



K17P 0206

Reg. No. :

Name :

**Fifth Semester M.C.A. Degree (Regular) Examination, January 2017
(2014 Admission)**

MCA 5C24 : OBJECT ORIENTED MODELING AND DESIGN

Time : 3 Hours

Max. Marks : 80

- Instructions :** 1) Answer **any ten** questions from Part – A. Each question carries 3 marks.
2) Answer **all** questions from Part – B. Each question carries 10 marks.

PART – A

Note : Answer **any ten** questions. Each question carries 3 marks.

1. What is the relationship between abstraction, information hiding and encapsulation ?
2. Define object with an example.
3. What is a use case and Actor ?
4. Explain the generalization with the partial event hierarchy for keyboard events.
5. What is a package ?
6. Give the deployment diagram for hardware artifacts.
7. What do you mean by class cohesion ?
8. Give the design criteria governing interacting levels of encapsulation.
9. What do you mean by rings of operation ?
10. List the advantages of using the components.
11. Write a short note on principle of closed behavior.
12. Write a note on window-navigation diagrams. (10×3=30)

P.T.O.



PART - B

Answer **all** questions. **Each** question carries **10** marks.

13. a) With example, explain class hierarchy.

OR

b) Explain the message structure and the role of objects in messages.

14. a) What is aggregation and composition? Give their respective UML notations, with an example.

OR

b) What is an activity diagram? Explain the special constructs for activity models.

15. a) Explain the deployment diagram for software constructs.

OR

b) Explain architecture modeling with packages and deployment diagrams.

16. a) Write a note on :

- i) Principle of type conformance
- ii) Domains of object classes.

OR

b) Write a note on :

- i) Encumbrance
- ii) State space and behaviour of class.

17. a) Write a note on :

- i) Light weight and heavy weight components
- ii) Mix-in classes.

OR

b) Explain in detail, the various aspects of components.

(5x10=50)