AW–1801

B.C.A. (Part—II) Semester—III Examination
3ST2 : OBJECT ORIENTED PROGRAMMING WITH C++

Time : Three Hours]   [Maximum Marks : 60

N.B. :— (1) All questions are compulsory.

(2) All questions carry equal marks.

(3) Assume suitable data wherever necessary.

1. (a) Explain object oriented programming paradigm in detail.   6

(b) Explain data type conversion used in C++.   6

OR

2. (a) Write and explain the applications of OOP.   6

(b) Explain structure of C++ program with example.   6

3. (a) What are the various looping statements in C++ ? Explain any one. Also write program to check whether given number is prime or not.   6

(b) What is inline function ? Explain with example.   6

OR

4. (a) Explain the switch statement with example.   6

(b) What is function ? Explain the following with example :

(i) Call by reference

(ii) Return by reference.   6

5. (a) Define Class. Explain class specification with example.   6

(b) Explain the following with example :

(i) Construction with default argument

(ii) Copy constructor.   6

OR

6. (a) Explain the following :

(i) Nesting of member function

(ii) Private member function.   6

(b) What is destructor ? Explain with example.   6

7. (a) What is Inheritance ? Explain multilevel and multiple inheritance with example.   6

(b) Explain base class and derived class with example.   6

OR

8. (a) What is Pointer ? Explain declaration and initialization of pointer. Also write program to find sum of n numbers using pointers and array.   6

(b) How to make private member inheritable ? Explain.   6

9. (a) Explain the concept of virtual function and pure virtual function with example.   6

(b) How to write data sequentially in a file in C++ ? Explain with example.   6

OR

10. (a) Explain the pointer to derived class with suitable example.   6

(b) Explain opening and closing of files in C++ with example.   6