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**BCACAC 266** 

# Credit Based Fourth Semester B.C.A. Degree Examination, April/May 2018 (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 of Part – **B**.

## PART - A

1. a) Define open system and closed system.

 $(10 \times 2 = 20)$ 

- b) List any two roles of system analyst.
- c) List major plan documents.
- d) What is the difference between open and closed ended questions?
- e) What are disruptive technologies?
- f) Who is a Scribe?
- g) List any four deliverables of logic modeling.
- h) What is meant by binary relationship? Give an example.
- i) Define conceptual data model.
- j) Differentiate form and reports.
- k) What is an interface? Give example.
- I) What is integration testing and system testing?

PART – B UNIT – I

- 2. a) What is system analysis and design? Explain preliminary investigation phase of SDLC.
  - b) What is management information system? Explain its features.
  - c) Explain the following system concepts:
    - i) Decomposition

ii) Modularity.

(6+5+4)

- Who is a system analyst? Explain the technical skills required for an ideal system analyst.
  - b) What is transaction processing system? Explain its features.
  - c) Explain the following system concepts:

i) Coupling

ii) Cohesion.

(6+5+4)

#### UNIT - II

- a) Explain any two traditional methods of collecting information system requirements.
  - b) Explain major interview guidelines.
  - c) List and explain the phases of planning game.

(5+5+5)

- 5. a) Explain joint application design technique in information gathering.
  - b) List and explain different types of documents analysed for requirement determination.
  - c) Write a short note on:

i) Prototypes

ii) CASE tools.

(5+5+5)

# UNIT - III

- 6. a) Explain the guidelines for drawing data flow diagrams.
  - b) What is decision tree? Explain logic modeling using decision trees with example.
  - c) Explain the guidelines for displaying tables and lists.

(5+5+5)

- 7. a) What is Structured English? Explain logic modeling using Structured English.
  - b) What is E-R model? Explain relationships of different degrees in an E-R Model with example.
  - c) Describe the deliverables and outcomes from process modeling.

(5+5+5)

## UNIT - IV

- 8. a) List and explain different methods of interacting with the system.
  - b) Explain different types of validation tests.
  - c) What is process design? Illustrate grouping processes with example. (5+5+5)
- 9. a) What is programming? What are the five steps in accomplishing it?
  - b) State the guidelines for menu design.
  - c) Explain the significances of normalization concept in database design. (5+5+5)