C 25 1	F-10	11/1/25	The same				100						
Reg. No	 7.	62.0	15 FOR			N. William		800	THE SE	3 -3	-1.5	11	1000
neg. 110		William		300	M = 33		esave)	5000	15.00		200	ans IV	1.

B.Tech DEGREE EXAMINATION, NOVEMBER 2023

Seventh Semester

18CSE359T - NATURAL LANGUAGE PROCESSING

(For the candidates admitted during the academic year 2020 - 2021 & 2021 - 2022)

Note:

i. Part - A should be answered in OMR sheet within first 40 minutes and OMR sheet should be handed over to hall invigilator at the end of 40th minute.
 ii. Part - B and Part - C should be answered in answer booklet.

Tim	e: 3 Hours	Angeria) Haik (lab a	Max. Marks	: 100
	PART - A (20 × 1 = Answer all Qu		Marks BL	CO
1.	Natural Language Processing is	ANDARAS Laurent in Belgraf der der anstille der anstille der eine	1 1	1
ď	(A) Dealing with only images	(B) a subdomain of Artificial Intelligence		
	(C) a super domain of Artificial Intelligence	(D) dealing with only Programming languages	mandQ 1	
2.	Which is the type of morphology that o meaning?	changes the word category and affects the	1 1	1
	(A) Inflectional(C) Translational	(B) Derivational (D) Rational		
3.	Stochastic tagger is also known as	e Alfanty Titte	1 1	1
	(A) HM tagger (C) RM Tagger	(B) HMM Tagger (D) Super Tagger	anser k Marija	
4.	T	A SANDER OF THE	1 1	1
	(A) A technique for dividing a text into paragraphs and sentences.	(B) A method for determining the subjectivity of a sentence.		
	(C) An approach for identifying the grammatical category of each word in a sentence.	(D) A process of extracting keywords from a document.		
5.	What is the main problem that Laplace sm	noothing addresses in language modeling?		2 .
	(A) Over fitting	(B) Under fitting		
	(C) Data sparsity	(D) Biased estimation	Carpen 7. IV	
6.	Lemma with multiple senses is called			2
	(A) polysemy	(B) synonymy	winter of	
	(C) antonymy	(D) meronymy		
7.	Word sense disambiguation is a	amount of the course	1 1	. 2
9	(A) classification task	(B) generation task		
	(C) Masking task	(D) parsing task		
8.	Pronoun Resolution is as same as		1 1	-2
	(A) Anaphora resolution	(B) Semantic Resolution		
	(C) phonetic resolution	(D) Speech resolution	engalemit s	
9.	A lexicon is a	winds the marks being a constraint of	11	.3
	(A) list of sentences	(B) list of words	3 3546	
	(C) list of documents	(D) is just a word		

10.	A discourse relation captures (A) the relation between semantically connected sentences	(B) the relation between semantically disconnected sentences	1	1	3
	(C) the relation between semantically connected words	(D) the relation between semantically disconnected words			
11.	Story Generation can be thought of as a dire (A) Parts of Speech tagging (C) Text Coherence	ect application of (B) Syntactic parsing (D) N grams	1	1	3
12.	Which one of the following is an example o (A) Lexicon (C) A set of synonyms	f Knowledge graph? (B) Ontology (D) A set of Antonyms	1	1	3
13.	Which one of the following is an example of (A) Amazon Alexa (C) Google Search	f Information Retrieval System (B) Google Translation (D) Chatbot	1	1	4
14.	Which one of the following does not require (A) Question Answering (C) Information Extraction	e a Large Language Model (B) Chatbot (D) Spell checker	1 ,	1	4
15.	Generative Artificial Intelligence is (A) related to only Text (C) related to to only Images	(B) related to only speech (D) related to Text, Speech and Images	1	1	4
16.	The input to a Natural Language Understan (A) A natural language text (C) Named Entity Tags		1	. 1	5
17.	A vector of a word is called (A) Embeddings (C) Strings	(B) Arrays (D) Captions	1	1	5
18.	CBOW and Skip Gram are (A) Deep Learning Language Models	(B) Natural Language Understanding applications	1	1	5
	(C) Sentiment Analysis models	(D) Summarization models			
19.	The state of the art large language models a (A) transformer based (C) ChatGPT based	re (B) Neural Network based (D) Bard Based	1	1	5
. 20.	Cosine Similarity measures (A) the semantic similarity of the texts (C) character similarity of the text	(B) syntactic similarity of the texts(D) character dissimilarity of texts	1	1	= 5
PART - B ($5 \times 4 = 20$ Marks) Answer any 5 Questions					C
21.	Name any four real time Natural Languages	age Processing applications that you are	4	1	1
22.	In "N-gram model", What the word "gram'	'refers to? Please give your views.	4	2]
23	Define Semantics with suitable examples.		4	1	2
24	Does Context Free Grammar cares about the context? Give your perspectives on this.			2	1
25	. Connect text coherence and Generative Art	tificial Intelligence.	4	2	3
26	What is the difference between Natura Language Generation.	l Language Understanding and Natural	4	1	. 4

	*			
27.	"Recurrent Neural Networks (RNN) and Long Short Term Memory (LSTM) networks are one and the same". Is the statement true or false. Justify to your answer.	4	2	6
	PART - C (5 × 12 = 60 Marks) Answer all Questions	Mark	ks BL	CO
28.	(a) Write in detail about how a Parts of Speech Tagger can be built using either by using a rule based or a machine learning based approach. (OR)	12	2	1
	(b) What is a language model? Explain in details about how N-gram works as a language model. Include necessary mathematical equations wherever necessary.	•		
29.	(a) S -> NP VP NP -> Det NOMINAL NOMINAL -> Noun VP -> Verb Det -> a Noun -> flight	12	3	2
	Verb -> left Using the above given Context Free Grammar, explain the working of both Top down and Bottom Up parser for the sentence, "A flight left". (OR) (b) Explain the working of Word Sense Disambiguation using Supervised or			
	Unsupervised approach.			
30.	(a) List the Semantic Relations of WordNet and explain the use case of each relation.	12	2	3
	(OR) (b) Explain the working of Hobbs Algorithm in the resolution of pronouns for a chosen text.			
31.	(a) Describe in detail about the working of an Abstractive Summarization technique. (OR)	12	3	6
	(b) Explain in detail about the Machine Translation using the state-of-art encoder-decoder model.			
32.	(a) Explain in detail about how embeddings inculcate the semantics for a given text.	12	3	5
	(OR)		đ	
	(b) Explain the working of Long Short Term Memory network in the context of either Text classification or Text Generation task.			

* * * * *

Romanned Harrison water with Philippy and Burde Steel New Medicine (USE 1994).

- regitarionalist nome en just endern spacent formats a sene fix a a sit growne see at insean you
- a diselect magnetical engine and make in all selections in the light of the control of the contr
 - The second secon
- And the electron personal of the continue of butter and the continue of butter design and the continue of butter and design and the continue of butter and the continue of the
- TO FREE WAY AND A THE TARGET SHEET SHEET AND A THE STORY OF THE STORY
- nt see Torress of more and market and telefolder of the market of the ma
- in high a ghiànn ag air ann aithe a sigh ann aidheachd. Madh th' finche an aigidh fogadh i de Ingail raideach
- ं भाग प्रदेश माहित कर है। तो है जो के कि का क्षेत्रक का जी है के हैं है जो है जिस का प्राप्त कर है। एक स्थापन स्थापन कर नाम
- The state of the s
- A District at array in each investible day in each parties at the principle of
- For Stephen with the Adding order of Marin Many of the Adding of the Add