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**SUBJECT CODE NO:- H-1128**  
**FACULTY OF SCIENCE AND TECHNOLOGY**  
**S.Y. B.Tech. (ETC) CBC & Grading System (Sem IV)**  
**Elective-I OOPS using C++**  
**[Revised]**

**[Time: Three Hours]****[Max.Marks: 80]**

N.B Please check whether you have got the right question paper.

- i) Question 1 & 6 are compulsory.  
 ii) Attempt any two from remaining both sections.

**Section A**

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|-----|--|----------|
| Q.1 | Attempt any FIVE.  | 10       |
|     | a. What are variables?<br>b. Feature of OOPS paradigm.<br>c. What is a class? Give example.<br>d. What is the use of Static?<br>e. Give example of Copy constructor.<br>f. Give 2 characteristics of destructor. |          |
| Q.2 | a. Demonstrate use of constructor using example.<br>b. Give example of basic structure of C++ program.   | 08<br>07 |
| Q.3 | a. Write C++ program to find if number is even or odd.<br>b. Compare POP & OOP paradigm.   | 08<br>07 |
| Q.4 | a. What are the feature of C++?<br>b. Give example of static variables and static functions.   | 08<br>07 |
| Q.5 | a. Demonstrate usage of friend function using example.<br>b. How to define destructor in C++ give example.   | 08<br>07 |

**Section B**

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|-----|---|----------|
| Q.6 | Attempt any FIVE  | 10       |
|     | a. Define inheritance<br>b. What are exceptions?<br>c. What are advantages of using pointers?<br>d. What is purpose of abstract class?<br>e. Define virtual functions.<br>f. Why do we do rethrowing of exceptions? |          |
| Q.7 | a. Write C++ program for method overloading.<br>b. What are the rules of creating virtual functions?  | 08<br>07 |

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|------|--|----|
| Q.8  | a. Demonstrate exception handling using C++ program.                       | 08 |
|      | b. What are the rules of operator overloading?                             | 07 |
| Q.9  | a. How to perform call by value & Call by reference. Explain with example. | 08 |
|      | b. Compare compile time & run time polymorphism.                           | 07 |
| Q.10 | a. Write program for single inheritance.                                   | 08 |
|      | b. How public & private inheritance different, Give example.               | 07 |

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