

Bachelor of Science (B.Sc.I.T.) Semester-II Examination
OBJECT ORIENTED PROGRAMMING USING "C++"

Paper—II

Time : Three Hours]

[Maximum Marks : 50

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

EITHER

1. (A) Explain the features of Object Oriented Programming. 5
- (B) Write a program in C++ to find whether an entered number is prime or not. 5

OR

- (C) Explain the following access specifiers : 5
 - (i) Private
 - (ii) Public
 - (iii) Protected.
- (D) What are inline functions ? How will you make a member function defined outside the class inline ? 5

EITHER

2. (A) What is a constructor ? Explain copy constructor with the help of example. 5
- (B) Discuss the rules for overloading an operator. List the operators which can not be overloaded. 5

OR

- (C) What is parameterized constructor ? Write a program to illustrate parameterized constructor. 5
- (D) Discuss the significance of destructors in brief. Explain the difference between constructor and destructor. 5

EITHER

3. (A) Explain pointer to objects. Illustrate with a suitable example. 5
- (B) What is array of objects ? Explain with a program illustrating array of objects. 5

OR

- (C) What is Inheritance ? Explain its types and examples. 5
- (D) Write a program to demonstrate multiple Inheritance. Declare class M and N and derive publicly class P from M and N. 5

EITHER

4. (A) What are virtual functions ? Explain the rules to program a virtual function. 5
- (B) What is Exception handling ? Explain list of exceptions. 5

OR

- (C) What are abstract classes ? How will you use a constructor in derived class ? Illustrate with an example. 5
- (D) What is a friend function ? Explain the merits and demerits of using friend function. Explain put () and get () function. 5

5. Attempt all :

- (A) Explain classes and objects. 2½
- (B) Explain static data members with constructor. 2½
- (C) Explain new and delete operators. 2½
- (D) What are pure virtual functions ? Give example. 2½