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Total No. of Questions : 09

MCA (Sem.–5)
OBJECT ORIENTED ANALYSIS & DESIGN WITH UML
Subject Code : MCA-504
M.Code : 74384
Date of Examination : 19-12-22

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. a) Explain why object-oriented approach is preferable when compared to other approaches?

   b) What is the nature of Class and Object? How to identify Classes and Objects with suitable examples?

2. How does one properly identify the classes and objects that are relevant to a particular application? Explain.

SECTION-B

3. What is SRS? What is the importance of SRS in system design?

4. a) Why design patterns are used in Analysis and designing?

   b) What is refactoring and its importance?

SECTION-C

5. a) Explain forking and joining concepts in the activity diagram with an example,

   b) Differentiate between Aggregation and Generalization?

6. Consider modelling a student information system. Consider the use case "student registers for a course". Draw a sequence diagram and explain briefly.

SECTION-D

7. Briefly discusses the use of open source tools for UML design. Also, tell any five tools that you have used during this course.

8. What are the difficulties and risks involved in use-case modelling. Explain with an example.

SECTION-E

9. a) What is the difference between UML and OOAD?

b) Define Association and its usage.

c) What are packages, and how they are used?

d) Which Global resources are used in system design?

e) What is an interaction diagram?

f) Define Aggregation and how it is used in UML

g) Which graphical constructs are used in object model, dynamic model and functional model?

h) What do you mean by programming-in-the-large?

i) Discuss lmpact with an example.

j) Write a short note on ArgoUML.

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.