

UNIT I	INTRODUCTION	8
Components – Types – Ontological Commitments – Ontological Categories – Philosophical Background -Sample - Knowledge Representation Ontologies – Top Level Ontologies – Linguistic Ontologies – Domain Ontologies – Semantic Web – Need – Foundation – Layers – Architecture.		
UNIT II	LANGUAGES FOR SEMANTIC WEB AND ONTOLOGIES	12
Web Documents in XML – RDF - Schema – Web Resource Description using RDF- RDF Properties – Topic Maps and RDF – Overview – Syntax Structure – Semantics – Pragmatics - Traditional Ontology Languages – LOOM- OKBC – OCML - Flogig Ontology Markup Languages – SHOE – OIL - DAML + OIL- OWL		
UNIT III	ONTOLOGY LEARNING FOR SEMANTIC WEB	12
Taxonomy for Ontology Learning – Layered Approach – Phases of Ontology Learning – Importing and Processing Ontologies and Documents – Ontology Learning Algorithms - Evaluation		
UNIT IV	ONTOLOGY MANAGEMENT AND TOOLS	8
Overview – need for management – development process – target ontology – ontology mapping – skills management system – ontological class – constraints – issues. volution – Development of Tools and Tool Suites – Ontology Merge Tools – Ontology based Annotation Tools.		
UNIT V	APPLICATIONS	5
Web Services – Semantic Web Services - Case Study for specific domain – Security issues – current trends.		
		TOTAL = 45

REFERENCES

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3. Alexander Maedche, “Ontology Learning for the Semantic Web”, Springer; 1 edition, 2002
4. John Davies, Dieter Fensel, Frank Van Harmelen, “Towards the Semantic Web: Ontology – Driven Knowledge Management”, John Wiley & Sons Ltd., 2003.
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