

51 : 2nd half 12-AM(i)
Con. 8425-12.

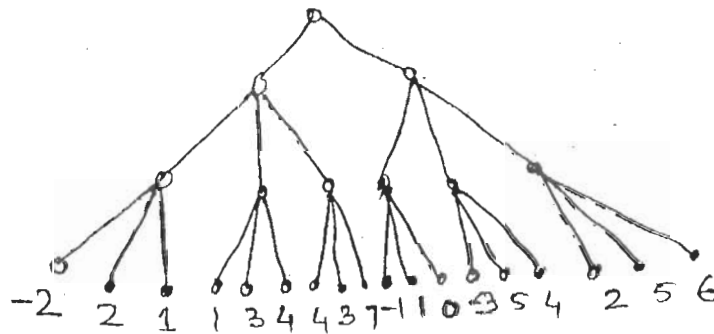
KR-1602

(3 Hours)

[Total Marks : 100

- N.B. :** (1) Attempt Question No. 1, which is **compulsory**.
(2) Attempt any **four** from **remaining** questions.

1. (a) What is AI ? Explain its components. 10
(b) What is Rational Agent ? Explain Goal based Agent. 10
2. (a) What is PEAS descriptor ? Explain PEAS descriptor for Taxi Driver Agent. 10
(b) Compare DFS and BFS with example. 10
3. (a) What is Hill Climbing Algorithm. Explain its problem and solution in brief. 10
(b) Explain Min-Max and Alpha Beta pruning algorithm with following example :-- 10



4. Consider following statements :— 20
 - (a) Ravi Likes all kind of food.
 - (b) Apple and Chicken are food.
 - (c) Anything anyone eats and is not Killed is food.
 - (d) Ajay eats peanuts and still alive.
 - (e) Rita eats everything that Ajay eats.

Prove that —

Ravi Likes Peanuts using resolution and what food does Rita eat.

5. (a) From the given table find the probability of having "No cavity when toothache is there". 10

	toothache		~ toothache	
	Catch	~ Catch	Catch	~ Catch
Cavity	.108	.012	.072	.008
~ Cavity	.016	.064	.144	.576

- (b) Explain Planning Algorithm for Spare Tyre Problem. 10

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6. (a) Explain Water Jug problem with State Space Search Method. **10**
(b) Explain Decesion Tree in brief. **10**
7. Write short notes on any **two** of the following :— **20**
(a) Ontology
(b) Agent Communication
(c) Neural Network.
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