Reg. No. : | | | | | | | | | | | | | |

Question Paper Code : 424326

B.E./B.Tech. DEGREE EXAMINATIONS April / May 2025

Third Semester

Computer Science and Engineering

CS23312 — OBJECT ORIENTED PROGRAMMING

(Common to All Branches)

(Regulations 2023)

Time: Three Hours Maximum: 100 Marks

Answer ALL Questions

PART A — (10x2=20 Marks)

1. Define Polymorphism with an example
2. Outline a class template with data members and member functions.
3. Illustrate the need for exception handling. Give an example for finally keyword.
4. Define Package. How do you represent packages in C++?
5. Define Multithreading. Specify the different states of thread.
6. Illustrate some of the generic methods in generic programming.
7. Compare and contrast between TCP and UDP Protocols.
8. List the Driver packages in JDBC.
9. Illustrate the use of Model View Controller.
10. Build a program to illustrate any one of JAVA FX Components.

PART B — (5x13= 65 Marks)

11. (a) Explain function overloading and constructor overloading in C++ with an example.

Or

(b) Discuss about Multiple, Hierarchical and Multilevel inheritance in C++ with an example.

12. (a) Explain about string in C++. Illustrate string operations with example.

Or

(b) Illustrate about the reflection and inner classes in C++ with an example.

13. (a) Examine about generic code and virtual machine in C++

Or

(b) Explain the concept of synchronization in multithreading with suitable program.

14. (a) Build a program in java using socket programming where the Client keeps reading input from a user and sends it to the server until "Over" is typed.

Or

(b) Explain about how to create Remote Method Invocation client and server and how to invoke RMI Registry?

15. (a) Explain about swing event handling with examples.

Or

(b) Develop a Program using Java FX for listing of menu using menu button and split menu button

PART C — (1x15=15 Marks)

16. (a) (i) Develop an Interest interface which contains simple Interest and compound Interest methods and static final field of Rate 25%. Write a class to implement those methods. (8)

(ii) Write a Java program to implement transpose of a matrix. (7)

Or

(b) Explain the Exception handling with example.
