JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION- 2024

B.Tech-I Semester (CSE/IT/ECE/CE)

COURSE CODE(CREDITS):23B1WHS831   MAX. MARKS: 35

COURSE NAME: INTRODUCTION TO SCIENCE OF LANGUAGE

COURSE INSTRUCTORS: Dr. Atul Kumar Singh   MAX. TIME: 2 Hours

Note: (a)All questions are compulsory.

(b)Marks are indicated against each question in square brackets.

(c) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

1. Disambiguate (resolve ambiguity of) the sentence "He jumped from a superfast train running at a 90 km speed" by drawing a phrase structure tree and paraphrasing, i.e. clarifying the two senses by rewriting. (3+2) [CO2]

2. Draw a phrase structure tree for the sentence "He has been my mentor since the beginning of my tenure." What all nodes will be dominated by VP? Show this in the tree. What all nodes will be C-Commanded by NP? Show this in the tree. (2+1.5+1.5) [CO2]

3. What is an implicature in semantics? In the sentence, "John used to be a great asset for us", what is the implicature? Create contexts to defeat and reinforce this implicature. (2+1.5+1.5) [CO2]

OR

What is presupposition in semantics? How is it different from entailment? Discuss with a detailed example. (2+1.5+1.5) [CO2]

4. What is entailment in semantics? How do you use truth-conditional semantics to show or reject entailment between two sentences? Use truth-conditional semantics to show that A and B together entail C. (1+1+3) [CO2]

   A. John is lying or Parvati is sleeping. B. Pravati is not sleeping. C. John is lying

5. What is called precedence in Syntax? Draw a tree for "He was lying unconsciously in the bar" and show all the nodes that are preceded by 'V'? (2.5+2.5) [CO2]

6. What is the difference between syllable and morpheme? Write down all the syllables and morphemes of words hippopotamus and cows. (2+1+1) [CO1]

7. Is the given sentence correct? $John_i$ said that he_j has not been true to $himself_k$. (1) [CO2]

8. Reflect on the statement "Linguistics can open newer horizons in different disciplines, such as, psychology, neurology, or even computer sciences". [5] [CO4]

OR

Write about the development of writing systems in history establishing the logical difference between a picture-based and an alphabet based writing system. (5) [CO4]