

Total No. of Questions: 5]

SEAT No. :

PB4741

[6201]-416

[Total No. of Pages :2

S.Y.M.B.A.

**SC-BA06: ARTIFICIAL INTELLIGENCE IN BUSINESS
APPLICATIONS**

(Revised 2019 Pattern) (Semester-IV) (404BA)

Time : 2½ Hours]

[Max. Marks : 50

Instructions to the candidates:

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

Q1) Answer any 5 out of 8

[10]

- a) Define the term Semantic.
- b) What is the full form of ANN and DNN?
- c) What is Boltzmann Machine?
- d) Define Clustering.
- e) What is parsing?
- f) Define Data Analysis.
- g) Define the term "heuristic search".
- h) Define terms 'Fact' and 'Rule'.

Q2) Answer any 2 out of 3 :

[10]

- a) What is the difference between forward and backward chaining?
- b) What is the common way to represent and parse Grammars for natural language processing?
- c) Explain in detail DNN and its tools.

P.T.O.

Q3) Answer 3(a) or 3(b): **[10]**

a) Explain in brief k-Means Algorithm.

OR

b) Discuss the role of reasoning in AI. How predicate logic is used in AI to represent the knowledge? **[10]**

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

a) Explain with an example Random Forest algorithm. **[10]**

OR

b) Define ANN and explain the basic structure of ANN. Give an example of a real-world application of neural networks. **[10]**

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

a) Name one application area where knowledge-based systems are commonly used. Briefly explain how they assist in decision-making processes. **[10]**

OR

b) What is NLP? Explain in brief use cases of NLP? **[10]**

