



II SEMESTER M.TECH. COMPUTER SCIENCE & ENGG.
END SEMESTER EXAMINATIONS, APR/MAY 2019
SUBJECT : OBJECT ORIENTED SYSTEM DESIGN(CSE 5202)
REVISED CREDIT SYSTEM
DATE: 26-04-2019

TIME:03 HOURS

MAX.MARKS : 50

Instructions to Candidates:

- Answer **ALL** questions.
- Missing data, if any, may be suitably assumed.

www.artjewellery.com is an e-commerce jewellery shop. The shop offers variety of jewelleries made out of silver, gold or diamond. The type of jewellery include ring, bracelet, bangle, chain, earring, necklace, anklet. The shop also offers silver, gold bars and coins. Customers need to enter their details namely email address, name, phone number, shipping address. Customers can add items to the shopping cart and do the payment. After customer selects item, a check will be made about the availability of item. If the item is available, then customer can do the payment. Customers can track the order through the website. Payment on delivery is not available. The site offers search based on type of jewellery, value of jewellery, make of jewellery and style of jewellery(modern, antique). If a particular jewellery stock goes below a certain limit, then a message has to be sent to the shop owner. Shop owners and top-level managers should be able to see total transactions during a particular period and quantity of items transacted and customers details.

1A. Explain the following types of Information Systems.

3M

- Transaction Processing System
- Management Information System
- Executive Information System
- Decision Support System

1B. Explain the following Unified Process disciplines.

3M

- i. Project Management
 - ii. Configuration and Change Management
 - iii. Environment
- 1C. Write the domain model class diagram for the online jewellery shop system. 4M
 - 2A. Explain the techniques for developing Work Breakdown Structure(WBS). 3M
 - 2B. Draw an activity diagram for a customer transaction through the online jewellery system. 3M
 - 2C. Write the use case diagrams for the online jewellery system. 4M
 - 3A. Write the System Sequence Diagram for customer transaction in online jewellery system. 3M
 - 3B. Draw the statechart diagram for an Order in the online jewellery system. 3M
 - 3C. Explain with examples singleton and adapter design patterns. 4M
 - 4A. List and explain the reasons for a project's failure. 2M
 - 4B. Explain designing enterprise-level systems. Also, draw the three layer internet architecture using appropriate symbols. 4M
 - 4C. Write the Object Definition Language for any four classes in the online jewellery shop. 4M
 - 5A. List and explain the User Interface Design rules. 4M
 - 5B. Write a C program for reading three integers. Find the greatest of 3 integers and display it. Write the Control Flow Graph for the program. 4M
 - 5C. Explain Smoke testing. Also, mention the steps involved in it. 2M

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