Seat No:

MIT ACADEMY OF ENGINEERING

COURSE CODE: CS312T **24 DECEMBER 2018**

TY BTECH SEMESTER - V 2018 - 2019 EXAMINATION

SCHOOL OF COMPUTER ENGINEERING & TECHNOLOGY

END COURSE EXAMINATION

ARTIFICIAL INTELLIGENCE AND NEURAL NETWORKS

TIME : 3 HOURS **MAX MARKS : 100 MARKS**

TOTAL NO OF QUESTIONS: 5 **TOTAL NO OF PRINTED PAGES: 2**

INSTRUCTIONS TO CANDIDATES:

1. Assume suitable data wherever necessary
2. Non programmable scientific calculators are allowed
3. Black figures to the right indicate full marks

1	**a)**	Discover the functioning of autonomous agents using real time instance. Concept: 2M Working using instance: 8 M	**[10]**	**CO1**	**L4**
	b)	How and where to apply GPS navigation System. Justify your answer with suitable algorithm. Procedure with usage: 5 M Explanation with algorithm: 5 M	**[10]**	**CO2**	**L5**
2	**a)**	Why Prolog is used in CSP. Illustrate with example. Reason: 2 M Description with instance: 8 M	**[10]**	**CO3**	**L2**
	b)	Make use of any App to explore task of WebQR. Specification of App: 2 M Explanation with task specification and procedure: 8 M	**[10]**	**CO4**	**L3**
3	**a)**	Explain deterministic games used in CSP Concept: 2M Description using instance: 8 M	**[10]**	**CO3**	**L2**
	b)	Explain reasoning and knowledge representation with WUMPUS world example. Concept: 2 M Explanation with instance: 8 M	**[10]**	**CO4**	**L2**
4	**a)**	Construct Expert System and its shell under MYCIN for knowledge acquisition. Explain in detail.	**[12]**	**CO5**	**L3**

Definitions (both) : 2 M Working in detail: 10 M

	b]	Define following terminologies with example: 1] Semantic Networks 2] Frames Definition: 4 M Explanation with instance: 4 M	**[8]**	**CO4**	**L1**
5	**a)**	Relate Artificial Neural Network with biological Neural Network with example. Concept: 2 M Explanation with instance: 8 M	**[04]**	**CO6**	**L2**
	b)	Draw 4 common activation function of neuron.Demonstrate Perceptron Learning rule using step function. Diagrams: 4 M Explanation with step function: 8 M	**[10]**	**CO6**	**L2**
	c)	Explain any two applications of ANN in detail with diagram. Explanation with diagram: 6 M	**[06]**	**CO6**	**L2**