

December 2023

BBA (GEN) 6th Semester

**System Analysis and Design (BBA-GEN-602)**

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**

- Q1 (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)
- (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**

- Q2 (a) What is system? Explain characteristics and types of system. (6)
- (b) Explain system development life cycle (SDLC) in detail. (9)
- Q3 (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 Charts. (6)
- Q4 (a) Draw a labelled DFD for University result Management System. (9)
- (b) How logical design of a system is mapped to the physical design of system? (6)
- Q5 (a) What is distributed data processing? Explain in detail how will you design a distributed data base? (9)
- (b) Write an explanatory note on state transition diagrams in detail. (6)

- Q6 (a) Construct an E-R diagram for a hospital with a set of patients and a set of medical doctors. Associate with each patient a log of the various tests and examinations conducted. (9)
- (b) Discuss in detail the role of a system analyst in design of a system. (6)
- Q7 (a) What do you mean by cost-benefit analysis in system design? Illustrate cost-benefit analysis with an example. (9)
- (b) Discuss in detail event based real time analysis tools. (6)