Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 02

Total No. of Questions : 18

MCA (2015 & Onwards)   (Sem.–5)
OBJECT ORIENTED ANALYSIS & DESIGN WITH UML
Subject Code : MCA-504
M.Code : 74384

Time : 3 Hrs.   Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1.   SECTIONS-A, B, C & D contains TWO questions each carrying TEN marks each and students have to attempt any ONE question from each SECTION.

2.   SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.

SECTION-A

1.   What is Object Orientation? What are the benefits of object orientation? Also write a short note on object oriented modeling.

2.   Define and distinguish between :

     a. Class Modeling

     b. State Modeling

     c. Interaction Modeling

SECTION-B

3.   What is SRS document? Discuss the format and contents of SRS document.

4.   What are the main considerations of System Design? Discuss the use of design patterns. How is design optimization performed?

SECTION-C

5.   What are the basic building blocks of UML? What are the various types of UML diagrams drawn to handle static and dynamic component of software under development?

6.   What is an activity diagram? Explain how activity diagram focuses on flows driven by internal processing with the help of suitable example?

SECTION-D

7. Elaborate in detail the SA/SD methodology.

8. a) What are the difficulties and risks in use-case modeling and UI design?

   b) Briefly discuss the use of open source tools for UML design.

SECTION-E

Write short note on the following :

9. Define Aggregation.

10. Define generalization.

11. Define Responsibility.

12. What do you mean by object decomposition?

13. What do you mean by recursive aggregates?

14. What is an interface?

15. Which graphical constructs are used in object model, dynamic model and functional model?

16. What is the purpose of Hierarchy Graphs?

17. What is UML? Briefly discuss its purpose.

18. What is Reverse Engineering?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.