**53 (CS 511) OOAD**

**2021**

# 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.***

*Answer **all** questions.*

1. Answer **any ten** questions :  6×10=60

    (i)  Describe an object-oriented design.

    (ii)  Define an UML with its usages.

    (iii)  What is the importance of modeling ?

    (iv)  What are the principles of modeling ?

    (v)  What is the relationship between sequence and communication diagrams ?

*(vi)* What is Software development life cycle ?

*(vii)* Explain the *five* meaningful metrics for building quality classes and objects.

*(viii)* What are the *four* kinds of things in building blocks of the UML ?

*(ix)* Describe the *four* types of relationship with graphical representation in building blocks of the UML.

*(x)* Define state and activity diagrams.

*(xi)* Describe a good system according to user's need and also the challenges for achieving a good system.

2. Answer *any five* questions :     8×5=40

   *(i)* Explain a conceptual model of UML with a diagram.

   *(ii)* Describe package and interface in the context of Object Oriented Design (OOD).

   *(iii)* Explain the compartments of UML with its representation of class diagram.

(iv) Explain use cases and actors for the car rental company with a diagram and also two types of packages.

(v) Explain the association relationship between two models with their types, also define association class with its graphical representation.

(vi) Describe inheritance in OOD with an example of bank account and inherited other bank accounts also.

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