

Total No. of Questions : 5]

PD2736

[6430]-86

S.Y.M.B.A.

**404BA-SC-BA-06 : ARTIFICIAL INTELLIGENCE IN BUSINESS APPLICATIONS**

**(2019 Revised Pattern) (Semester - IV)**

*Time : 2½ Hours]*

*[Max. Marks : 50*

*Instructions to the candidates:*

- 1) *All questions are compulsory.*
- 2) *Neat diagram must be drawn wherever necessary.*
- 3) *Assume suitable data, if necessary.*

**Q1) Answer any 5 out of 8 :**

**[10]**

- a) Define the term entropy in decision tree learning.
- b) What is the primary objective of hill-climbing search?
- c) What are the elements of predicate logic?
- d) Define first order logic.
- e) State uniform-cost search.
- f) Define Complexity of Analytics.
- g) Define Data and Big Data.
- h) What is PROLOG?

**Q2) Answer any 2 out of 3 :**

**[10]**

- a) What is the difference between Depth-First Search and Breadth-First Search?
- b) What is the common way to represent and parse Grammars for natural language processing?
- c) Explain in detail A\* searching technique with an example.

**P.T.O.**

**Q3)** Answer 3 (a) or 3 (b) :

a) Explain Clustering with an example.

[10]

OR

b) Discuss the Machine Learning Workflow.

[10]

**Q4)** Answer 4 (a) or 4 (b) :

a) What is Artificial Intelligence? Explain applications of Artificial Intelligence.

[10]

OR

b) What is NLP? What are the stages in NLP?

[10]

**Q5)** Answer 5 (a) or 5 (b) :

a) What are the applications of neural network?

[10]

OR

b) Explain any two informed searches.

[10]

