

### Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore

### Shri Vaishnav Institute of Technology and Science Choice Based Credit System (CBCS) Scheme in light of NEP-2020

# Generic Elective for UG (2021-Batch)

(======)											
COURSE CODE		COURSE NAME	TEACHING &EVALUATION SCHEME								
	CATEG ORY		THEORY			PRACTICAL					
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*	L	Т	P	CREDITS
GUME301	GE	DECISION SUPPORT SYSTEMS	60	20	20	0	0	3	0	0	3

**Legends**: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P - Practical; C - Credit; \*Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in

Class, given that no component shall exceed more than 10 marks.

#### **Course Objectives:-**

The primary objectives of the course is to knowledge and skills of (A) concept of managerial decision systems (B) DSS components and identify sources of data for business intelligence (C Categorize the methodologies involved in DSS development (D) AI and Expert systems.

#### **Course Outcomes:-**

- 1. Understand concept of managerial decision systems and outline its various phases.
- 2. Demonstrate DSS components and identify sources of data for business intelligence.
- 3. Categorize the methodologies involved in DSS development.
- 4. Analyze evolution of enterprise DSS and knowledge management initiatives.
- 5. Infer AI and Expert systems evolution and probe advances in intelligent support systems.

## **Syllabus**

#### **Unit-I Decision Making**

9 hrs

Managerial decision making and information systems - framework and concept for decision support, Decision making - introduction - definition - systems and models, phases of decision making process - Personality Types - Gender - Human Cognition - and Decision Styles.

#### **Unit- II Modeling and Analysis**

8 hrs

Definition – Characteristics and capabilities of DSS – DSS components - Modeling and issues – Static and dynamic models – Certainty, Uncertainty and Risk – Influence Diagrams – Structure of Mathematical models.

#### **Unit- III DSS Development**

10 hrs

Introduction – Traditional and alternative development methodologies - Change Management – DSS Technology Levels and Tools – Development Platforms – Tool Selection.



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#### **Unit-IV Enterprise DSS and Knowledge Management**

8 hrs

Communication support – Collaboration support - Group support systems and technologies – GSS meeting process – Creativity and idea generation – Enterprise information systems – Evolution – Characteristics and capabilities of executive support systems – Organizational DSS - Organizational learning and transformation – Knowledge management initiatives – approaches – implementation.

#### **Unit-V Business Intelligence**

8 hrs

Nature and Sources of data – Data collection, problems and quality – Database organizations and structures -Data warehousing, Data mining and Data visualization.

#### **Text Books:**

- 1. Efraim Turban, Jay E Aronson, Ting Peng Liang, Decision Support and Intelligent Systems, Prentice Hall of India, 7th Edition 2005.
- 2. Elain Rich and Kevin Knight, Artificial intelligence, TMH, 2006.
- 3. Efraim Turban, Ramesh Sharda, Dursun Delen, Decision support and Business Intelligence systems, Pearson Education, 9th Edition, 2011.