1. What is the main difference between the Skip-gram and CBOW models in word2vec?
   - a. Skip-gram predicts context words given a focus word, while CBOW predicts a focus word given context words.
   - b. Skip-gram and CBOW models have the same architecture and weight matrix generation.
   - c. Skip-gram is faster to train than CBOW for large corpora.
   - d. Skip-gram cannot capture multiple semantics for a single word.
2. How many vector representations of the word "Apple" can the Skip-gram model capture?
   - a. One
   - b. Two
   - c. Three
   - d. Four
3. Which model is recommended for implementing word2vec when dealing with a large corpus with higher dimensions?
   - a. Skip-gram
   - b. CBOW
   - c. Both Skip-gram and CBOW are equally suitable.
   - d. Neither Skip-gram nor CBOW is suitable.
4. What is the purpose of semantic analysis?
   - a. To draw exact meaning within two parts of a sentence.
   - b. To expand keywords search in information retrieval.
   - c. To study the meaning of individual words.
   - d. To combine individual words to provide meaning in sentences.
5. Which term refers to words that have meanings that are opposite to each other?
   - a. Synonyms
   - b. Antonyms
   - c. Homonyms
   - d. Polysemy
6. What type of homonyms are the words "right" and "write"?
   - a. Homographs
   - b. Homophones
   - c. Hypernyms
   - d. Hyponyms
7. Which term refers to words that have the same written form and related meanings?
   - a. Homonyms
   - b. Homophones
   - c. Synonyms
   - d. Polysemy
8. What is a hyponym?
   - a. A word that has the same written form but unrelated meanings.
   - b. A word that represents a subclass of another word.
   - c. A word that has the opposite meaning of another word.
   - d. A word that has multiple semantic representations.
9. What is a hypernym?
   - a. A word that represents a superclass of another word.
   - b. A word that sounds similar to another word but has different meanings.
   - c. A word that has the same written form but different meanings.
   - d. A word that captures multiple semantics for a single word.

10. When might you want to retrieve synonyms of query words in information retrieval?
   - a. When you want to expand the keywords search.
   - b. When you want to study the meaning of individual words.
   - c. When you want to combine individual words to provide meaning in sentences.
   - d. When you want to capture multiple semantics for a single word.

11. Which algorithm is better suited for a large corpus with higher dimensions?
   - a. Skip-gram
   - b. CBOW
   - c. Both Skip-gram and CBOW are equally suitable.
   - d. Neither Skip-gram nor CBOW is suitable.

12. What is the main difference between Skip-gram and CBOW models in word2vec?
   - a. Skip-gram is faster to train than CBOW.
   - b. CBOW can capture two semantics for a single word.
   - c. Skip-gram predicts context words given a focus word.
   - d. CBOW uses a different weight matrix generation.

13. What is the purpose of semantic analysis?
   - a. To draw exact meaning within two parts of a sentence.
   - b. To generate word embeddings.
   - c. To study the meaning of individual words.
   - d. To combine individual words to provide meaning in sentences.

Question 14: What is a confusion matrix?
A) A layout of algorithm performance visualization
B) A table layout of algorithm performance visualization
C) A measure of algorithm accuracy
D) A measure of algorithm precision

Question 15: What does accuracy measure?
A) How many correct results the algorithm managed to identify
B) The proportion of true results among the total cases examined
C) How good the algorithm is in general
D) The quality of the algorithm

Question 16: In which scenario is accuracy a good measure?
A) When data sets are symmetric
B) When precision and recall are balanced
C) When there are equal positive and negative values
D) When the algorithm performs well

Question 17: What does precision represent?
A) The fraction of relevant documents that were retrieved
B) The fraction of retrieved documents that are relevant
C) The ability to tradeoff precision against recall
D) The average of precision and recall values

Question 18: What does recall represent?
A) The fraction of relevant documents that were retrieved
B) The fraction of retrieved documents that are relevant
C) The ability to tradeoff precision against recall
D) The average of precision and recall values

Question 19: What is the F-score (F-measure)?

A) A measure of algorithm performance
B) A measure of precision and recall tradeoff
C) The average of precision and recall values
D) A fraction of retrieved relevant documents

Question 20: What does a higher F-score value indicate?
A) Better algorithm performance
B) Higher precision
C) Higher recall
D) Balanced precision and recall

Question 21: Which metric enables tradeoff between precision and recall?
A) Accuracy
B) F-Score
C) Confusion matrix
D) Recall

Question 22: What is the purpose of precision?
A) To measure algorithm performance
B) To evaluate the quality of the algorithm
C) To quantify the fraction of relevant documents
D) To balance precision and recall tradeoff

Question 23: What is the purpose of recall?
A) To measure algorithm performance
B) To evaluate the quality of the algorithm
C) To quantify the fraction of relevant documents
D) To balance precision and recall tradeoff

Question 24: What are the possible values of precision and recall?
A) Between 0 and 1
B) Between -1 and 1
C) Between 0 and 100
D) Any positive value

Question 25: Which metric considers the relevance of retrieved documents?
A) Accuracy
B) Precision
C) Recall
D) F-Score

Question 26: Which metric considers the fraction of true results?
A) Accuracy
B) Precision
C) Recall
D) F-Score

Question 27: Which metric approximately averages precision and recall?
A) Accuracy
B) Precision
C) Recall
D) F-Score

Question 28: How can you evaluate the quality of an algorithm?
A) By examining precision and recall values
B) By considering the confusion matrix layout
C) By calculating the proportion of true results
D) By measuring the fraction of relevant documents