

Enrollment No: \_\_\_\_\_

Exam Seat No: \_\_\_\_\_

# C.U.SHAH UNIVERSITY

## Summer Examination-2017

**Subject Name : System Analysis and Design & Unified Modeling Language**

**Subject Code : 4TE04SAD1**

**Branch: B.Tech (CE,IT)**

**Semester : 4**

**Date : 11/05/2017**

**Time : 02:00 To 05:00**

**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.
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**Q-1**

**Attempt the following questions:**

- |                                                                                |      |
|--------------------------------------------------------------------------------|------|
| (a) List various characteristics of system.                                    | (01) |
| (b) What is Cost Benefit Analysis?                                             | (01) |
| (c) What is system evaluation?                                                 | (01) |
| (d) What do you mean by maintenance in Software Development Life Cycle (SDLC)? | (01) |
| (e) Give the basic difference of Data and Information.                         | (01) |
| (f) Define the term intangible benefit.                                        | (01) |
| (g) What is Structured Analysis?                                               | (01) |
| (h) What is regression testing?                                                | (01) |
| (i) What do you mean by relationship in class diagram?                         | (01) |
| (j) Why we use fork and join in activity diagram?                              | (01) |
| (k) List various structured diagrams of Unified Modeling Language (UML).       | (01) |
| (l) What is white box testing?                                                 | (01) |
| (m) Define the term informal system.                                           | (01) |
| (n) What do you mean by decision tree?                                         | (01) |

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

**Q-2**

**Attempt all questions**

- |                                                                           |      |
|---------------------------------------------------------------------------|------|
| (a) Write a detailed note on System analyst with various characteristics. | (07) |
| (b) What is UML? Explain UML with its various model.                      | (07) |

**Q-3**

**Attempt all questions**

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|---------------------------------------------------------------------------------------------------------------------|------|
| (a) Explain different types of Information system.                                                                  | (07) |
| (b) Explain following with suitable example<br>(1) Verification and Validation. (2) Alpha Testing and Beta testing. | (07) |

**Q-4**

**Attempt all questions**

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|---------------------------------------------------------------------------------------|------|
| (a) Explain Feasibility study with its types. Discuss the needs of Feasibility study. | (07) |
| (b) Draw Sequence diagram and State diagram for Online examination system.            | (07) |



- Q-5**                    **Attempt all questions**
- (a) (1) Explain Association & Specialization in Class Diagram.                    (07)  
(2) Give the differences between End user and Customer.
- (b) What is DFD? Explain various rules for leveling of Data Flow Diagram with example.                    (07)
- Q-6**                    **Attempt all questions**
- (a) Explain different Fact Finding Techniques.                    (07)
- (b) Explain objectives of Input Design. Prepare Graphical User Interface (GUI) design for E-mail Service Registration and Sign-in page with its constraints.                    (07)
- Q-7**                    **Attempt all questions**
- (a) Discuss in detail Structured Design in SSADM.                    (07)
- (b) What is Decision table? Explain it with suitable example.                    (07)
- Q-8**                    **Attempt all questions**
- (a) Explain Include and Extends & Generalization in Use case diagram with example.                    (07)
- (b) Explain Importance of Layout & Caption in design of system.                    (07)

