MCS-14

M. C. A. (REVISED)/B. C. A. (REVISED)

(MCA/BCA)

Term-End Examination

June, 2023

MCS-14 : SYSTEMS ANALYSIS AND DESIGN

Time : 3 Hours *Maximum Marks : 100*

Weightage : 75%

Note :*Question **No. 1** is compulsory. Attempt any **three** questions from the rest.*

1. (a) What is Prototyping Approach for system design ? Explain the steps involved in Prototyping process with the help of a diagram. 10

   (b) What is a DFD ? Draw DFD's upto 2nd level for "Online Examination System". 10

   Note : Make necessary assumptions.

   (c) What is MIS ? How is it useful for management control and strategic planning in an organization ? 10

(d) What are CASE Tools ? Explain the role of CASE Tools in technical and managerial aspects of software development process. List advantages and disadvantages of CASE Tools. 10

2. (a) Prepare an outline of SRS for an "Online Examination System". Make necessary assumptions. 10

(b) What are the duties of a systems analyst ? Why technical and managerial skills are required for the job of systems analyst ? Explain. 10

3. (a) What is the need of feasibility study ? Explain any *four* issues involved in feasibility study. 10

(b) What is modularity in a system ? Explain the concepts of coupling and cohesion. Is there any relationship between coupling and cohesion ? Explain. 10

4. (a) Explain the following with an example for each : 2×5=10

   (i) Class diagram

   (ii) E-R diagram

   (b) What is SDLC ? Briefly explain all the seven phases of SDLC. 10

5. Write short notes on the following : 4×5=20

   (a) Distributed Systems

   (b) Structure Charts

   (c) Internal and External Information

   (d) Risk Analysis