U.S.N

P.E.S. College of Engineering, Mandya - 571 401
(An Autonomous Institution affiliated to VTU, Belagavi)
Sixth Semester, B.E. - Information Science and Engineering
Semester End Examination; May/ June - 2019
Object Oriented System Development

Time: 3 hrs   *Max. Marks: 100*

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

UNIT - I

1 a.	What is object orientation? Explain the stages involved in object oriented methodology.	12
b.	Describe the important characteristics of object orientation.	8
2 a.	Develop a class model for Hospital Management System.	10
b.	Draw and explain the general UML syntax for state diagram.	10

UNIT - II

3 a.	Explain the activity diagram with an illustration to show stock trade processing.	8
b.	Define state diagram and state model. Draw the state diagram for telephone line with its activities.	12
4 a.	What is sequence diagram? Draw a sequence diagram for a stock purchase using online stock broker system.	8
b.	Discuss the steps to construct Domain class model with an example.	12

UNIT - III

5 a.	Describe application analysis with an example of ATM banking system.	10
b.	Explain in detail, how a system is broken into subsystems?	10
6 a.	Draw a use case diagram of an ATM and explain each use case.	8
b.	Explain the various software control strategies that can be applied in system design.	12

UNIT - IV

7 a.	List and explain the steps involved in design of an algorithm.	12
b.	Write a brief note on organizing a class design.	8
8 a.	Explain two kinds of control flows in software.	12
b.	Explain the consideration for choosing alternative algorithms.	8

UNIT - V

9 a.	What is a pattern? Explain MVC with an example.	8
b.	Explain the structure and dynamics of Forwarder-Receiver design pattern.	12
10 a.	Give an example design patterns for management of software system. Explain briefly.	10
b.	Describe various metrics for software maintenance.	10

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