C.U.SHAH UNIVERSITY
Summer Examination-2019

Subject Name: System Analysis and Design & Unified Modelling Language

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

Semester: 4   **Date: 24/04/2019**   **Time: 02:30 To 05:30**   **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 questions: **(14)**
  1. Define System.
  2. Define Decision Tree.
  3. Define Metadata.
  4. List various diagram used in Structural Modeling.
  5. Define Software Testing,
  6. Sequence Diagram is time oriented. True or False.
  7. Give Full form of following.
     1. UML 2. DFD
  8. Define Data Dictionary.
  9. Define pseudo code.
  10. Draw symbol of actor and use case for Use Case Diagram.
  11. Define Maintenance. .
  12. Define Beta Testing.
  13. What is cost benefit analysis?
  14. Define object.

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

Q-2   Attempt all questions
  a) Explain Elements of a System.   **(7)**
  b) Write short note of Feasibility Study.   **(7)**
Q-3   Attempt all questions
  a) Explain System Survey.   **(7)**
  b) Explain Decision Table with the use of example.   **(7)**
Q-4   Attempt all questions
  a) Design Context diagram for Hospital Management System.   **(7)**

	b)	List & Explain all Phases of SDLC.	**(7)**
Q-5		**Attempt all questions**	
	a)	Explain different Fact Finding Techniques.	**(7)**
	b)	Explain Following.	**(7)**
		1. Verification and Validation	
		2. Open and Closed System.	
Q-6		**Attempt all questions**	
	a)	Explain White box and Black box testing.	**(7)**
	b)	Prepare Graphical User Interface (GUI) design for Registration and Sign-in page with its constraints.	**(7)**
Q-7		**Attempt all questions**	
	a)	Explain Activity diagram with its symbols and suitable example.	**(7)**
	b)	Explain INCLUDE, EXTENDS and GENERALIZATION in USECASE diagram.	**(7)**
Q-8		**Attempt all questions**	
	a)	Explain State diagram with suitable example.	**(7)**
	b)	Explain Inception, Elaboration, Construction, and Transition with respect to UML.	**(7)**