Paper Code: IB431

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| **DIT UNIVERSITY, DEHRADUN**   |  |  | | --- | --- | | **B. TECH (CSE-IOT)** | **END TERM EXAMINATION, ODD SEM 2022-23 (SEM VII)** | | | | | | | | | | | | | | |
| **Roll No.** | |  |  |  |  |  |  |  |  |  |  |  |  |
| **Subject Name: Artificial Intelligence and Weather systems** | | | | | | | | | | | | | |
| **Time: 3 Hours** | **Total Marks: 100** | | | | | | | | | | | | |
| **Note: All questions are compulsory. No student is allowed to leave the examination hall before the completion of the exam.**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Q.1)** | **Attempt all Parts:** | | **BTL** | **CO** | |  | (a) | Explain the following terms:   1. Image Classification 2. Tagging | L2 | CO1 | |  | (b) | Discuss in short about Computer vision. | L1 | CO2 | |  | (c) | Explain the term NLP with the help of example. | L3 | CO4 | |  | (d) | Differentiate between human and AI in NLP. | L2 | CO4 | |  |  | **[4 x 5= 20]** |  |  | | **Q.2)** | **Attempt all Parts:** | | **BTL** | **CO** | |  | (a) | Discuss about all the NLP component and their roles. | L2 | CO3 | |  | (b) | How NLP can used in Business in different domains? | L1 | CO5 | |  | (c) | Explain UIMA in short. | L2 | CO4 | |  | (d) | How artificial Intelligence responds to any asked question? | L2 | CO5 | |  |  | **[4 x 5= 20]** |  |  | | **Q.3)** | **Attempt any Two Parts:** | | **BTL** | **CO** | |  | (a) | What are virtual bots? Explain IBM Watson service that is used to create bots on IBM cloud. | L3 | CO2 | |  | (b) | Explain the AI Vision through Deep Learning in detail. | L2 | CO4 | |  | (c) | Discuss about multiple layers or multi-perceptron with example. | L2 | CO3 | |  |  | **[2 x 10= 20]** |  |  | | **Q.4)** | **Attempt any Two Parts:** | | **BTL** | **CO** | |  | (a) | Demonstrate Roles and key components of perceptron to perceptron. | L3 | CO2 | |  | (b) | Differentiate deterministic static and self-improvement with examples. | L3 | CO1 | |  | (c) | Explain the difference between brute statics and machine learning. | L2 | CO4 | |  |  | **[2 x 10= 20]** |  |  | | **Q.5)** | **Attempt any Two Parts:** | | **BTL** | **CO** | |  | (a) | Compare the neuron with perceptron and explain the working of both. | L5 | CO5 | |  | (b) | Explain briefly about Gradient Descent Algorithm. | L2 | CO5 | |  | (c) | Differentiate among Machine Learning, Deep Learning and Artificial Intelligence. | L2 | CO4 | |  |  | **[2 x 10= 20]** |  |  | | **-----END OF PAPER ----** | | |  |  | | | | | | | | | | | | | | |