

B.Tech. Computer Science Engineering (NEP) Semester-II
STPCCINS205 - Fundamentals of Artificial Intelligence

P. Pages : 1



Time : Two Hours

GUG/S/25/16799

Max. Marks : 40

- Notes : 1. All questions carry equal marks.
2. Assume suitable data wherever necessary.
3. All questions are compulsory.

1. a) What is Artificial Intelligence and Briefly Explain Branches of AI? 7

- b) Define Turing Test and explain its significance in the context of AI? 7

OR

2. a) Provide a brief overview of the History and evolution of AI? 7

- b) Describe simple reflex agents & goal based agents with proper diagram? 7

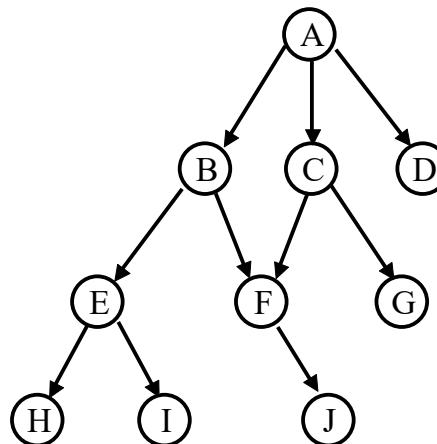
3. a) Discuss the following search technique with the help of an example? 7

- b) Define heuristics search and elaborate its types with an example? 6

OR

4. a) Explain the Hill Climbing Algorithm with a suitable example? 7

- b) Apply DFS algorithm on following graph, where start state is (A) & the desired goal state is (G), show the successive value of open and closed, and the traversed path. 6



5. a) How frames are used for knowledge representation. Explain using an example? 7

- b) Explain the knowledge representation using semantic Net with the help of an example? 6

OR

6. a) Explain the components of an expert system & give any four applications of expert system? 7

- b) Define Resolution. Differentiate between backward chaining and forward chaining? 6
