

March – April 2022

Post Graduate Diploma in Computer Applications (PGDCA) Examination

**I Semester
SYSTEM ANALYSIS AND DESIGN**

Time 3 Hours]

[Max. Marks 100

Note : Attempt any two parts of each question. All questions carry equal marks.

1. (a) What do you understand by System Analysis and Design ? Explain the steps an analyst should follow to design an Information System.
(b) What is Feasibility Study ? Explain about Technical Operational and Economic Feasibility Study.
(c) Explain main characteristic of System. Differentiate between Physical and Abstract System.
2. (a) Discuss Program Flowchart and System Flowchart. Also write its characteristic and differentiate it.
(b) Explain Gantt Charts and Data Dictionary with suitable example.
(c) How Decision Tree and Decision Table is useful in analysing system ? Explain with example.
3. (a) What is System Testing ? What type of testing are required to assure system quality ? Explain.
(b) Explain elements of Software Quality Assurance and its techniques.
(c) Write short note on the following :
 - (i) Black Box Testing.
 - (ii) Integration Testing.
 - (iii) Methodologies in Input and Output Form Design.
4. (a) Write the various importance of Software Implementation and Maintenance.
(b) What is System Conversion ? Explain conversion plan, methods, advantages and disadvantages. <https://www.davvonline.com>
(c) Explain, why Project Planning is important in Software Engineering ?
5. (a) What is UML ? Explain UML Concept and UML Symbol.
(b) Differentiate between Structured UML Diagram and Behaviour Diagram.
(c) Write short notes on the following :
 - (i) Package.
 - (ii) State Chart.
 - (iii) Sequence Diagram.