



**MARRI LAXMAN REDDY**  
**INSTITUTE OF TECHNOLOGY AND MANAGEMENT**

(AN AUTONOMOUS INSTITUTION)

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)

Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section 2(f) & 12(B) of the UGC act, 1956

II B.Tech I Sem Supplementary Examination, July-2022

**Object Oriented Programming using C++**

(CSE & IT)

**Time: 3 Hours.**

**Max. Marks: 70**

Note: 1. Answer any FIVE questions.

2. Each question carries 14 marks and may have a, b as sub questions.

- |   |   |     |     |     |
|---|---|-----|-----|-----|
| 1 | a) Discuss about the differences between Object Oriented Programming and procedural oriented programming. | 7M  | C01 | BL3 |
|   | b) Explain how dynamic memory allocation works in C++.  | 7M  | C01 | BL2 |
| 2 | Write about various Object Oriented Programming concepts?   | 14M | C01 | BL2 |
| 3 | a) What is class? Explain the structure of a class in C++.  | 7M  | C02 | BL1 |
|   | b) Write about constructor and destructors in C++.  | 7M  | C02 | BL2 |
| 4 | Discuss about the friend function and its advantages with suitable example in C++.                        | 14M | C02 | BL3 |
| 5 | a) Write about the use of constructors in base and derived classes.                                       | 7M  | C03 | BL2 |
|   | b) Explain the concept of virtual destructor in C++.  | 7M  | C03 | BL2 |
| 6 | What is virtual function? Write an example in C++ for virtual function.                                   | 14M | C03 | BL3 |
| 7 | a) Write about various IOS format functions with suitable examples.                                       | 7M  | C04 | BL2 |
|   | b) Explain how to handle errors during file operations.   | 7M  | C04 | BL3 |
| 8 | Write an example code in C++ to illustrate to catch all exceptions and rethrowing an exception.           | 14M | C05 | BL3 |