**1. Introduction to NLP**

1. **What is the main goal of NLP?**
   * (A) Enable machines to understand and generate human language ✅
   * (B) Store large text datasets
   * (C) Improve internet speed
2. **Which of the following are core NLP tasks?**
   * (A) Sentiment Analysis ✅
   * (B) Machine Translation ✅
   * (C) Image Classification
3. **Which of the following represents a structured form of text data?**
   * (A) XML ✅
   * (B) JSON ✅
   * (C) WAV
4. **Which technique is used for removing stop words in text processing?**
   * (A) Tokenization
   * (B) Lemmatization
   * (C) Stop-word filtering ✅
5. **Which library is commonly used for NLP in Python?**
   * (A) NLTK ✅
   * (B) OpenCV
   * (C) TensorFlow ✅

**2. Text Preprocessing**

1. **What is tokenization?**
   * (A) Splitting text into words or sentences ✅
   * (B) Encoding text into numbers
   * (C) Removing punctuation
2. **What is the difference between stemming and lemmatization?**
   * (A) Stemming removes suffixes, lemmatization finds root words ✅
   * (B) Lemmatization removes suffixes, stemming finds root words
   * (C) They are identical techniques
3. **Which of the following are tokenization methods?**
   * (A) Word tokenization ✅
   * (B) Sentence tokenization ✅
   * (C) Object tokenization
4. **What does POS tagging stand for?**
   * (A) Part-of-Speech tagging ✅
   * (B) Position of Sentence
   * (C) Prediction of Syntax
5. **Which technique is used to convert words into numerical representations?**
   * (A) Word Embeddings ✅
   * (B) Sentence Parsing
   * (C) Grammar Checking

**3. Language Models & Embeddings**

1. **Which of the following are word embedding techniques?**
   * (A) Word2Vec ✅
   * (B) GloVe ✅
   * (C) ResNet
2. **What is the key benefit of using word embeddings?**
   * (A) Captures semantic meaning of words ✅
   * (B) Reduces file size
   * (C) Improves grammar
3. **What does BERT stand for?**
   * (A) Bidirectional Encoder Representations from Transformers ✅
   * (B) Basic Encoding for Real-time Translation
   * (C) Bilingual Extraction for Recognizing Text
4. **Which model is best suited for contextual word representations?**
   * (A) BERT ✅
   * (B) Word2Vec
   * (C) One-hot encoding
5. **Which of the following NLP models are transformer-based?**
   * (A) GPT-3 ✅
   * (B) BERT ✅
   * (C) LSTM

**4. NLP Applications**

1. **Which NLP technique is used in chatbots?**
   * (A) Intent Recognition ✅
   * (B) Sentiment Analysis ✅
   * (C) Edge Detection
2. **Which task does Named Entity Recognition (NER) perform?**
   * (A) Identifies names, places, and organizations in text ✅
   * (B) Translates text
   * (C) Parses syntax
3. **Which is an example of a sequence-to-sequence NLP model?**
   * (A) Transformer ✅
   * (B) CNN
   * (C) K-means
4. **Which of the following are text generation models?**
   * (A) GPT-3 ✅
   * (B) LSTM ✅
   * (C) YOLO
5. **Which NLP application is used for sentiment analysis?**
   * (A) Text Classification ✅
   * (B) Image Processing
   * (C) Object Tracking

**1. Fundamentals of NLP**

1. **What is the main goal of NLP?**
   * (A) To analyze and generate human language ✅
   * (B) To store numerical data
   * (C) To create images
2. **Which of the following are common NLP tasks?**
   * (A) Named Entity Recognition ✅
   * (B) Sentiment Analysis ✅
   * (C) Image Classification
3. **What does Tokenization in NLP mean?**
   * (A) Splitting text into smaller units like words or sentences ✅
   * (B) Encrypting text
   * (C) Translating text
4. **Which of the following are stopwords?**
   * (A) The ✅
   * (B) Is ✅
   * (C) Python
5. **Which technique is used for text normalization?**
   * (A) Lemmatization ✅
   * (B) Convolution
   * (C) Image Filtering
6. **What is a corpus in NLP?**
   * (A) A collection of text data ✅
   * (B) A speech recognition tool
   * (C) A word embedding technique
7. **Which of the following are common stemming algorithms?**
   * (A) Porter Stemmer ✅
   * (B) Lancaster Stemmer ✅
   * (C) K-means Clustering
8. **What is Named Entity Recognition (NER) used for?**
   * (A) Identifying names, locations, and organizations in text ✅
   * (B) Translating text
   * (C) Removing stopwords
9. **What is the Bag-of-Words (BoW) model?**
   * (A) A text representation method ignoring word order ✅
   * (B) A machine translation model
   * (C) A deep learning algorithm
10. **Which NLP task is used to classify the sentiment of a text?**

* (A) Sentiment Analysis ✅
* (B) Part-of-Speech Tagging
* (C) Machine Translation

**2. Machine Learning for NLP**

1. **Which machine learning models are commonly used in NLP?**

* (A) Naive Bayes ✅
* (B) Support Vector Machines ✅
* (C) CNNs (for vision tasks)

1. **What is TF-IDF used for?**

* (A) Measuring word importance in a document ✅
* (B) Translating text
* (C) Tokenization

1. **Which model is most commonly used for text classification?**

* (A) Logistic Regression ✅
* (B) K-Means
* (C) Decision Trees

1. **Which NLP model is used for predicting the next word in a sentence?**

* (A) Language Model ✅
* (B) Image Classifier
* (C) Tokenizer

1. **Which evaluation metric is used for classification problems in NLP?**

* (A) F1-score ✅
* (B) Mean Squared Error
* (C) PSNR

**3. Deep Learning for NLP**

1. **What does LSTM stand for?**

* (A) Long Short-Term Memory ✅
* (B) Linear Sequence Text Model
* (C) Logical Syntax Transformer Model

1. **Which deep learning models are used for NLP tasks?**

* (A) RNNs ✅
* (B) Transformers ✅
* (C) CNNs (for images)

1. **What is the main advantage of Transformers over RNNs?**

* (A) They process text in parallel ✅
* (B) They require less data
* (C) They do not use embeddings

1. **Which model introduced the Attention Mechanism?**

* (A) Transformer ✅
* (B) CNN
* (C) Naive Bayes

1. **Which famous model is based on Transformers?**

* (A) BERT ✅
* (B) ResNet
* (C) AlexNet

**4. Text Generation and Translation**

1. **Which model is commonly used for text generation?**

* (A) GPT ✅
* (B) VGG
* (C) SVM

1. **Which deep learning model is commonly used for machine translation?**

* (A) Seq2Seq with Attention ✅
* (B) Random Forest
* (C) K-means

1. **What is the purpose of word embeddings?**

* (A) Convert words into numerical representations ✅
* (B) Compress text
* (C) Remove stopwords

1. **Which model is commonly used for word embeddings?**

* (A) Word2Vec ✅
* (B) SVM
* (C) KNN

1. **Which NLP task is used to generate summaries of long documents?**

* (A) Text Summarization ✅
* (B) Text Tokenization
* (C) Named Entity Recognition