

Total number of printed pages—4

53 (CS 511) OOAD

2018

**OBJECT ORIENTED ANALYSIS AND
DESIGN**

Paper : CS 511

Full Marks : 100

Time : Three hours

***The figures in the margin indicate
full marks for the questions.***

PART-A

(Answer any ten questions)

10×3=30

1. Give the characteristics of Object Oriented System.
2. What is an object ? Give an example.
3. Give a note on patterns and its necessity.

Contd.

4. Mention the models in Object modelling techniques in Rumbaugh methodology and its role for describing the system.
5. List out the steps for finding the attributes of a class.
6. Give the hint to identify the attributes of a class.
7. For the schema employee (emp-id, emp-name, street, city), give the class representation along with the attribute types.
8. Compare Aggregation and Composition with a suitable example.
9. Write a short note on evolution history of UML.
10. Draw the (4+1) view model.
11. What is client/server computing ? Give *two* applications which work on this basis.

PART-B

(Answer **any seven** questions)

7×10=70

1. Explain the relationship that are possible among the classes in the UML representation with your example.

2. What are the various diagrams that are used in analysis and design steps ? Explain with your own example.
3. Explain the method of identifying the classes using the common class approach with an example.
4. Consider the Hospital management system application with the following requirements :
 - (a) System should handle the in-patient, out-patient information through receptionist.
 - (b) Doctors are allowed to view the patient history and give their prescription.
 - (c) There should be an information system to provide the required information.Give the use case, class and object diagram.
5. With a suitable example, explain how to design a class. Give all possible representation in a class (name, attribute, visibility, methods, responsibilities).
6. Give the use cases that can be used to generate the test cases for the Bank ATM application.

7. Draw a system sequence diagram to purchase books online. (use the admin, user, third party, bank etc. as actors).
 8. Draw and discuss (in short) the tree structure of UML diagrams used in static and dynamic behaviours.
 9. Compare package diagram and deployment diagram. Draw them using *at least one* suitable example.
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