



K19P 1362

Reg. No. :

Name :

V Semester Master of Computer Application (M.C.A.)/ (M.C.A.) Lateral Entry
Degree (Reg./Supple./Imp.) Examination, November - 2019
(2014 Admission Onwards)

MCA 5C24 : OBJECT ORIENTED MODELING AND DESIGN

Time : 3 Hours

Max. Marks : 80

SECTION - A

Answer any **ten** questions. Each question carries **three** marks.

(10×3=30)

1. Define object with example
2. Define encapsulation with example
3. Write a note on class hierarchy
4. Write a note on use case diagrams
5. What is an activity diagrams and list its uses
6. Explain how to depict a message in the collaboration diagram
7. What are deployment diagram for hardware artifacts explain
8. What are the uses of interface diagrams ,explain
9. Write a note on levels of encapsulation
10. Write a note on state-space of a subclass
11. Write a note on abuses of inheritance
12. Write a note on light weight and heavy weight component

P.T.O.

**SECTION B**

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

13. a) Explain message structure and the role of objects in messages (10)
(OR)
- b) i) Briefly explain the history of object orientation (5+5)
ii) Explain inheritance with example
14. a) Explain class diagrams and explain in detail generalization and association constructs in class diagrams with example. (10)
(OR)
- b) Explain basic state diagram and how to represent nested states , concurrent states and synchronization in state diagrams with example. (10)
15. a) Explain architecture modeling with packages and deployment diagrams (10)
(OR)
- b) Explain with a neat diagram depicting the human interface using the window-navigation diagram (10)
16. a) i) Explain domains on object classes with example. (5+5)
ii) What is encumbrance? And explain its uses.
(OR)
- b) Explain in detail the principles of type conformance with example. (10)
17. a) Explain various design techniques for organizing the attributes and operations of a class interface. (10)
(OR)
- b) i) What is a component ? Explain its internal design (5+5)
ii) What are the similarities and differences between components and objects explain.