

Roll No.:.....

National Institute of Technology, Delhi

Name of the Examination: M. Tech./ PhD.

Mid-Semester Examination Sept-Oct, 2019

Branch : EEE Semester : III
Title of the Course : AI Techniques & Applications Course Code : EEL612

Time: 2 Hours

Maximum Marks: 25

Note : All Questions are Compulsory and each carry equal marks

1. State & explain the following terms.

- Definition of Artificial Intelligence & its applications.
- Two differences between informed search and un-informed search.
- What do you understand by well-formed functions (WFFs) ?
- What do you understand by knowledge representation & reasoning (KRR) ?

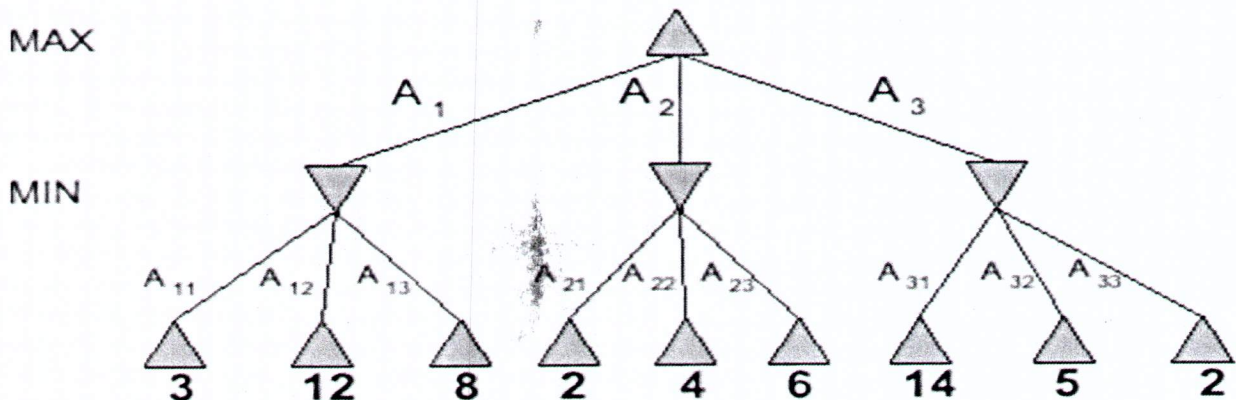
2. Translate English to first order logic

- No purple mushroom is poisonous. (ii) There are exactly two purple mushrooms.
- Every gardener likes the sun (iv) All purple mushrooms are poisonous

3. (i) Design the fuzzy logic architecture. (ii) Differentiate Crisp Vs Fuzzy.

- Any three Advantages of fuzzy logic systems

4. Solve the following tree using Min-Max algorithm.



P.T.O

4. Perform the A* Algorithm on the following figure. Explicitly write down the queue at each step.

