

| | | | Subj | ect | Cod | e: K | MC | 2101 |
|--|--|--|------|-----|-----|------|----|------|
| | | | | | | | | |

B.TECH

Roll No:

(SEM I) THEORY EXAMINATION 2020-21

ARTIFICIAL INTELLIGENCE FOR ENGINEERS

Time: 3 Hours

Total Marks: 100

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief.

| Q no. | Question | Marks | CO |
|-------|--|-------|----|
| a. | What is meant by ethical approach? | 2 | 1 |
| b. | Define AI. | 2 | 1 |
| c. | Differentiate between data and information. | 2 | 2 |
| d. | What is data clustering? | 2 | 2 |
| e. | List any 2 applications that use speech recognition. | 2 | 3 |
| f. | What is parsing in NLP? | 2 | 3 |
| g. | Define neuron. | 2 | 4 |
| h. | What is the biggest advantage of deep learning? Support your answer. | 2 | 4 |
| i. | List any 2 uses of computer vision technology. | 2 | 5 |
| j. | Define pixel. | 2 | 5 |

SECTION B

2. Attempt any *three* of the following:

| a. | Discuss the future and evolution of AI in detail | 10 | 1 |
|----|--|----|---|
| b. | Discuss different stages of data processing. | 10 | 2 |
| c. | Explain the speech recognition system in detail. | 10 | 3 |
| d. | Explain The Universal Approximation Theorem. | 10 | 4 |
| e. | Discuss the advantages & challenges of face recognition system | 10 | 5 |

SECTION C

Attempt any one part of the following: 3. What is computational intelligence? Explain n brief. 10 1 a. How artificial intelligent systems are different from traditional systems? 10 b. 1 Discuss with example. Attempt any one part of the following: 4. What is Data visualization? Explain in detail. 10 2 a. Write short notes on Classification of data 2 b. 10 Attempt any one part of the following: 5. What is Machine translation? How is it helpful for differently abled a. 10 3 persons? What are chatbots? Explain its advantages. 10 3 b. Attempt any one part of the following: 6. What is neural network? Discuss recurrent neural network in detail 10 4 a. How deep learning mimics human brain? Explain its limitations. 10 4 b. Attempt any *one* part of the following: 7. Discuss various applications of Ai in real world. 5 10 a. Write short notes on Object Recognition and Intelligent Robots b. 10 5