

T.E Sem V (Computer) CBCS 712/2015
Structured and Object Oriented
Analysis & Design
(SOOAD)

QP Code : 5693

1. Question No.1 is Compulsory.
2. Answer any three from the remaining questions.
3. Assume suitable data wherever necessary

Time : 3 Hrs

Max Marks . 80

- 1: A) Compare Object Oriented and Structured Analysis.
B) What are the architectural relationships that can be shown in a class diagram? Give clear distinctions between them.
C) Explain the checklist to be considered for validating the requirements gathered.
D) What is the role of a System Analyst? (4X5 =20)
2. a) A local bank requires a system where customers may open accounts and perform the usual transactions on these account (Credit, debit and obtain the current balance) through a mobile app. The bank is also required to provide the government the value of its total assets. Write a system proposal for the same. (10)
b) Construct the sequence diagram and corresponding collaboration diagram for the use-case "Determine total Bank Assets". (10)
3. a) Write the steps for processing and enclosing Requirements, Environment and Implementation alternatives. (10)
b) Explain with an example, how use case modeling is used to describe functional requirements. Identify the actors, scenario and use cases for the example. (10)
4. a) Draw three levels of DFD for a Supermarket App : (10)

A Customer can Build Shopping List by providing Items details and the details will be stored in the Shopping Cart database. The Warehouse database will also provide the Items details required to complete the process. A Customer can receive Shopping list details from the View Shopping List process and such details is provided by the Shopping Cart database. A Customer can receive Items details by performing the Search Items process. Customer provides an Item name for searching and the item details are returned from the Warehouse database after searched.

b) What are the general principles of UI design? Develop the Interface design elements for the Supermarket App given above. (10)

- 5 a) Explain the representation of Zachman Framework for an Enterprise. (10)
- (b) Consider the Hospital Management System application with the following requirements:
- (i) System should handle the In-patient, out-patient information through receptionist.
 - (ii) Doctors are allowed to view the patient history and give their prescription.
 - (iii) There should be a information system to provide the required information.
- Give the state chart, component and deployment diagrams. (10)
6. a) What is a deployment diagram? Draw the deployment diagram for the shopping cart application selecting a suitable architecture for the same. (10)
- b) Write a note on : Modeling Application Architecture for a web based Information System (10)