# Government PG College, Ambala Cantt

## Course File(Session 2023-24)

## Name of Professor: DR. SHRUTI

## Class: BCOM(CAV)/ 5TH SEMESTER

## Subject code and Name: BC(VOC)-506/SYSTEM ANALAYSIS AND DESIG

Max. Marks: 60 Internal Marks: 20

Time: 3 Hours

Note: Paper setter will set nine questions in all. Question No. 1 comprising of five short types questions carrying four (4) marks each is compulsory. It covers the entire syllabus. Answer to each question should not be more than one page. Candidate is required to attempt four questions from the remaining eight questions carrying 10 marks each.

SAD: definition of system, characteristics, elements, types of system, system development life cycle; techno-economic feasibility; role of system analyst the process of logical and physical design

form design: input, output, form, system testing, auditing, system maintenance, threats to security, control measures.

**Practical**: The candidates will develop a systems design, such as feasibility study, comparative charts, impact analysis, etc., in their vicinity using computer applications

**REFERENCES** E.M. Awadh, Structured Systems Analysis by, Galgotia Publications.


- Kendall, System Analysis and Design, Pearson
- Maneesh Trivedi, System Analysis and Design, Khanna Publishing
- A Priya, System Analysis and Design, Margham Publications

## COURSE OBJECTIVES

The course objectives outlined are as follows:

- **Role of System and its element:** Describe how information technology and decision support systems contribute to businesses and analyze current issues within firms to solve business problems.
- **Understand System Development life cycle:** Explore and define SDLC and its characteristics. Identify the components of an sdlc.
- **Fundamental Principles of System Feasibility and testing:** Introduce the foundational principles of analysing and designing computer-based information systems, fostering an understanding of the techniques and methodologies employed in this process.
- **Impact of Internet Technology on System auditing and security:** Enable studentsto assess the influence of the Internet and Internet technologies on electronic commerce and business operations. Understand the specific risks and vulnerabilities associated with computer systems in this context.
- **Use of different file design format:** Provide students with theoretical models used in examining functional ERP in the areas of personnel, financial, and production management.

These objectives collectively aim to equip students with a comprehensive understanding of how information technology, decision support systems, expert systems, internet technology, and database management systems intersect with business operations. By covering these topics, students will be better prepared to analyze, design, and utilize technological solutions to address contemporary business challenges and enhance organizational competitiveness.

## COURSE OUTCOMES

After the successful completion of the course, students will be able to:

- Understand the leadership role of SDLC in achieving businesscompetitive advantage through informed decision-making.
- Understand the fundamental concepts of systems and their types.

- Apply the systems approach to analyze and solve complex problems.
- Define an information system and recognize its characteristics.
- Identify different types of information and their role in decision-making process.
- Analyse and synthesize business information and systems to facilitate the evaluation ofstrategic alternatives.
- Effectively communicate strategic alternatives to facilitate decision-making.
- Articulate the fundamental principles of information systems analysis and design.
- Demonstrate the skills necessary to conduct a requirements determination study.
- Analyse how information system impacts a firm.
- Interpret how to use information systems to solve business problems.
- Explore decision support systems and their role in planning, control, and decision-makingprocesses.

## Lesson Plan

| Week No | Scheduled Dates | Topics to be covered |
|---|---|---|
| 1 | 3-8 July | Definition and characteristics of system. |
| 2 | 10-15 July | Elements types of system. |
| 3 | 17-22 July | SDLC |
| 4 | 24-31 July | Revision, Test, Assignment-1. |
| 5 | 1-5 August | Different types of feasibility. |
| 6 | 7-12 August | Role of system analyst. |
| 7 | 14-19 August | Process of logical . Oral Test. |
| 8 | 21-26 August | Input form design Revision, Test. |

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| **9** | **28-2 September** | Output form design. |
| **10** | **4-9 September** | System testing. Oral Test |
| **11** | **11-16 September** | System maintenance. |
| **12** | **18-23 September** | Threats to security |
| **13** | **25-30 September** | Process of physical design |
| **14** | **3-7 October** | Revision, Test. Assignment-2 |
| **15** | **9-14 October** | System auditing . |
| **14** | **16-21 October** | System Implementation. |
| **15** | **23-28 October** | Feasibility report. Revision, Test,. |
| **16** | **30-4 November** | Feasibility report |
| **17** | **6-9 November** | Old question paper discussion |