5BCA4 - Paper-IV : Computational Linguistics

P. Pages : 2

Time : Three Hours

GUG/S/18/3276

0464

Max. Marks : 80

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Notes : 1. All questions are compulsory and carry equal marks.
2. Draw well labelled diagram wherever necessary.
3. Avoid vague answers.

Either

1. a) What do you mean Artificial Intelligence Explain AI techniques. **8**

b) What is prolog? Explain why prolog is important for AI. **8**

OR

c) Explain cut and fail predicate with example. **8**

d) Write a note on : **8**

i) Pattern Recognition

ii) Heuristic search

Either

2. a) Explain Best-first search Algorithm in detail. **8**

b) Trace the constraint satisfaction procedure for solve the cryptarithmetic problem **8**

   SENO
+ <u>MORE</u>
  MONEY

OR

c) Explain mean-end-Analysis in detail. **8**

d) Discuss Breadth-first search algorithm in detail. **8**

Either

3. a) Explain following **8**

i) Prepositional Logic

ii) Predictive Logic

b) Write conversion to clause form algorithm and explain with example. **8**

OR

c) Consider the following sentences:- **8**

    i) Marcus was a man

    ii) Marcus was a Pompeian

    iii) All Pompeian's were Roman

    iv) All Romans were either Loyal to caesar or hated him.
       Translate above sentence in predicate logic

d) Explain Unification Algorithm in detail. **8**

Either:

4. a) Explain the structure representation of knowledge. **8**

b) What is translation? Explain types of translation. **8**

OR

c) What do you mean by keyword matching? Explain. **8**

d) Explain syntactic and semantic Analysis in detail. **8**

5. Solve all the questions.

a) Explain level of model in brief. **4**

b) Write a short note on production system. **4**

c) Explain Resolution in predicate logic. **4**

d) Explain Matching Translation in brief. **4**

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