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BCACAC 266

**Credit Based Fourth Semester B.C.A. Degree Examination, September 2022
(Common to all Batches)**

SYSTEM ANALYSIS AND DESIGN (Elective – I)

Time : 3 Hours

Max. Marks : 80

Note : Answer **any ten** questions from Part – **A** and **one full** question from **each** Unit in Part – **B**.

PART – A

(10×2=20)

1. a) What is prototyping ?
- b) List any two roles of System Analyst.
- c) What is business process re-engineering ?
- d) List different types of data flow diagrams.
- e) What is the difference between open and closed ended questions ?
- f) Define context diagram.
- g) What is normalization ?
- h) What is conceptual data model ?
- i) List any four deliverables of logic modeling.
- j) Differentiate forms and reports.
- k) What is an interface ? Give example.
- l) What is integration testing and system testing ?

PART – B

Unit – I

2. a) What is a System ? Explain its parts.
- b) Explain preliminary investigation phase of SDLC.
- c) Explain the features of transaction processing system. **(5+5+5)**
3. a) Explain the interpersonal skills of system analyst.
- b) What is Management Information System ? Explain its features.
- c) Explain System analysis phase of SDLC. **(5+5+5)**

P.T.O.

**Unit – II**

4. a) Explain the major interview guidelines.
b) What are CASE tools ? How can CASE tools be used to support requirement determination ?
c) What is JAD ? What are its merits and demerits ? **(5+5+5)**
5. a) Explain any two traditional methods of collecting information system requirements.
b) List and explain the phases of planning game.
c) Explain the agile usage-centered design technique for requirement determination. **(5+5+5)**

Unit – III

6. a) What is decision table ? Explain with an example logic modeling using decision table.
b) What is Structured English ? Explain logic modeling using structured English.
c) What are the guidelines of displaying the tables and lists ? **(5+5+5)**
7. a) What is E-R model ? Explain relationships of different degrees in E-R model with example.
b) What are the guidelines for drawing Data Flow Diagrams ?
c) What are the deliverables and outcomes of process modeling ? **(5+5+5)**

Unit – IV

8. a) List and explain different methods of interacting with a system.
b) Explain different types of validation tests.
c) What are the roles of database administrator ? **(5+5+5)**
9. a) Explain different steps in programming.
b) State the guidelines for menu design.
c) What is a process design ? Illustrate grouping process with example. **(5+5+5)**
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