PAPER ID-411730

Roll No: ☐☐☐☐☐☐☐☐☐☐☐☐☐

BTECH
(SEM I) THEORY EXAMINATION 2021-22
AI FOR ENGINEERING

Time: 3 Hours   *Total Marks: 100*
Note: Attempt all Sections. If you require any missing data, then choose suitably.

SECTION A

1. **Attempt *all* questions in brief.**   **2x10 = 20**

Qno	Questions	Marks	CO
(a)	What do you understand by the term "Intelligence"?	2	1
(b)	What do you understand by the term data in the field of Artificial Intelligence?	2	2
(c)	What is Speech Recognition in the field of Artificial Intelligence??	2	3
(d)	Define "Neuron" in the field of Artificial Intelligence?	2	4
(e)	What is Object Recognition in the field of Image Processing?	2	5
(f)	Define the term Pixel?	2	1
(g)	Explain the term "Algorithm and its basic Properties?	2	2
(h)	List Any two Real-life applications of Natural Language Processing.	2	3
(i)	List some Applications of Deep Learning in the field of Artificial Intelligence?	2	4
(j)	What is Speech Recognition in Artificial Intelligence?	2	5

SECTION B

2. **Attempt any *three* of the following:**   **10x3 = 30**

Qno	Questions	Marks	CO
(a)	Describe the four categories under which AI is classified with examples.	10	1
(b)	Discuss different Stages in Data Processing.	10	2
(c)	What is Natural Language Processing? Discuss with some applications.	10	3
(d)	Explain the Universal Approximation Theorem in detail.	10	4
(e)	What is need and use of the concept of Image and face recognition Learning in the field of Artificial Intelligence?	10	5

SECTION C

3. **Attempt any *one* part of the following:**   **10x1 = 10**

Qno	Questions	Marks	CO
(a)	Explain the term Computational Intelligence in brief in the field of Artificial Intelligence	10	1
(b)	Write Short note on Classification of Data.	10	2

4. **Attempt any *one* part of the following:**   **10x1 = 10**

Qno	Questions	Marks	CO
(a)	Explain the concept of Natural Language Understanding and Natural Language Generation?	10	3
(b)	What is Deep learning the field of Artificial Intelligence? Explain its Application and history in brief.	10	4

5. **Attempt any *one* part of the following:**   **10x1 = 10**

Qno	Questions	Marks	CO
(a)	What's the Difference Between Robotics and Artificial Intelligence?	10	5
(b)	Write about the Emerging Technologies the field of AI.	10	1

6. **Attempt any *one* part of the following:**   **10x1 = 10**

Qno	Questions	Marks	CO
(a)	What is Data Clustering? Explain anyone Clustering method in details.	10	2
(b)	Describe the different Components of a Typical Conversational Agent?	10	3

7. **Attempt any *one* part of the following:**   **10x1 = 10**

Qno	Questions	Marks	CO
(a)	Explain Generative Adversarial Network in brief.	10	4
(b)	What are Robots in the field of Artificial Intelligence? Explain its characteristics.	10	5