

**DEPARTMENT OF BIOTECHNOLOGY & BIOCHEMICAL ENGINEERING**

**MODEL QUESTION PAPER**

**SUBJECT: COMPUTER PROGRAMMING IN C++**

**SCHEME: 13. 404**

**SEMESTER: 4**

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**SET OF QUESTIONS FOR 2 MARK EACH**

1. Distinguish between the while and do while loops
2. Discuss about conditional expression with an example.
3. Give the method to store data into an array.
4. Write codes to display the statement 'END OF THE PAGE'
5. Develop programming codes to reverse a string using C++
6. What is the relation between f and \*f.
7. Write a note on string functions.
8. Describe on friend function
9. Briefly discuss on dynamic memory
10. Give a note on inline function.

**(10 X 2 = 20 Mark)**

**SET OF QUESTIONS FOR 20 MARKS TO EACH SET**

**MODULE – I**

1. a) Write a program to input an expression of the form a # b and evaluate it. The symbol '#' is any one of the arithmetic operator. **(10 Mark)**  
b) Explain the types of operators in C++. **(10 Mark)**

OR

- a) Write a program to generate the electricity bill of a consumer as per the given conditions. If consumption is below 100, unit charge is Rs. 3/-; if consumption is below 200, the unit charge is Rs. 7/-; if consumption is greater than 200 and less than 300, the unit charge is Rs. 15/- and if consumption is more than 300 unit, print the comment as 'MEET A.Ex.E AT THE OFFICE'. **(10 Mark)**
- b) Discuss the applications of unary operators with examples. **(10 Mark)**

### MODULE – II

2. a) Develop a program to input the data of 'n' students such as name, register number and three marks and then obtain the total mark of each student. Also apply the concept of initialization of structure. **(10 Mark)**
- b) What are recursive functions? Develop a program to generate a Fibonacci series. **(10 Mark)**

OR

- a) Write a note on the template function. Develop program codes to sort a list of numbers in alphabetical order. **(10 Mark)**
- b) Explain about pointers. Construct a C++ program to exchange two values using pointers. **(10 Mark)**

### MODULE – III

3. Discuss about multiple inheritance. Write an object oriented program to apply the concept of multiple inheritance. **(20 Mark)**

OR

Explain the concept of *files* in C++. Write a program to read a passage from the file 'ordinance' and copy it to another file 'order'. **(20 Mark)**

## **MODULE – IV**

4. Write a program with linked list data structure **(20 Mark)**

OR

Develop a C++ program to represent the concept of stack and queues **(20 Mark)**