

Dr. Babasaheb Ambedkar Open University
Term End Examination February – 2026

Course	: BSCIT	Date	: 08/03/2026
Subject Code	: BSCIT-205	Time	: 11:30am to 01:45pm
Subject Name	: System Analysis and Design	Duration	: 02.15 Hours
		Max. Marks	: 70

Section A

Answer the following (Attempt any three) (30)

1. Explain types of System in detail.
2. List types of Information System and explain each in detail.
3. Explain Stages of System Development Life Cycle.
4. List and explain six types of Special Tests.
5. List and explain various Criteria for Software Selection?

Section B

Answer the following (Attempt any four) (20)

1. What are various characteristics of a System?
2. Explain Cohesion and Coupling in brief.
3. List and explain fact finding techniques.
4. What is DFD? Draw and explain symbols of DFD.
5. Explain Decision Tree in brief.
6. Explain Decision Table in brief.

Section C

Part – A (Multiple Choice Questions) (10)

Q-1. Which of the following best defines a system?

- A) A set of unrelated parts B) A set of interrelated components
C) A random process of data flow D) An independent process with no purpose

Q-2. Which of the following is a closed system?

- A) Banking system B) Computer program running without external input
C) Hospital management system D) Railway reservation system

Q-3 System Development Life Cycle (SDLC) is:

- A) Design B) Implementation
C) Feasibility Study D) Preliminary Investigation

Q-4. The study of system performance and feasibility is done during:

- A) Implementation phase B) Feasibility Study
C) Coding phase D) Maintenance phase

Q-5. Which of the following is not a type of feasibility analysis?

- A) Technical Feasibility B) Operational Feasibility
C) Economical Feasibility D) Linguistic Feasibility

Q-6. In cost-benefit analysis, tangible benefits are:

- A) Benefits that cannot be measured
B) Benefits that can be measured in monetary terms
C) Benefits related to customer satisfaction
D) Benefits related to morale of employees

Q-7. Which fact-finding technique involves direct communication with users?

- A) Sampling B) Observation
C) Interview D) Document Review

Q-8. A Data Flow Diagram (DFD) is used to represent:

- A) Physical design of system B) Flow of control
C) Flow of data in a system D) Cost analysis

Q-9. A Data Dictionary is used for:

- A) Programming codes
- B) Storing definitions of data elements
- C) Controlling program execution
- D) Testing system performance

Q-10. Decision Trees are mainly used for:

- A) Cost estimation
- B) File storage
- C) Representing decision-making rules
- D) Data storage in memory

Part – B (State whether the following statements are true or false)

(10)

- 1 A system must always operate in complete isolation from its environment.
- 2 SDLC provides a structured approach for system development.
- 3 Prototyping helps in understanding user requirements more effectively.
- 4 An infeasible project should always be implemented with modifications.
- 5 Feasibility analysis includes technical, operational, and economic considerations.
- 6 Intangible benefits of a system cannot be measured in monetary terms.
- 7 Observation is a fact-finding technique where the analyst watches actual work being done.
- 8 A DFD shows how data moves within a system.
- 9 A Data Dictionary stores information about data elements, data flows, and processes.
- 10 Decision Trees are only used for representing data flows in a system.
