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SEAT No. :

PD-400

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[6411]-193

B.E. (Artificial Intelligence and Data Science) (Insem.)

REINFORCEMENT LEARNING

(2019 Pattern)(Semester - VIII) (417533(D)) (Elective-VI)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Answer Q.1 or Q.2, Q.3 or Q.4.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate frill marks.*
- 4) *Assume suitable data, if necessary.*

Q1) a) Explain Reinforcement Learning with examples. [8]

b) List out the scope and limitations of reinforcement learning. [7]

OR

Q2) a) 'What are the elements of Reinforcement learning [8]

b) Give few applications where reinforcement learning can be combined with different machine learning algorithms. [7]

Q3) a) Explain the Markov Property in detail. [7]

b) What is Bellman equation? Write the process to solve Bellman equation.[8]

OR

Q4) a) Explain in detail the concept of The infinite Horizons and Utility of Sequences? [8]

b) Explain the concept of Partially Observable Markov Decision Proccss with the help of suitable example. [7]

