

Total No. of Questions : 5]

SEAT No. :

PC-3001

[Total No. of Pages : 2

[6380] - 78

M.B.A.

**SC-BA-06- (404BA) ARTIFICIAL INTELLIGENCE IN
BUSINESS APPLICATION
(2019 Pattern) (Semester - IV)**

Time : 2½ Hours]

[Max. Marks : 50

Instruction to the candidates:

- 1) *All questions carry equal marks.*
- 2) *Figures to the right indicate full marks.*
- 3) *Neat diagrams must be drawn wherever necessary*

Q1) Solve any five (2 marks each) :

- a) Explain Basic Concepts of Artificial Intelligence Brain Science
- b) Define Backward chaining
- c) Define Breadth - First search
- d) Explain K-Nearest - Neighbor classifiers.
- e) What is decision tree
- f) What is Natural Language Processing
- g) Define Heuristic Search
- h) Explain Propositional logic

Q2) Solve any two (5 marks each) :

- a) Explain stages of NLP
- b) Difference between Supervised and Unsupervised machine learning
- c) What do you understand by expert system? Discuss its advantages.

P.T.O.

Q3) Solve any one (10 marks each) :

- a) Discuss the application of NLP in Machine Translation.
- b) Explain the data mining functionalities.

Q4) Solve any one (10 marks each) :

- a) What is Machine Learning? Why Machine Learning must be performed? Explain its types.
- b) List some of the uninformed search techniques.

Q5) Solve any one (10 marks each) :

- a) Solve the water Jug problem: you are given 2 jugs, a 4-gallon one and 3 gallon one Neither has any measuring maker on it. There is a pump that can be used to fill the jugs with water. How can you get exactly 2 gallons of water into 4-gallon jug? Explicit assumptions: A jug can be filled from the pump, water can be poured out of a jug onto the ground. Water can be poured from one jug to another and that there are no other measuring devices available.
- b) Design a business application using ANN to a pattern recognition with example?

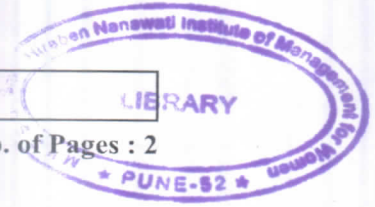


Total No. of Questions : 5]

P-7982

SEAT No. :

[Total No. of Pages : 2



[6118]-78

M.B.A.

**SC-BA-06(404BA) : ARTIFICIAL INTELLIGENCE IN
BUSINESS APPLICATIONS
(2019 Pattern) (Semester - IV)**

Time : 2½ Hours]

[Max. Marks : 50

Instructions to the candidates:

- 1) *Neat diagrams must be drawn wherever necessary.*
- 2) *Figures to the right indicate full marks.*
- 3) *All questions carry equal marks.*

Q1) Solve any five (2 marks each) :

[10]

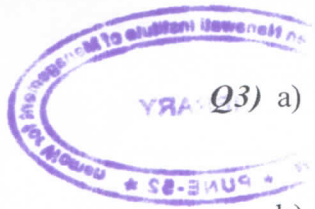
- a) What is AI?
- b) What is embedding AI into Business process?
- c) Define Backward chaining.
- d) What are the elements of propositional logic?
- e) Define Heuristic search.
- f) Define Deep learning.
- g) What is decision tree?
- h) Define Artificial Neural Network (ANN).

Q2) Solve any Two. (5 Marks each)

[10]

- a) Explain stages of NLP.
- b) What are the advantages and disadvantages of AI on society?
- c) Difference between logic programming and PROLOG.

P.T.O.



Q3) a) Discuss the machine learning work flow.

[10]

OR

b) Explain the process of mining the World Wide Web (WWW) with various types of web mining?

Q4) a) Describe train model using machine learning algorithm, Test model.[10]

OR

b) Give the structure of an agent in an environment.

Q5) a) Draw and Explain the architecture of Conventional/Neural Network.[10]

OR

b) List the criteria to measure the performance of search strategies.



Total No. of Questions : 5]

P-3797

[6025]-86

M.B.A.

**404-BA-SC-BA-06 : ARTIFICIAL INTELLIGENCE IN
BUSINESS APPLICATIONS
(2019 Pattern) (Semester - IV)**

Time : 2½ Hours!

[Max. Marks : 50]

Instructions to the candidates :

- 1) *Neat diagrams must be drawn wherever necessary.*
- 2) *Figures to the right indicate full marks.*
- 3) *All questions carry equal marks.*

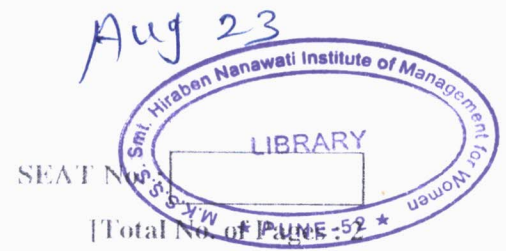
Q1) Solve any five (2 marks each) :

- a) What is Artificial Intelligence?
- b) Explain Predicate Logic.
- c) Define Depth-First Search.
- d) Define K-Means algorithm.
- e) What is machine learning?
- f) Define Artificial Neural Networks (ANN).
- g) What are the techniques used in data mining?
- h) What are the elements of propositional logic?

Q2) Solve any two (5 marks each) :

- a) What are the advantages and disadvantages of AI and society?
- b) Explain stages of NLP.
- c) Difference between supervised and unsupervised machine learning.

P.T.O.



Q3) Solve any one (10 marks each) :

- a) Discuss the Applications of NLP in Business Customer Services.

OR

- b) Discuss the Machine Learning Workflow.

Q4) Solve any one (10 marks each) :

- a) Explain the process of mining the World Wide Web with various types of web mining.

OR

- b) List the criteria to measure the performance of search strategies.

Q5) Solve any one (10 marks each) :

- a) What is the difference between Simple Hill Generate and Test algorithm climbing?

OR

- b) Draw and explain the architecture of Convolutional/Neural network.

6 Sep 22

Total No. of Questions : 5]

P7483

SEAT No. :

[Total No. of Pages : 2

[5860]-416

S.Y.M.B.A.

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

(404BA)

(2019 Pattern) (Semester-IV)

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 :

[2 Marks each]

- a) Define Artificial intelligence?
- b) Define first order logic.
- c) State Breadth-First search.
- d) Define machine learning.
- e) Define Hierarchical clustering.
- f) Define Artificial Neural Networks.
- g) Define terms 'Fact' and 'Rule'.
- h) State uniform-cost search.

Q2) Answer any 2 out of 3 :

[10]

- a) Distinguish between forward and backward chaining.
- b) What is the common way to represent and parse grammars for natural language processing?
- c) Explain state space approach for solving any AI problem.

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

[10]

- a) Discuss the role of reasoning in AI. How predicate logic is used in AI to represent knowledge?
- b) Explain A * searching technique in detail with example. Discuss conditions for the optimality of this technique.

P.T.O.

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

[10]

- a) What are steps involved in natural language processing (NLP) of an English sentence? Explain with an example sentence.
- b) Give an example of a problem for which breadth first search would work better than depth-first search.

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

[10]

- a) Write in detail about any two informed search strategies.
- b) Distinguish ambiguity and disambiguation in AI.

