



25804666

**QP CODE: 25804666**

**Reg No** : .....

**Name** : .....

**I.M.C.A DEGREE EXAMINATION, OCTOBER 2025**

**Fifth Semester**

Integrated MCA

**CORE - IMCA5C04 - OBJECT ORIENTED MODELING AND DESIGN**

2020 Admission Onwards

6E876DDD

Time: 3 Hours

Maximum: 75 Marks

**Part A**

*Answer any **ten** questions*

*Each question carries **3** marks*

1. How a model helps in developing a system?
2. The models are used to visualise the problem. Justify your answer.
3. Outline the concept of iterative development.
4. Define multiplicity in a relation.
5. Explain the purpose of tagged values.
6. What are the main components in an object diagram? Explain.
7. Define the term Role. How it is different from object?
8. Briefly describe the parts of a transition.
9. Explain simple and qualified artifact names.
10. Brief about the Deployment view.
11. With a Use Case diagram explain online train ticket booking.
12. With a Sequence diagram explain online train enquiry process.

(10×3=30 marks)





## Part B

Answer **all** questions

Each question carries **9** marks

13. a) Explain the features of object oriented modelling.

OR

b) With example explain the structural things in UML.

14. a) Briefly describe Stereotype, Tagged values and Constraints with example.

OR

b) Shows how interfaces are helpful in explaining the relationships with appropriate diagrams.

15. a) How Communication diagram helps in understanding the behaviour of a system? Justify your answer with an example.

OR

b) With example explain different states in a state machine diagram.

16. a) Explain the way ports and interfaces shown in a component.

OR

b) How the deployment diagram is used to explain the relationships with processors and devices?

17. a) Prepare Class diagram for ATM?

OR

b) In detail explain railway reservation using Activity diagram.

(5×9=45 marks)

