BACHELOR OF TECHNOLOGY (CBCS) (2021-COURSE)
B. Tech. Sem - III Computer Science & Business Systems : SUMMER : 2025
SUBJECT: OBJECT ORIENTED PROGRAMMING

Day : Thursday
Date : 15/05/2025

S-24144-2025

Time : 02:30 PM-05:30 PM
Max. Marks : 60

N.B.

1) All questions are **COMPULSORY**.
2) Figures to the **RIGHT** indicate **FULL** marks.
3) Assume suitable data **WHEREVER** necessary.
4) Draw neat diagrams **WHEREVER** necessary.

Q.1 Define structure. Explain syntax of structure declaration in C. Write a C program using structure to print record of 5 students. **(10)**

OR

Q.1 Explain concept of "file handling" in C programming. Explain the use of fopen ( ) and fclose ( ) functions associated with it. Also, mention various modes in which a file can be allowed to open. Explain with an example of each. **(10)**

Q.2 Write a note on function overloading. Write C++ program using function overloading to overload function add ( ), sub ( ), Mul ( ) etc. **(10)**

OR

Q.2 Differentiate between passing pointer by value and reference. Explain in detail with suitable example. **(10)**

Q.3 How member functions are defined in C++? Also, write applications of OOP in detail. **(10)**

OR

Q.3 Describe the applications of OOP in detail. **(10)**

Q.4 Write C++ program to demonstrate the use of try, catch block with the argument as an integer and string using multiple catch block. **(10)**

OR

Q.4 Describe the concept of friend function with the help of suitable example. Also, write the features of friend function. **(10)**

Q.5 How compile time polymorphism is achieved using operator overloading explain it with suitable example. **(10)**

OR

Q.5 How Run time polymorphism is achieved. Explain it with suitable example. **(10)**

Q.6 Define generic programming. How it is implemented in C++. Write program using class template. **(10)**

OR

Q.6 Draw use case, class, sequence and activity diagram for online shopping system. **(10)**

* * * *