

Bachelor of Science (B.Sc.I.T.) Semester—II (C.B.S.) Examination

OBJECT ORIENTED PROGRAMMING USING “C++”

Paper—II

Time : Three Hours]

[Maximum Marks : 50

- N.B. :—** (1) **All** questions are compulsory and carry equal marks.
 (2) Draw neat and labelled diagrams wherever necessary.

EITHER

1. (a) What is Class ? How can we define member function outside the class ? 5
- (b) What are access specifiers ? Why are they needed ? 5

OR

- (c) Write a short note on static data members. 5
- (d) What are the features of OOPs ? 5

EITHER

2. (a) What are the rules for operator overloading ? 5
- (b) Explain the concept of multiple constructor in a class with example. 5

OR

- (c) Explain binary operator overloading with an example. 5
- (d) What is a constructor ? Explain parameterized constructors with example. 5

EITHER

3. (a) What is the use of new and delete operator ? Explain with example. 5
- (b) Explain the concept of this pointer. Write a sample program to illustrate the use. 5

OR

- (c) What is inheritance ? Explain multiple inheritance with example. 5
- (d) How can we create an array of objects ? Give an example. 5

EITHER

4. (a) What is virtual function ? How does it differ from pure virtual function ? 5
- (b) Explain the use of try and catch block with example. 5

OR

- (c) Write a program to raise exception if an attempt is made to perform division by zero. 5
- (d) What is abstract class ? Why it is needed ? 5

5. Attempt **all** :

- (a) Explain types of member functions. 2½
- (b) Explain the order of construction and destruction while creating a derived object. 2½
- (c) Explain single inheritance with suitable example. 2½
- (d) Give any two examples of predefined exceptions. 2½