15SE203- OBJECT ORIENTED ANALYSIS AND DESIGN

CYCLE TEST-I

Year/Sem: II/IV   **Date:01-03-2017**

Duration: 100 Minutes   **Max Marks: 50**

Register Number

R	A	1	5	1	1	0	0	8	0	1	0			

Instructional Objectives

O1. Understand the fundamental principles of object oriented analysis and design.

O2. Apply the object oriented paradigm and visual modeling using UML approach.

Student Outcomes

Outcome c. An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs

    I.   ability to integrate prior knowledge into a new problem
    II.   ability to recognize practical significance of design outcome/answer

Mark Allotment

Question No	Objective	Outcome	Marks Scored	Outcome Total	Outcome Met/Not
1	O1	c.i.			
2	O1	c.i.			
3	O1	c.i.			
4	O2	c.ii.			
5	O2	c.ii.		c(25)	
6	O2	c.ii.			
7	O1	c.i.			
8	O1	c.i.			
9	O2	c.ii.			
10	O2	c.ii.			
Total Marks					

Outcomes	
MET	**NOT MET**

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Part-B (Answer any five- 4 Marks Each)

1. What is Software Crisis? Give examples to justify the answer.
2. What are non-functional requirement's in project? Mention any two of its type.
3. Compare and contrast Algorithm Vs. Object Oriented Decomposition.
4. What is Use Case Modeling? Where it's used?
5. Give examples of Model, View and Notation in UML Approach.
6. Describe in detail the pre-condition and post-conduction for use case.

Part-C (30 marks)

7. What is Object Model? Explain the four major object oriented principles/element's giving suitable example for each type. (15 Marks)

(Or)

8. A. What are the three common types of operation while designing class? Justify with examples. (8 Marks)

    B. Compare and contrast links and aggregation among Object's. (7 Marks)

9. Briefly explain about reverse engineering and code generation in class diagram. Justify by giving suitable diagram and necessary code snippet. (15 Marks)

(Or)

10. Customer can browse through the product catalogue and add the items to shopping cart. He can proceed to checkout as long as his shopping cart is not empty. Customer will require to login to the system when he proceed to checkout, or he can create an account if he not yet have one. The order will charge to the credit card registered in customers account. Customer need to provides full name, email address, phone number, credit card and billing address details when creating an account. Customer can login to the system to maintain his account information, such as changing phone number, address, and credit card details, and check the status of his orders. On order received, the sales staff will process the order by charge to customer's credit card. Once the order has been charged, he will then mark the order as paid and pass to Courier Company and deliver them to customer. The items customer ordered is out of stock, and then the order will mark as on hold. Once the item arrived, the order will pass to Courier Company for delivery. Courier Company will pack the item with standard packaging, but if the order is marked as gift, then the items will pack as gift. The items arrived with damage; customer can return it by register in the online shop. Courier Company will collect the item from customer and sales staff will refund the money for that item. The marketing staffs responsible to maintain the product catalogue, they can also setup the promotion item and send email to customer.

Identify class, attribute and method for the problem statement given above. Construct class diagram with all necessary relationship. (15 Marks)