# BRAINWARE UNIVERSITY

### Term End Examination 2021 - 22
### Programme – Bachelor of Science in Information Technology
### Course Name – Natural Language Processing
### Course Code - BAIC403
### ( Semester IV )

**Time allotted : 1 Hrs.15 Min.**                                            **Full Marks : 60**

[The figure in the margin indicates full marks.]

### Group-A
(Multiple Choice Type Question)                                            1 x 60=60

*Choose the correct alternative from the following :*

(1) What is the field of Natural Language Processing (NLP)?

  a) Computer Science                        b) Artificial Intelligence
  c) Linguistics                             d) All of these

(2) Choose from the following areas where NLP can be useful.

  a) Automatic Text Summarization           b) Automatic Question-Answering Systems
  c) Information Retrieval                   d) All of these

(3) What is Machine Translation?

  a) Converts one human language to another   b) Converts human language to machine language

  c) Converts any human language to English   d) Converts Machine language to human language

(4) One of the main challenge/s of NLP is which of the following?

  a) Handling Tokenization                   b) Handling Ambiguity of Sentences
  c) Handling POS-Tagging                    d) All of these

(5) All of the following are challenges associated with natural language processing except

  a) Dividing up a text into individual words in English.   b) Understanding the context in which something is said.
  c) Recognizing typographical or grammatical errors in texts   d) Distinguishing between words that have more than one meaning.

(6) What is co-reference resolution?

  a) Anaphora resolution   b) Given a sentence or larger chunk of text, determine which words refers to the same object

  c) Metaphora resolution   d) None of these

(7) What is full form of NLP?

a) Natural Language Processing  b) Nature Language Processing

c) Natural Language Process  d) Natural Language pages

(8) Which of the following is used to mapping sentence plan into sentence structure?

a) Text planning  b) Sentence planning

c) Text Realization  d) None of these

(9) He lifted the beetle with red cap. contain which type of ambiguity?

a) Lexical ambiguity  b) Syntax Level ambiguity

c) Referential ambiguity  d) None of these

(10) What are the input and output of an NLP system?

a) Speech and noise  b) Noise and value

c) Noise and Written Text  d) Speech and Written Text

(11) Which of the following is used study of construction of words from primitive meaningful units?

a) Phonology  b) Morphology

c) Morpheme  d) Shonology

(12) Many words have more than one meaning; we have to select the meaning which makes the most sense in context. This can be resolved by using which of the following?

a) Fuzzy Logic  b) Shallow Semantic Analysis

c) Word Sense Disambiguation  d) All of these

(13) I am tired. Contain which type of ambiguity?

a) Lexical ambiguity  b) Syntax Level ambiguity

c) Sementic ambiguity  d) None of these

(14) Why it is needed to make probabilistic systems feasible in the world?

a) Feasibility  b) Reliability

c) Crucial robustness  d) None of the above

(15) Which of the below are NLP use cases?

a) Speech Biometric  b) Facial Recognition

c) Detecting objects from an image  d) Text Summarization

(16) What is the language of machine translation?

a) Converts one human language to another  b) Converts Machine language to human language

c) Converts human language to machine language  d) None of these

(17) Which of the following features can be used for accuracy improvement of a classification model?

a) Part of Speech Tag  b) Dependency Grammar

c) Vector Notation of sentence  d) All of these

(18) Which of the following is not an important step in NLP?

a) Pragmatic analysis  b) Entity extraction

c) Entity elimination  d) Syntactic analysis

(19) Which among the following is not an application of natural language programming (nlp)?

a) ChatBot  b) Speech Recognition

c) Sentimental Analysis  d) Market Basket Analysis

(20) Which kind of areas where NLP can not be useful?

a) Data pre-processing  b) Information Retrieval

c) Automatic Text Summarization      d) Automatic Question-Answering Systems

(21) Which of the following is not a document preprocessing step?

a) Tokenization      b) Substitution

c) Normalization      d) Feature Selection

(22) Case folding is used for which of the following process?

a) Normalization      b) Tokenization

c) Stemming      d) Lemmatization

(23) What is Utterance?

a) A part of disfluency      b) It is the smallest unit of speech

c) A part of text normalization.      d) A process of breaking up a text into individual sentences

(24) Which of the following is the output of tokenization?

a) Sentences in a text      b) All characters in a text

c) Text after removing punctuation      d) Tokens

(25) Different NLP learning methods does not include?

a) Introduction      b) Analogy

c) Deduction      d) Memorization

(26) Which of the following is a large and structured set of texts?

a) Lemma      b) Token

c) Corpus      d) Morpheme

(27) Which of the following is morphene?

a) It is a large and structured set of texts      b) It is a small and structured set of texts

c) It is a small and unstructured set of texts      d) It is the smallest meaningful unit in the grammar of a language

(28) Which of the following is a form of lemma?

a) Syntactical      b) Semantic

c) Lexical      d) None of these

(29) Converting a text to a more convenient, standard form means which of the following?

a) Corpora      b) Normalization

c) Stemming      d) Disfluency

(30) What is the height of the balanced binary tree. if the vocabulary size is 128?

a) 128      b) 32

c) 16      d) 7

(31) LSTM introduces which of the following at the hidden layer?

a) State vector      b) Memory vector

c) Word Vector      d) Sentence Vector

(32) In the encoder, the fixed length vector at the output represents which of the following?

