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P.E.S. College of Engineering, Mandya - 571 401
(An Autonomous Institution affiliated to VTU, Belgaum)
Seventh Semester, B.E. - Computer Science and Engineering
Semester End Examination; Dec - 2016/Jan - 2017
Object Oriented Modeling Design

Time: 3 hrs   *Max. Marks: 100*

Note: Answer **FIVE** full questions, selecting **ONE** full question from each unit.

UNIT - I

1 a.	Explain the different stages of Object Oriented Methodology.	10
b.	Briefly discuss the three models to describe a system.	6
c.	Differentiate between Link and Association with example.	4
2 a.	Draw and explain a state diagram for telephone line.	10
b.	Explain the following with example;	
	i) Enumerations ii) Multiplicity	10
	iii) Scope iv) Visibility.	

UNIT - II

3 a.	Describe the steps performed in constructing domain state model.	10
b.	Explain the questions that must be answered by a good system concept.	10
4 a.	What is software development process? Mention the different stages of software development.	4
b.	With example, explain UML diagram.	6
c.	Explain sequence diagram with any two examples.	10

UNIT - III

5 a.	Explain the steps involved in constructing application interaction model.	10
b.	Draw an application class model diagram for ATM.	5
c.	How operations can be added in object oriented analysis?	5
6 a.	Explain the different concepts of Re-use plan for system design.	10
b.	Explain the different software control strategies.	10

UNIT - IV

7 a.	Explain the steps involved in designing algorithm.	10
b.	Explain the tasks involved in design optimization.	10
8 a.	Discuss the inputs and outputs for reverse engineering.	10
b.	Explain the following concepts related to implementation model,	
	i) Fine-tuning classes	10
	ii) Fine-tuning Generalizations.	

UNIT - V

9 a. What is a pattern? Briefly explain its propeties. Also mention three-port-schema of pattern. 10

  b. Explain the pattern discription template. 10

10 a. Explain the steps involved in client-dispatches-series implementation. 10

  b. Explain counted-pointer briefly. Also write the steps to implement counted pointer idiom. 10

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