

Decision Support and Expert System

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Decision Making and Expert System

Syllabus:

Understanding Systems and Related Environment: System definition, characteristics of a system, organization, interaction, interdependence, integration, elements of a system, outputs and inputs, processors, control, feedback, boundaries and interface, types of system.

Process Models and Role of System analyst: SDLC models, Role of the Systems Analyst, Organizational Style and its Impact on Information Systems, Feasibility and Managing Analysis and Design Activities.

Information Requirements Analysis: Sampling and Investigating Hard Data, Interviewing using Questionnaires,

Decision Making and Decision Support System : Decision Types, Characteristics, Process, Models, Role of Decision-Maker Behavior and Office Environment, Data Flow Diagrams, Data Dictionaries, Process Specifications and Structured Decisions, Semi structured Decision Support Systems, Systems Proposal.

Knowledge Engineering and Expert Systems: Knowledge management, Expert Systems, Types of Expert Systems, Development of Expert Systems, Role of AI and ANN in expert system development, Examples,

Essentials of Design and Automated Tools: Designing Effective Input and Output, File or Database, User Interface, Data-Entry Procedures, CASE definitions, Types of CASE tools, Benefits and Limitations of CASE tools, CASE support in SDLC, Software Maintenance

Evaluation Scheme:

Component	Duration	Weightage (%)
Minor Test 1	Two Hour	20
Assignment / Seminar / Project + Class Performance		30
Major Test	Two Hour	50

Books/References

- ◆ [System Analysis and Design in a Changing World](#) MIS Series
John W. Satzinger, Robert B. Jackson, and Stephen D. Burd.
- ▶ [Systems Analysis and Design, Sixth Edition](#) by Gary B. Shelly, Thomas J. Cashman, and Harry J. Rosenblatt
(**Paperback** - Mar 16, 2005)
- ◆ [Decision Options: The Art and Science of Making Decision](#): by Gill Eapen, CRC Press
- ◆ [Systems Analysis and Design \(6th Edition\)](#) by Kenneth E. Kendall and Julie E. Kendall (**Hardcover** - Mar 1, 2004)
- ◆ [Decision and The Information Systems](#): by Maryse Salles, ISTE, Wiley
- ◆ [Knowledge Engineering: the Uses of Artificial Intelligence in Business](#) by Thomas B Cross

