C. U. SHAH UNIVERSITY
Summer Examination-2022

Subject Name : System Analysis and Design and Unified Modeling Language

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

Semester: 4   **Date: 06/05/2022**   **Time: 11:00 To 02:00**   **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)**
	a)	Define Beta Testing.	(01)
	b)	Define Software Testing.	(01)
	c)	Define the term intangible benefit.	(01)
	d)	What is regression testing?	(01)
	e)	Difference between fork and join?	(01)
	f)	What do you mean by pseudo code?	(01)
	g)	What is System Boundary?	(01)
	h)	How flow chart different than activity diagram?	(01)
	i)	What is observation?	(01)
	j)	What is the difference between validation and verification?	(01)
	k)	What is the difference between data, information and knowledge?	(01)
	l)	What do you mean by swim lane diagram?	(01)
	m)	What is Feasibility Study?	(01)
	n)	List various roles are played by system analyst.	(01)

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

Q-2		**Attempt all questions**	**(14)**
	(a)	List and explain all Phases of SDLC.	(07)
	(b)	Discuss in detail Structured Design in SSADM.	(07)
Q-3		**Attempt all questions**	**(14)**
	(a)	Write a note of Feasibility Study.	(07)
	(b)	Design Context diagram for Employee Management System.	(07)
Q-4		**Attempt all questions**	**(14)**
	(a)	Explain Inception, Elaboration, Construction, and Transition with respect to UML.	(07)
	(b)	What is DFD? Explain various rules for leveling of Data Flow Diagram with example.	(07)

Q-5		**Attempt all questions**	(14)
	(a)	Draw level-0 and level-1 diagram for food ordering system.	(07)
	(b)	What is Requirements Determination? Explain major activities related with Requirements Determination.	(07)

Q-6		**Attempt all questions**	(14)
	(a)	Draw Use Case diagram for online auction system.	(07)
	(b)	Explain decision table with suitable example.	(07)

Q-7		**Attempt all questions**	(14)
	(a)	What do you mean by fact gathering? Explain Interviewing, Questionnaires and Observations.	(07)
	(b)	Explain elements of a System.	(07)

Q-8		**Attempt all questions**	(14)
	(a)	Explain following with suitable example (1) Verification and Validation. (2) Alpha Testing and Beta testing.	(07)
	(b)	Explain objectives and design principles of input and output design.	(07)