

Seat No.: \_\_\_\_\_

Enrolment No.: \_\_\_\_\_

# C U SHAH UNIVERSITY

Faculty of Technology and Engineering

B.TECH- EXAM May-2015

**Subject Code: 4TE03SAD1**

**Date: 26/05/2015**

**Subject Name: System Analysis and Design**

**Time: 2:30 pm to 5:30 pm**

**Total Marks: 70**

**Instructions:**

1. Make suitable assumptions whenever necessary.
2. Figures to the right indicate full marks.
3. Question one and four are compulsory.

## SECTION-I

Q – 1)	a)	What is System? Explain Open and Closed System	02
	b)	Differentiate Formal and Informal Information System.	02
	c)	What is Dataflow Analysis? It answers which four Questions?	02
	d)	What is Feasibility Study?	01
Q – 2)	a)	List and Explain Characteristics of System.	05
	b)	What is DFD? Explain Rules for Leveling of DFD.	05
	c)	Differentiate Followings- (1) Direct and Indirect Cost (2) Tangible & Intangible Benefit.	04
<b>OR</b>			
Q – 2)	a)	Explain the Basic Elements to be considered for designing a Perfect System.	05
	b)	What are the Advantages of SSADM?	05
	c)	Explain knowledge and qualities required to become an Analyst.	04
Q – 3)	a)	Explain SDLC in detail with suitable figure.	05
	b)	Draw Usecase diagram for Hospital Management System	05
	c)	Draw Context Diagram for College Management System.	04
<b>OR</b>			
Q – 3)	a)	What is FACT FINDING techniques? Explain All types of it.	05
	b)	Draw Usecase diagram for Airline Ticket Reservation System.	05
	c)	Draw DFD Level-0 for Mess Management System.	04

## SECTION-II

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|--------|--|----|
| Q – 4) | a) What is “BLACK BOX” testing?                                  | 02 |
|        | b) Explain four Objectives of OUTPUT design.                     | 02 |
|        | c) Explain Peak Load Testing.                                    | 02 |
|        | d) What is SCENARIO?   | 01 |
|        |  |    |
| Q – 5) | a) Draw Sequence Diagram for Telephone Landline System.          | 05 |
|        | b) Objective of INPUT design in detail.                          | 05 |
|        | c) Explain Use of LAYOUT & CAPTION in interactive screen design. | 04 |

OR

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|--------|---|----|
| Q – 5) | a) Draw State Diagram for Internet Browser.   | 05 |
|        | b) Explain Verification and Validation.   | 05 |
|        | c) Explain any Four types of testing.   | 04 |
|        |   |    |
| Q – 6) | a) What is Decision Tree? Draw for Following Sentence-<br>" A Company Might Give Discount Amount On Three Different Values For Condition On Size Of Order, Over 10,000 ~4%, In Between 5000-10,000 ~3%, Below 5000 Only 2%, AND the payment must be done within 10 days". | 05 |
|        | b) Draw Activity Diagram for (ISSUE-RETURN Books) for Library Management System.  | 05 |
|        | c) What is DD? Explain Importance of Data Dictionary.   | 04 |

OR

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|--------|--|----|
| Q – 6) | a) Draw Class Diagram For Hotel Management System.   | 05 |
|        | b) What is Decision Table? Draw Decision Table for-<br>“ Give a Discount of 5% if the Customer pays in advance or if the purchase is for Rs. 10,000 or more and customer is regular customer.” | 05 |
|        | c) Write Structure English for given Sentence-<br>“ Give a Discount of 5% if the Customer pays in advance or if the purchase is for Rs. 10,000 or more and customer is regular customer.”      | 04 |