

JK Lakshmipat University Jaipur
INSTITUTE OF ENGINEERING AND TECHNOLOGY

End Term Examination-II, May, 2019

B. Tech. in Computer Science Engineering (IBM) Backlog, Semester II

Roll No.....

CSESP201 : Software Foundation Programming using C++

Time: 3 hours

Max. Marks: 100

Instructions to students:

1. Do not write anything other than your roll number on question paper.
2. Assume suitable data wherever required and mention it clearly.
3. Writing appropriate units, nomenclature, and drawing neat sketches/schematics/ flow chart wherever, required are an integral part of the answer.

- | | | |
|-----|---|----|
| Q.1 | Design a class named Distance that has data member feet as integer and inches as float. The class has the following member functions: <ul style="list-style-type: none">- void set(int, float) to give value to object- void disp() to display distance in feet and inches- Distance add(Distance) to sum two distances & return distance- Parameterized constructor that takes distance in inches as its only argument and initialize the feet and inches data members with appropriate values. | 15 |
| Q.2 | Illustrate the various methods available to detect the end of file. Design a single manipulator to provide a following output specification for printing float value. <ul style="list-style-type: none">i) Three position precisionii) Trailing zeros shown are display + sign as first position. | 10 |
| Q.3 | Describe the mechanism of accessing data members and member functions in the following cases: <ul style="list-style-type: none">(a) Inside the main program.(b) Inside a member function of the same class.(c) Inside a member function of another class. | 15 |
| Q.4 | Create a function template to display the absolute value of an argument of basic type. Using this function template, write a program to display the absolute value of a variable of type int, float, and double. | 10 |
| Q.5 | Handle exception (in C++) in case of buffer overflow while adding 10 integer values inside array and access the 11 th position which doesn't exist. | 10 |
| Q.6 | Explain the utility of XML. Make a XML document - club.xml - populate it with club category, member name, duration. | 10 |