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

Total No. of Questions : 09

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 are the features of Object Oriented Design? How is it better than traditional design approach?

2. How is the Class Modeling technique different from State Modeling? Explain the concepts of Inheritance in classes.

SECTION-B

3. Which design patterns are considered while designing a System? How are these patterns incorporated in the design process?

4. What are the various SDLC models? What is the importance of software requirements phase in the models?

SECTION-C

5. How are activity diagrams different from Interaction diagrams? Describe with the help of an example.

6. What are the advantages of using UML? Which features of UML make it the best choice for OO designing?

SECTION-D

7. How are the following principles implemented in OO development style :

   a) Robustness

   b) Re-usability

   c) User friendly design

8.   What do you mean by Reverse Engineering? When and why is it used in OO design process?

SECTION-E

9.   **Write short notes on :**

a)   Structured Analysis

b)   Risks in Use-case model

c)   Benefits of Inheritance

d)   Class diagram and Object Diagram

e)   Information Modeling Notations

f)   Features of Plant UML

g)   Difference between Interaction diagram and Activity diagram

h)   Data Abstraction with example

i)   Domain Analysis

j)   Generalization and Aggregation

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.