a) Word vector      b) Encoding of the input sentence

c) Translation of the sentence      d) Softmax containing the probability score of all words in the vocabulary

(33) Is Speech Segmentation is a subtask of Speech Recognition?

a) Yes      b) No

c) Partially true      d) None of these

(34) _____ is the process of getting the root form of a word.

a) Rooting      b) Dreaming

c) Steaming      d) Polling

(35) _____ is the process of extracting phrases from unstructured text and more structure to it.

a) Rooting     b) Chunking

c) Steaming     d) Lemmatization

(36) _____ is also known as shallow parsing.

a) Rooting     b) Chunking

c) Steaming     d) Lemmatization

(37) Which machine learning models are trained to make a series of decisions based on the rewards and feedback they receive for their actions?

a) Post processing     b) Pre processing

c) Pre defined     d) Post defined

(38) _____ is the process of tokenizing or splitting a string, text into a list of tokens.

a) Rooting     b) Chunking

c) Steaming     d) Tokenization

(39) Which of the following will be POS Tagger output when the input sentence is "And now for something completely different"?

a) [('And', 'CC'), ('now', 'RB'), ('for', 'IN'), ('something', 'RB'), ('completely', 'RB'), ('different', 'JJ')]

b) [('And', 'CC'), ('now', 'RB'), ('for', 'IN'), ('something', 'NN'), ('completely', 'JJ'), ('different', 'RB')]

c) [('And', 'CC'), ('now', 'RB'), ('for', 'IN'), ('something', 'NN'), ('completely', 'RB'), ('different', 'JJ')]

d) [('And', 'CC'), ('now', 'RB'), ('for', 'CC'), ('something', 'NN'), ('completely', 'RB'), ('different', 'JJ')]

(40) How many lexemes are there in following list: [man,men,girls,girl,mouse]?

a) 4     b) 5

c) 3     d) 2

(41) Which of the following computer language is used for artificial intelligence?

a) FORTRAN     b) PROLOG

c) C     d) COBOL

(42) "I went to the school, and they told me come on next day". What type of ambiguity present in the given sentence?

a) Syntactic ambiguity     b) Anaphoric ambiguity

c) Semantic ambiguity     d) Lexical ambiguity

(43) N-Gram language models cannot be used for which of the following?

a) Spelling Correction     b) Predicting the completion of a sentence

c) Removing semantic ambiguity     d) Speech Recognition

(44) Choose from the following where NLP is not being useful?

a) Automatic Text Summarization     b) Automatic Question-Answering Systems

c) Partially Observable systems     d) Information Retrieval

(45) Which of the following is true about Residuals?

a) Lower is better     b) Higher is better

c) Depend on the situation     d) None of these

(46) Named Entity Recognition means which of the following?

a) Finding spans of text that constitute proper names and then classifying the type of the entity.     b) Mapping between name and entity.

c) Classification of text into subject and     d) Searching text for proper nouns.

predicates.

(47) Morphotactics is a model of which of the following?

a) Spelling modifications that may occur during affixation

b) All affixes in the English language

c) How and which morphemes can be affixed to a stem

d) Ngrams of affixes and stems

(48) Residual is?

a) Residual = Observed value – predicted value

b) Residual = Observed value + predicted value

c) Residual = predicted value – Observed value

d) None of these

(49) Which is the type of morphology that changes the word category and affects the meaning?

a) Inflectional

b) Derivational

c) Cliticization

d) Rational

(50) In NLP, machine learning model which is build on sample data is known as?

a) Transfer data

b) Training data

c) Clean data

d) None of these

(51) Summarization which creates new phrases paraphrasing the original source?

a) Extraction-based

b) Abstraction-based

c) Auto-correct

d) None of these

(52) Which of the following is the library used in NLP?

a) NLTK

b) Tensorflow

c) Node js

d) None of the above

(53) Which is the process whereby meaning representations are composed and assigned to linguistic inputs?

a) Semantic analysis

b) Lexical analysis

c) Syntax Analysis

d) Morphology Analysis

(54) Modern NLP algorithms are based on which of the following?

a) Artificial Intelligence

b) Machine Learning

c) Neural Language Processing

d) Machine Translation

(55) What is a meaning of Morphology?

a) The study of word format

b) The study of sentence format

c) The study of syntax of sentence

d) The study of semantics of sentence.

(56) The system recognizes if emails belong in one of three categories (primary, social, or promotions) based on their contents. what this application is called?

a) Smart Assistant

b) Email Filters

c) Predictive Text

d) Language Translation

(57) Words automatic, automation, are converted to automat. This is the output of which process?

a) FSA

b) Lemmatization

c) Stemming

d) Parser

(58) _____ concerns how sentences are used in different situations and how use affects the interpretation of the sentence.

a) Syntax

b) Phonology

c) Pragmatics

d) Discourse

(59) Which of the following entities are identified by Named Entity Recognition?

a) Proper Nouns

b) Noun Phrase

c) Verb Phrase

d) Adverb

(60) Parts-of-Speech tagging determines _____.

a) Part-of-speech for each symbol only generated dynamically as per meaning of the sentence

b) Part-of-speech for each word dynamically as per sentence structure

c) All stem for a specific word given as input

d) All lemma for a specific word given as input