THAKUR COLLEGE OF ENGINEERING & TECHNOLOGY

Autonomous College Affiliated to University of Mumbai

Approved by All India Council for Technical Education (AICTE) and Government of Maharashtra (GoM)

Estd. in 2001

IN-SEMESTER EXAMINATION (ISE-II) March, 2023

ST (Semester-IV) CBCGS-HME 2020

INTRODUCTION TO ARTIFICIAL INTELLIGENCE

Branch: AI&DS | **Date: 29 / 03 /2023**

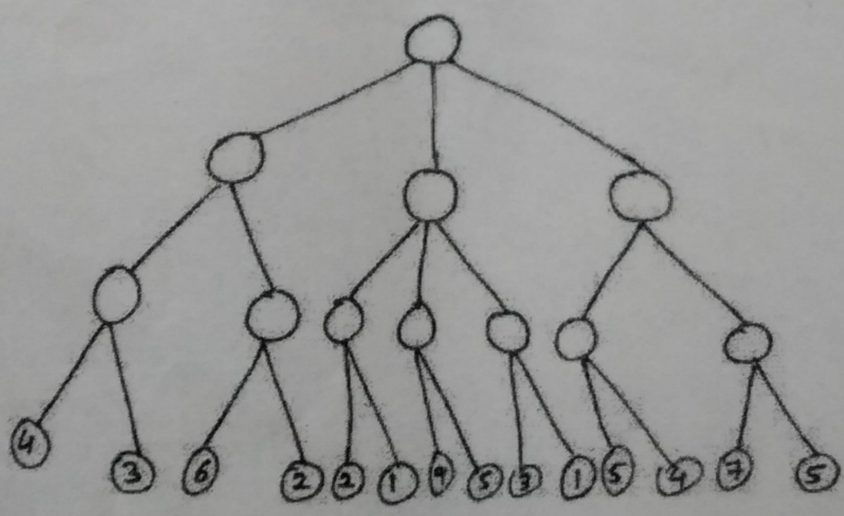
Div.: A | **Timing: 10 am to 11 am**

Duration: 60 Minutes | **Maximum Marks: 20**

Instructions –

1. All questions are compulsory.
2. Assume suitable data wherever necessary and state the assumptions made.
3. Diagrams / sketches should be given wherever necessary.
4. Figures to the right indicate full marks.

			Marks	CO	LO
Q.1		**Solve any 5 Questions.**			
	a.	Explain properties and limitation of Minmax search.	02	4	R
	b.	Explain Move Ordering in Alpha-Beta pruning	02	3	U
	c.	Explain different varieties of constraints in CSPs.	02	4	U
	d.	Describe the ways to counter the Horizon effect ?	02	3	R
	e.	Solve using cryptarithmetic: SUN + FUN = SWIM	02	4	A
	f.	Explain in brief: The Horizon Effect.	02	3	U
	g.	Explain the representation of CSP. Write 2 real world example of CSP.	02	3	U
Q.2.	**a.**	Maximize the function f(x) = X2 + 2X with x in interval [0 , 31]. **(Take X as 6, 14, 19, 23, 27)**	05	3	A
		OR			
	b.	Solve the given tree by using Alpha – beta Pruning and find the optimum path for the same.	05	3	A



			Marks	CO	LO
Q.3	**a.**	Solve using cryptarithmetic: SOME + TIME = SPENT	05	4	A
		OR			
	b.	Explain Minimax Search algorithm with an example	05	4	A

2025/1/26 22:00