"Do not write anything on question-paper except Roll Number, otherwise it shall be deemed as an act of indulging in unfair means and action shall be taken as per rules."

Roll No. .....

B.C.A. (III)

1735 **Sys. Anal. and Desi.**

B.C.A. Part-III EXAMINATION - 2022

Paper - V

BCA 305 - System Analysis and Design

Time Allowed : **Three** Hours

Maximum Marks : **80**

Note : 1. Question No. 1 is Compulsory. Attempt any four from the remaining questions.

2. All questions carry equal marks.

1. (i) Differentiate between technical and operational feasibility of a project.

(ii) Give one example each for strategic and operational decisions.

(iii) What is the purpose of Gantt Chart?

P.T.O.

(iv) What do you mean by quality assurance?

(v) What is the significance of data dictionary?

(vi) Explain decision tree.

(vii) What is the main difference between analysis and design?

(viii) Differentiate between verification and validation.

2. (a) What is system? Explain characteristics and types of system.

(b) Explain various types of feasibility studies that the analyst should consider.

3. (a) Explain cost and benefit analysis of a new system? How cost/benefit analysis plays an important role in SDLC?

(b) Discuss different types of software testing.

4. (a) Describe the major considerations for system planning and control for system success.

(b) Describe the operations and user documentation.

5. (a) What are the security issues in system development? How does an organization prevent its database from security concerns?

(b) List and illustrate the primary uses and elements of a decision table.

6. (a) Summarize the factors to be considered in forms design.

(b) Explain different types of coupling and cohesion.

7. (a) Briefly describe the Waterfall model of software life cycle with the help of a suitable diagram.

(b) Draw ER diagram for a student information system for a university. Explain the concept of cardinality through it.

8. Write short notes on the following:

(a) Programming specifications

(b) Software maintenance

(c) Risk analysis in system security

(d) System analysis standards.

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