

Total No. of Questions : 4]

SEAT No. :

**PE121**

[Total No. of Pages : 1

[6579]-429

**T.E. (Artificial Intelligence and Data Science) (Insem)**  
**ARTIFICIAL INTELLIGENCE**  
**(2019 Pattern) (Semester - I) (310253)**

*Time : 1 Hour]*

*[Max. Marks : 30*

*Instructions to the candidates:*

- 1) Answer four questions (Q.1 or Q.2), (Q.3 or Q.4).
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Assume suitable data, if necessary.

**Q1)** a) Define Artificial Intelligence, Intelligent Agent and its use. [5]

b) List advantages of Artificial Intelligence. [5]

c) Describe Learning Agent Architecture with diagram. [5]

OR

**Q2)** a) Write a note on 'Evaluation of search strategy'. [5]

b) Explain different search strategies. [5]

c) What is Heuristic function? [5]

**Q3)** a) Describe Hill climbing search with suitable example. List disadvantage of hill climbing process. [10]

b) Differentiate between Blind search and Heuristic search. [5]

OR

**Q4)** a) List steps involved in simple problem solving technique with suitable example. [7]

b) Explain A\* algorithm with suitable example. [8]

