Natural Language Processing
Assignment- 12
TYPE OF QUESTION: MCQ

Number of questions: 10   **Total mark: 10 X 1 = 10**

Question 1: Which of the following are indicators of Irrealis moods?

1. Words enclosed in quotes.
2. Conditional markers such as "If".
3. Questions.
4. All of the above

Answer: 4
Solution: Refer to Lecture 60 "Computing with Affective Lexicons".

Question 2: Let P(w|c) represent the probability of a word given its rating. Further, let P(w) represent the probability of the word in the overall corpus. While analyzing the polarity of a word in a given corpus, what is the intuition behind dividing P(w|c) by P(w)?

1. To make it comparable across different ratings.
2. To make it comparable across different words.
3. Both (1) and (2).
4. None of the above.

Answer: 2
Solution: Refer to Lecture 60 "Computing with Affective Lexicons".

Question3: Which of the following lexicons are appropriate for valence?

1. Aroused, wide-awake
2. dominant, autonomous
3. happy, satisfied
4. stimulated, excited

Answer: 3

Solution:
Refer lecture 62 of week 12

Question 4: Which of the following is/are false?

1. The words 'bad', 'problem' represents negative emotion
2. The words 'love', 'sweet' belong to the class of affective processes
3. The words 'perhaps', 'guess' don't belong to cognitive processes
4. 'relaxation' is an example of low arousal, high pleasure word

Answer: 3

Solution:
'perhaps', 'guess' they are under cognitive processes. Refer lecture 62 of week 12

Question 5: Which of the following is/are correct about Turney Algorithm

1. It uses Pointwise Mutual Information measure
2. Jaccard Coefficient also an be used to measure the co-occurence
3. This is used for phrase polarity task
4. It learns polarity of only a subset of phrase in the corpus

Answer: 1

Solution:
Jaccard coefficient is the correct metric for co-occurence measure in Turney algo, and this algo learns the polarity of each phrase

Question 6: Sentiment lexicons can be learned using intuitions such as:

1. Same polarity words are connected by "and"
2. Opposite polarity words are connected by "but"
3. Both (1) and (2)
4. None of the above

Answer: 3
Solution: Refer to Lecture 59 "Learning Affective Lexicons".

Question 7: Which of the following are true?

1. Emotions are instinctive and usually short-lived, whereas sentiments are more stable and valid for a longer period of time.

2. Polarity shift technique is performed to handle normalization problems
3. Sentiment lexicons can be learned using intuitions such as same polarity words are connected by "and.
4. 1 & 2

Answer: 1, 3
Solution:
Refer week 12 lecture

Question 8: Consider the sentence: "The sound was cool; but, the network quality and screen were very dull". Which of the following are true?

1. Aspect: "sound", Sentiment: Positive, Opinion Phrase: "cool".
2. Aspect: "screen", Sentiment: Negative, Opinion Phrase: "very dull".
3. Aspect: "were", Sentiment: Negative, Opinion Phrase: "very dull".
4. Only (1) and (3)

Answer: 1,2

Solution:
'were' is not a aspect term

Question 9: Which of the following is false?
a. Extraction of aspect-sentiment-opinion triplets is an easy task
b. Identification of Implicit aspects is challenging
c. Detecting same opinion phrases having different sentiments for different aspects is a challenging task
d. Aspect based sentiment analysis problem can be solved by deep learning framework

Answer: a
Solution: Refer to Week 12 Lecture 5.

Question 10: Consider the sentence: "The environment was great, however rent was very costly". Which of the following is/are true?

1. Aspect: "environment", Sentiment: Positive, Opinion Phrase: "great".
2. Aspect: "rent", Sentiment: Negative, Opinion Phrase: "very costly".
3. Aspect: "price", Sentiment: Negative, Opinion Phrase: "very costly".

4. Only (a) and (b)

Answer: 1, 2, 3
Solution: "price" is an implicit aspect.