.2 Differentiate between 'throw' and 'throws' with an example.
- Q.3 Explain the concept of method overriding.
- Q.4 What are packages? How packages can be created? Explain import statement with an example.
- Q.5 What is for-each loop in Java? Write a program which shows addition of two 2x2 matrices.

Part-C (Compulsory)

(Marks : 30)

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

Q.1 What is exception handling? Explain the concept of multiple catch statements. Write a program which implements finally block.

OR

What is need of synchronization in Multi threading? Explain synchronized method with an example?

Q.2 What are threads? How threads can be created in Java? Explain the concept of thread priority with an example.

OR

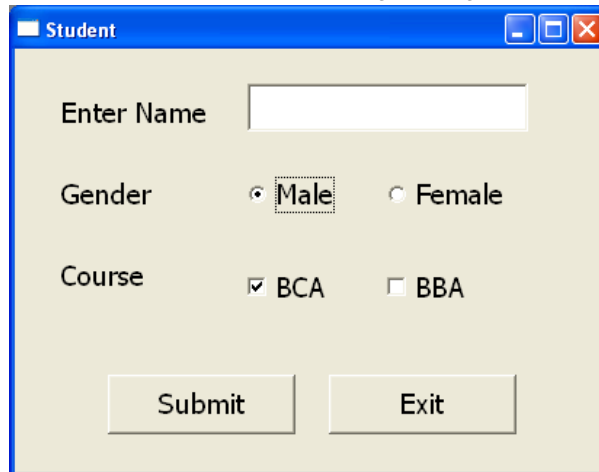
Differentiate between String and StringBuffer? Explain string connection and to string method with an example.

Q.3 Write short notes on following:

- (a) Wrapper classes
- (b) Super Keyword

OR

What do you understand from the term GUI? Write a program to generate following Output:



The image shows a Java Swing window titled "Student" with a light beige background and a blue title bar. The window contains a form with the following elements:

- A text label "Enter Name" followed by a text input field.
- A text label "Gender" followed by two radio buttons: "Male" (selected) and "Female".
- A text label "Course" followed by two checkboxes: "BCA" (checked) and "BBA" (unchecked).
- At the bottom, there are two buttons: "Submit" and "Exit".

B.C.A. (Part II) Examination, 2014

Database Management System

Time allowed : Three Hours

Max. Marks : 50

Part-A (Compulsory)

(Marks : 10)

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

- Q.1 What is a record?
- Q.2 Define data abstraction.
- Q.3 What is data dictionary?
- Q.4 What is a primary key?
- Q.5 What do you understand by data redundancy?
- Q.6 What is data integrity?
- Q.7 Define normalization.
- Q.8 How do you add a record in FoxPro?
- Q.9 Discuss the usage of SEEK command in FoxPro.
- Q.10 What is sorting?

Part-B (Compulsory)

(Marks : 10)

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

- Q.1 What are the advantages of DBMS approach?
- Q.2 Discuss the various vies of data.
- Q.3 Draw an ER diagram for your college database.
- Q.4 What is the role of DML?
- Q.5 How do you create a database structure with FoxPro?

Part-C (Compulsory)

(Marks : 30)

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

- Q.1 What is the role and responsibilities of a DBA (Database Administrator)?

OR

Discuss the architecture of a DBMS. Hence elaborate logical and physical data independence.

- Q.2 What is the purpose of integrity constraints? What is the role of primary key constraint, unique constraint and foreign key constraint? Illustrate using a database example.

OR

Present an overview of hierarchical, network and relational model. What are the advantages of using relational model?

- Q.3 Write short notes on any four of following:
(a) Super and candidate keys

- (b) Database Schema
- (c) Functional Dependency
- (d) DKNF
- (e) Data Definition Language
- (f) Compound Index File
- (g) Metadata
- (h) Serializability

B.C.A. (Part II) Examination, 2014

Computer Graphics

Time allowed : Three Hours

Max. Marks : 50

Part-A (Compulsory)

(Marks : 10)

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

- Q.1 What is resolution?
- Q.2 What is aspect ratio?
- Q.3 What is pixel?
- Q.4 What is pixmap and bitmap?
- Q.5 What is digitizer?
- Q.6 What is input and output system of computer?
- Q.7 What is light pen?
- Q.8 What is clipping?
- Q.9 What is shearing?
- Q.10 What is CRT?

Part-B (Compulsory)

(Marks : 10)

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

- Q.1 What is the difference between random and raster scan display?
- Q.2 What is the difference between CRT and LCD monitor?
- Q.3 What is non impact printer?
- Q.4 What is translation?
- Q.5 What are the applications of computer graphics?

Part-C (Compulsory)

(Marks : 30)

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

Q.1 Describe the various input and output devices of computer in detail.

OR

Describe the working of cathode ray tube.

Q.2 Explain:

(a) Reflection

(b) Line Clipping

OR

Explain:

(a) Polygon Clipping

(b) Text Clipping

Q.3 Describe Bresenhan's line algorithm in detail.

OR

Explain various area filling technique in detail.