QP Code : 1033

(3 Hours) Total Matks:100

NB: 1) Question Number 1 is compulsory.
2) Attempt any four questions out of remaining six questions.

Q1 a) What is object oriented programming? Explain the features of object oriented 5
programming.
b) Explain call-by value and call by reference with example. 5
c) What is virtual function? Explain the need of virtual function. 5
d) Differentiate class and structure with example. 5

Q2 a) Write a program that can enter and display the data up to 10 employees using 10
structure. Employee structure has members employee_code and salary.
b) What is default constructor? Explain with example. 10

Q3 a) Write a program to find area and perimeter of the rectangle using pure virtual 10
function.
b) Write a program to swap two numbers using pointers. 10

Q4 a) Explain storage class with one programming example. 10
b) What are the different types of inheritance? Explain each with example. 10

Q5 a) Write a program to display following pattern using nested loops :- 10

A

A B A

A B C B A

A B C D C B A

b) Write a program to check the entered number is prime or not. 5
c) Write a program to find factorial value of given integer number using recursion. 5

Q6 a) What are inline functions? Discuss its advantages and disadvantages. Write program 10
to demonstrate inline function.
b) Write a program in C++ to transpose a matrix. 10

Q7. Write short note on any four 20
(a) this pointer
(b) Constructor & Destructor
(c) Bitwise operators
(d) Distinguish between Function Overloading and Operator Overloading
(e) break & continue