

Roll No.

Total Pages : 3

311204

May 2023

BCA IInd Semester

Structured System Analysis and Design (BCA-17-109)

Time : 3 Hours]

Max. Marks : 75

Instructions :

1. *It is compulsory to answer all the questions (1.5 marks each) of Part-A in short.*
2. *Answer any four questions from Part-B in detail.*
3. *Different sub-parts of a question are to be attempted adjacent to each other.*

PART-A

1. (a) Differentiate between technical feasibility & operational feasibility of a project. (1.5)
- (b) List any *two* common errors that are made while drawing data flow diagrams. (1.5)
- (c) Why do we need to design software architecture? (1.5)
- (d) What is the purpose of system testing? (1.5)
- (e) What is the significance of data dictionary? (1.5)

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- (f) What is decision tree? (1.5)
- (g) What is fact analysis? (1.5)
- (h) What do you mean by prototyping? What is its need? (1.5)
- (i) What is structured walkthrough? (1.5)
- (j) What are the contents of a test plan? (1.5)

PART-B

- 2. (a) What is system? Explain characteristics and types of system. (6)
- (b) Explain System development life-cycle (SDLC) in detail. (9)
- 3. (a) What are the benefits of performing feasibility study? Discuss various techniques for gathering requirements for the system development. (9)
- (b) Write an explanatory note on Gantt's Charts. (6)
- 4. (a) Draw a labelled DFD for Library Management System. (9)
- (b) List and explain at least six considerations for the input design. (6)
- 5. (a) What are the different methodologies of system design? What do you understand by coupling and cohesion? (9)

(b) Give steps in form design. Explain at least five common GUI controls for inputs. (6)

6. (a) Define the term Quality Assurance. Discuss its importance in system design. Also list and briefly describe the factors that affect the quality of a system. (9)

(b) Define System maintenance. Explain its types. (6)

7. (a) What do you mean by Cost- benefit analysis, Illustrate cost-benefit analysis with an example. (9)

(b) What are various types of system testing? Explain in brief. (6)
