Total No. of Questions: 09]

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Paper ID [B0105]

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MCA (Sem. - 1st)

SYSTEM ANALYSIS AND DESIGN (MCA - 105)

Time: 03 Hours

Maximum Marks: 60

Instruction to Candidates:

- 1) Attempt any one question from each Sections A, B, C & D.
- 2) Section-E is Compulsory.

Section - A

 $(1 \times 10 = 10)$

- **Q1)** Define the term system and its characteristics? Explain the system development life cycle.
- Q2) Differentiate between the following:
 - Initial Investigation and Analysis.
 - Economic and technical feasibility.

Section - B

 $(1 \times 10 = 10)$

- Q3) What do you mean by Requirement analysis? Explain in detail the various information gathering tools used in the Analysis phase.
- **Q4)** Compare and contrast the terms Decision Trees and Decision Tables with a suitable example.

Section - C

 $(1 \times 10 = 10)$

- Q5) Name the various system design methodologies and describe in brief the input and output design steps in detail.
- **Q6)** Define the term: file organization and differentiate between chaining and inverted lists.

Section - D

 $(1\times10=10)$

- Q7) Explain in detail the various activities involved in the software selection process.
- Q8) What is the goal of software testing? Explain various types of system tests.

Section - E

 $(10 \times 2 = 20)$

- **Q9)** a) What is the difference between tangible and intangible value?
 - b) What do you mean by system analysis and its need?
 - c) What are the common processes associated with data stores?
 - d) Differentiate between zero levels and first level DFD.
 - e) How is requirement related to design phase?
 - f) Write the main criteria used for software selection?
 - g) What do you mean by system implementation?
 - h) What are the various sources of change requests?
 - i) What is activity network and its need?
 - j) Why testing is as important as programming.

