(For candidates admitted from 2015-2016 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2023.

Information Technology

OOAD AND UML

Time: Three hours Maximum: 100 marks

PART A —  $(10 \times 2 = 20)$ 

Answer ALL the questions.

- 1. What is encapsulation?
- 2. Write the disadvantage of OOD.
- 3. What is structural diagram?
- 4. Define attributes with an example.
- 5. What is the purpose of Use Case diagram?
- 6. What is actor?
- 7. Define Model-View-controlled (MVC) architecture.
- 8. What is business logic layer?

- 9. What is behavioural model?
- 10. Which UML diagram is commonly used to model the structure of a system's classes and their relationships?

PART B — 
$$(5 \times 7 = 35)$$

Answer ALL the questions.

11. (a) What is SADT and how is it used in systems analysis and design?

Or

- (b) Write about difference between Structured Analysis and Object-Oriented Analysis.
- 12. (a) Write about the Benefits of Object Oriented Methodologies.

Or

- (b) What is UML? Why do we really need UML?
- 13. (a) What are the stages of object oriented analysis?

Or

(b) What is an Attribute? Explain it.

14. (a) Explain about OO Design Axioms.

Or

- (b) Explain about Layered Technology in Software Engineering.
- 15. (a) What are different types of Behavioral UML diagram and what are they used for?

Or

(b) What are the different types of Structural UML diagrams and what are they used for.

PART C — 
$$(3 \times 15 = 45)$$

Answer any THREE questions.

- 16. What are the key phases of the OOSDLC and what are the key activities involved in each phase?
- 17. What are benefits of OO Methodology? Give overview of different OO Methodologies?
- 18. Explain about Object Oriented Analysis in detail.
- 19. Describe about Business-Logic layer.
- 20. Explain about Architectural model in detail.