

Reg. No.:

Name :



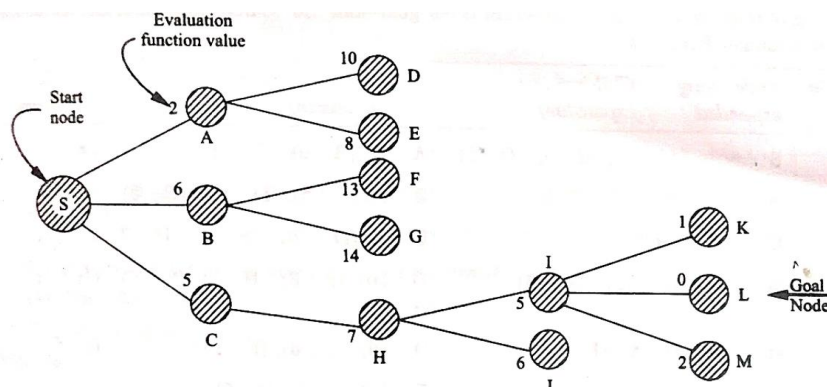
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**Mid-Term Examinations – October 2021**

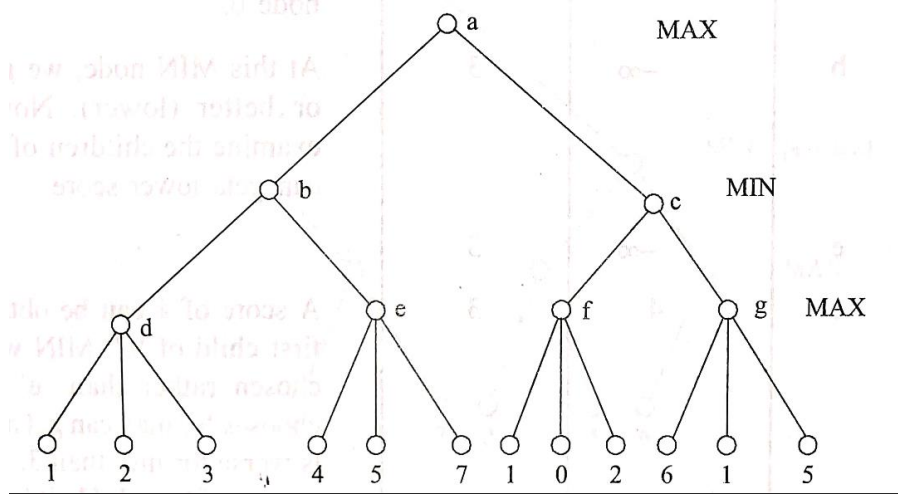
Programme	: <b>B.Tech.</b>	Semester	: <b>Fall 2021-22</b>
Course	: <b>FUNDAMENTALS IN AI and ML</b>	Code	: <b>CSA2001</b>
Faculty	: <b>Dr. Rakhi</b>	Slot/ Class No.	: <b>A11+A12+A13/0039</b>
Time	: <b>1 ½ hours</b>	Max. Marks	: <b>50</b>

**Answer all the Questions**

Q.No.	Sub. Sec.	Question Description	Marks
1		Write the PEAS sequence for the following agents: (i) Playing Cricket Match (ii) Completion of software project (iii) Online shopping for mobile phone (iv) Performance in Examination (v) Offline tutor	10
2	(a)	Explain the below mentioned AI Definition modules using suitable example: (i) Systems that act like humans (ii) Systems that think rationally	5
	(b)	How can you solve a problem using production system? Explain the tic-tac-toe problem in this context.	5
3		What will be the output (Sequence of states) if you perform the following search algorithms on the search tree: (i) Breadth First Search (ii) Depth First Search (iii) Best First Search	



4		Perform Min-Max strategy to find the values of nodes from a-g and also find out which nodes will be pruned using Alpha-Beta Pruning:	10
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5

Assume the following facts:

- (a) Steve only likes easy courses.
- (b) Science courses are hard
- (c) All courses in the basket weaving department are easy
- (d) BK123 is a basket weaving course.

10

Use resolution to answer the question:

“What course would Steve like?”

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