Reg. No. ☐☐☐☐☐☐☐☐

BCACAC 266

Credit Based Fourth Semester B.C.A. Degree Examination, April/May 2017
(New Syllabus – 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**.
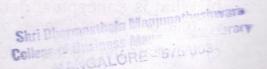
PART – A

(10×2=20)

1. a) Define a system ? Give an example.

   b) Who is a system analyst ?

   c) What is business process re-engineering ?

   d) Which are the two sub-phases of system analysis phase ?

   e) List the different types of data flow diagrams.

   f) What is process modelling ?

   g) Define context diagram.

   h) List any four deliverables of logic modelling.

   i) Define referential integrity.

   j) Differentiate Forms and Reports.

   k) What is unit testing and integration testing ?

   l) Define functional dependency.

PART – B

Unit – I

2. a) Explain Preliminary Investigation phase of SDLC.

   b) Explain interpersonal skills for system analysts.

   c) Describe the functions and activities of managers of an information system
      department.

                                                                      (5+5+5)

3. a) Explain the features of transaction processing system.

   b) Describe the technical skills for system analysts.

   c) What is prototyping ? What are its advantages ? How a prototype can be developed ? **(5+5+5)**

Unit – II

4. a) What is JAD ? What are its merits and limitations ?

   b) What are CASE tools ? How can CASE tools be used to support requirements determination ?

   c) What is 'Planning Game' in extreme programming ? How requirements are determined in this methodology ? **(5+5+5)**

5. a) What are the major interview guidelines ?

   b) Explain Agile Usage-Centered Design technique for requirement determination.

   c) Explain the Nominal Group Technique for determining the requirements. **(5+5+5)**

Unit – III

6. a) What is a decision table ? What are the set of basic procedures we have to follow in constructing decision tables ?

   b) What is conceptual data modelling ? With suitable examples explain relationships of different degrees in an E-R model.

   c) What are the guidelines for displaying tables and lists ? **(5+5+5)**

7. a) What is the purpose of process modelling ? What are the deliverables and outcomes of process modelling ?

   b) What is Structured English ? Explain logic modelling using Structured English.

   c) Explain the guidelines for drawing data flow diagrams. **(5+5+5)**

Unit – IV

8. a) Explain process design and its importance.

   b) Explain the different types of validation tests.

   c) What is programming ? Explain the five steps in accomplishing it. **(5+5+5)**

9. a) Who is database administrator ? What are the roles of a database administrator ?

   b) List and explain the different methods of interacting with the system.

   c) What are the guidelines for conducting a Code Walkthrough ? **(5+5+5)**

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