Enrollment No: _____   Exam Seat No:_____

C.U.SHAH UNIVERSITY
Winter Examination-2018

Subject Name : System Analysis and Design & Unified Modeling Language

Subject Code : 4TE04SAD1   **Branch : B.Tech (CE)**

Semester :4   Date : 29/10/2018   Time : 10:30 To 01:30   Marks : 70

Instructions:
   (1) Use of Programmable calculator & any other electronic instrument is prohibited.
   (2) Instructions written on main answer book are strictly to be obeyed.
   (3) Draw neat diagrams and figures (if necessary) at right places.
   (4) Assume suitable data if needed.

Q-1   **Attempt the following all questions:**   **(14)**

   a)   What is System Boundary?   1
   b)   What is logical DFD?   1
   c)   _____ System is isolated from environmental influence. In reality, a   1
            completely such system is rare.
   d)   Analyst should be an intelligent salesperson. True or False?   1
   e)   What is SSADM?   1
   f)   What is Black Box testing?   1
   g)   Write an equation for Return of Investment.   1
   h)   _____ is combination of English language and structured programming.   1
            And therefore this level tool provides environment for representing program logic
            with the natural English language.
   i)   What is gray-box testing?   1
   j)   _____ is important because SAD says "Equipment do not cry but people   1
            do."
   k)   What is Regression Testing?   1
   l)   Draw UML Notation for OBJECT, CLASS, Link, Association   1
   m)   What is Feasibility Study?   1
   n)   What is Data Dictionary?   1

Attempt any four questions from Q-2 to Q-8

Q-2   **Attempt all questions**   **(14)**
   a)   Explain Open and Close System.   **7**
   b)   Discuss the Basic Elements to be considered for designing a Perfect System.   **7**

Q-3   **Attempt all questions**   **(14)**
   a)   Differentiate between Formal System and Informal System.   **4**

b)		Analyst is called an Agent of Change. Why?	**4**
c)		List and explain Characteristics of System.	**6**

Q-4		**Attempt all questions**	**(14)**
	a)	Write a detailed note on : SDLC.	**4**
	b)	What is System? From where the word 'System' derived? Write a short note on 'System'.	**4**
	c)	Draw Class Diagram for College Management System.	**6**

Q-5		**Attempt all questions**	**(14)**
	a)	Explain knowledge and qualities required to become an Analyst.	**7**
	b)	Draw Sequence Diagram for Telephone Landline.	**7**

Q-6		**Attempt all questions**	**(14)**
	a)	What are Fact Finding techniques? Explain its all types.	**7**
	b)	Draw Activity Diagram for ATM machine.	**7**

Q-7		**Attempt all questions**	**(14)**
	a)	Differentiate Followings- (1) Direct and Indirect Cost (2) Tangible and Intangible Benefit.	**4**
	b)	Explain Verification and Validation.	**4**
	c)	Draw Use case diagram for Hospital Management System.	**6**

Q-8		**Attempt all questions**	**(14)**
	a)	Explain any Four types of Testing.	**4**
	b)	Draw state Diagram for Chess.	**4**
	c)	What is Decision Table? Draw Decision Table for-"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."	**6**