

**Text Books:**

1. Anthony T. Velte, Toby J. Velte, Robert Elsenpeter: Cloud Computing, A Practical Approach, McGraw Hill, 2010.
2. Prabhu: Grid and Cluster Computing, PHI, 2007.

**Reference Books:**

1. Joshy Joseph, Craig Fellenstein: Grid Computing, Pearson Education, 2007.
2. Internet Resources

**DECISION SUPPORT SYSTEMS**

**Subject Code: 10IS846**  
**Hours/Week : 04**  
**Total Hours : 52**

**I.A. Marks : 25**  
**Exam Hours: 03**  
**Exam Marks: 100**

**PART - A**

**UNIT – 1**

**6 Hours**

**Decision Making and Computerized Support – 1:** Managers and Decision Making, Managerial-Decision Making and Information Systems, Managers and Computer Support, Computerized Decision Support and the Supporting technologies, A frame work for decision support, The concept of Decision Support systems, Group Decision Support Systems, Enterprise Information Systems, Knowledge Management systems, Expert Systems, Artificial Neural Networks, Hybrid Support Systems.

Decision-Making Systems, Modeling, and Support: Introduction and Definitions, Systems, Models.

**UNIT – 2**

**6 Hours**

**Decision Making and Computerized Support – 2:** Phases of Decision-Making Process, Decision-Making: The Intelligence Phase, Decision Making: The Design Phase, Decision Making: The Choice Phase, Decision Making: Implementation Phase, How decisions are supported, Personality types, gender, human cognition, and decision styles; The Decision –Makers.

**UNIT – 3**

**6 Hours**

**Decision Support Systems: An Overview:** DSS Configuration, What is DSS? Characteristics and Capabilities of DSS, Components of DSS, The Data Management Subsystem, The Model Management Subsystem, The

User Interface Subsystem, The Knowledge-Based Management Subsystem, The User, DSS Hardware, DSS Classification.

**UNIT – 4**

**6 Hours**

**Decision Support Systems Development:** Introduction to DSS development, The Traditional System Development Life cycle, Alternate Development Methodologies, Prototyping: The DSS Development Methodology, DSS Technology Levels and Tools, DSS Development Platforms, DSS Development Tool Selection, Team-Developed DSS, End User-Developed DSS, Putting the System Together.

**PART - B**

**UNIT – 5**

**6 Hours**

**Group Support Systems:** Group Decision Making, Communication and Collaboration, Communication Support, Collaboration Support: Computer-Supported Cooperative work, Group Support Systems, Group Support Systems Technologies, Group Systems Meeting Room and Online, The GSS Meeting Process, Distance Learning, Creativity and Idea Generation.

**UNIT – 6**

**7 Hours**

**Enterprise Information Systems:** Concepts and definitions, Evolution of Executive and Enterprise Information Systems, Executive's roles and information needs, Characteristics and capabilities of Executive Support Systems, Comparing and integrating EIS and DSS, Supply and Value Chains and Decision Support, Supply Chain problems and solutions, MRP, ERP / ERM, SCM, CRM, PLM, BPM, and BAM.

**UNIT – 7**

**6 Hours**

**Knowledge Management:** Introduction, Organizational learning and Transformation, Knowledge management initiatives, Approaches to Knowledge management, IT in Knowledge management, Knowledge management systems implications, Role of people in Knowledge management, Ensuring success of Knowledge management.

**UNIT – 8**

**6 Hours**

**Integration, Impacts, and the Future of Management-Support Systems:** System Integration: An Overview, Models of MSS integration, Intelligent DSS, Intelligent modeling and model management, Integration with the Web, Enterprise systems, and Knowledge Management, The impact of MSS: An Overview, MSS impacts on organizations, Impact on individuals, Decision-Making and the Manager's job, Issues of legality, privacy, and ethics, Intelligent Systems and employment levels, Internet communities, Other societal impacts and the Digital Divide, The future of Management-Support Systems.

**Text Books:**

1. Efraim Turban, Jay E. Aronson, Ting-Peng Liang: Decision Support Systems and Intelligent Systems, 8<sup>th</sup> Edition, Pearson Education, 2008.  
(Chapters 1, 2, 3, 6, 7, 8 excluding 8.7 to 8.9, 9, 15)

**Reference Books:**

1. Sprague R.H. Jr and H.J. Watson: Decision Support Systems, 4<sup>th</sup> Edition, Prentice Hall, 1996.