

**Bachelor of Computer Application (B.C.A.) Semester—II Examination****PROGRAMMING IN C++****Paper—I**

Time : Three Hours]

[Maximum Marks : 50

- N.B. :—** (1) All questions are compulsory and carry equal marks.  
(2) Illustrate your answer with suitable diagram wherever necessary.

**EITHER**

1. (A) What is the purpose of static data member ? Explain with example. 5  
(B) Write a program to implement class :—  
(i) Data Members :  
(a) Name of cricket Player.  
(b) Score in last two matches.  
(ii) Member Functions :  
(a) To assign initial values.  
(b) To compute total and average score.  
(c) To display data.

Give the definition of display ( ) function outside the class. 5

**OR**

- (C) Explain features of OOP's. 5  
(D) Write the syntax for inline ; function explain inline function with suitable example. 5

**EITHER**

2. (A) What is copy constructor ? Demonstrate it with suitable example. 5  
(B) What is unary operator ? Write down unary operator overloading function with a suitable example. 5

**OR**

- (C) Write down the rules of operator overloading. List the operators which cannot be overloaded. 5  
(D) What is constructor ? Explain constructor with default arguments with an example. 5

**EITHER**

3. (A) What is this pointer ? Write a program to illustrate the use of 'this' pointer. 5  
(B) What is visibility mode ? What are different inheritance visibility modes ? Give an example. 5

**OR**

- (C) Explain pointer to objects. Write a program to illustrate it. 5  
(D) What is inheritance ? List the types of inheritance. Explain any one inheritance with example. 5

**EITHER**

4. (A) What is virtual function ? Write a program to demonstrate use of virtual function. 5  
(B) What is Exception Handling ? Explain handling uncaught exception. 5

**OR**

- (C) What is a fault ? Explain fault tolerant design techniques. 5  
(D) Explain pure virtual function. Give an example. 5
5. Attempt All :—
- (A) Explain class and object. 2½  
(B) What is constructor overloading ? 2½  
(C) Explain the following :  
(i) New operator  
(ii) Delete Operator. 2½  
(D) Write a note on abstract class. 2½