AB-235682

M.Sc. (Semester-IV) Examination, June-2025

(Backlog)

COMPUTER SCIENCE

(System Design and Software Engineering)

Time Allowed : Three Hours

Maximum Marks : 70

Note : This question paper is divided into **two** sections. Attempt questions of **Both** sections as per direction. Distribution of marks is given in each section.

SECTION-A

(Objective Type Questions)

Note : Attempt **any five** questions. Each question carries **2** marks. [5×2=10]

1. (i) _____ shows the decision rules that apply when certain conditions occur.

(ii) Distribution of information is represented by the_____.

(iii) The_____analysis method identifies the top-level components of a complex system.

(iv) The third phase in the system life cycle is the_____phase.

(v) The systems design report presents the_____versus the benefits.

(vi) Most organizations spend more time and money on the_____phase then on any of the other.

(vii) _____of the system follows the acquiring of software and hardware.

SECTION-B

(Long Answer Type Questions)

Note: Attempt **any five** questions. Each question carries 12 marks: [5×12=60]

2. (i) Explain the concept of Software Design, with example.

(ii) Write the phases of system analysis and design with example.

(iii) What is prototyping? Explain with case study.

(iv) What is feasibility study? Explain with Cost and Benefit Analysis.

(v) Define DFD. Explain various symbols used in DFD. Give suitable example describing DFD.

(vi) Explain the following:

(a) Quality and Quality factors

(b) Maintenance and its types

(vii) Define software testing? Also differentiate between Black box Testing and white box Testing methods.

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