

**DON BOSCO INSTITUTE OF TECHNOLOGY, MUMBAI - 400 070**

**Department of Computer Engineering**

**(Academic Year ODD Semester 2023– 2024)**

Course Code and Name: CSDC7013 – Natural Language Processing (BE 7<sup>th</sup> Sem)

**IA-2 SYLLABUS**

	Module No.	Topics
NLP	1	<b>Module 4: Semantic Analysis</b> Introduction, meaning representation; Lexical Semantics; Corpus study; Study of Various language dictionaries like WorldNet, Babelnet; Relations among lexemes & their senses Homonymy, Polysemy, Synonymy, Hyponymy; Semantic Ambiguity; Word Sense Disambiguation (WSD); Knowledge based approach(Les's Algorithm), Supervised(Naive Bayes, Decision List),Introduction to Semi-supervised method (Yarowsky) Unsupervised (Hyperlex)
	2	<b>Module 5: Pragmatic &amp; Discourse Processing</b> Discourse: Reference Resolution, Reference Phenomena, Syntactic & Semantic constraint on coherence; Anaphora Resolution using Hobbs and Canterling Algorithm
	3	<b>Module 6: Applications of NLP</b> Case studies on (preferable in regional language):Machine translation; Text Summarization; Sentiment analysis; Information retrieval; Question Answering system