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 **SRM Institute of Science and Technology**

**College of Engineering and Technology**

**School of Computing**

**DEPARTMENT OF NETWORKING AND COMMUNICATIONS**

SRM Nagar, Kattankulathur – 603203, Chengalpattu District, Tamilnadu

**Academic Year: 2022-23 (EVEN) BATCH 2**

**Test: CLAT-3**  **Date:** 09-05-2023

**Course Code & Title: 18CSC305J Artificial Intelligence**

**Duration:** 10 Minutes

**Year & Sem:** III / VI **Max. Marks:** 5

**Course Articulation Matrix (CAM)**

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| **Course Learning Outcomes (CLO)** | **At the end of this course, learners will be able to:** | **PO 1** | **PO 2** | **PO 3** | **PO 4** | **PO 5** | **PO 6** | **PO 7** | **PO 8** | **PO 9** | **PO 10** | **PO 11** | **PO 12** |
| **CLO-5** | Design an expert system and implement natural language processing techniques | M | H |  |  |  | - | - | - | M | L | - | H |
| **CLO-6** | Implement advance techniques in Artificial Intelligence | L | H |  |  |  |  |  |  | H | L |  | H |

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| **Part – A**  **(5 x 1 = 5 Marks)**  **Answer all questions** | | | | | | |
| **Q. No** | **Question** | **Marks** | **BL** | **CO** | **PO** | **PI Code** |
| 1. | ………… is an iterative method that fine-tunes the weight of an observation according to the most recent classification   1. Bagging 2. **Boosting** 3. Stacking 4. Queuing | 1 | BL1 | 4 | 1 | 1.1.4 |
| 2. | Pick the expert system that detects cancer at early stages   1. **CaDet** 2. MYCIN 3. DENDRAL 4. DIPMETER | 1 | BL1 | 5 | 1 | 1.1.4 |
| 3. | Select the suitable learning technique that solves a specific type of problem where decision making is sequential, and the goal is long-term, such as game-playing, robotics     1. Supervised Learning 2. Unsupervised Learning 3. **Reinforcement Learning** 4. Semi Supervised Learning | 1 | BL2 | 4 | 2 | 2.1.1 |
| 4. | Write the goal state representation for the below block world problem  Goal State:     1. **on(A, table) ^ on(B, table) ^ on(C, table) ^ clear(A) ^ clear(B) ^ Clear(C) ^ empty\_hand** 2. on(A, table) ^ on(B, table) ^ on(C, table) 3. on(A, table) V on(B, table) V on(C, table) 4. on(A, table) ^ on(B, table) ^ on(C, table) ^ clear(A) ^ clear(B) ^ Clear(C) | 1 | BL2 | 5 | 2 | 2.1.1 |
| 5. | Identify the true statement about the pooling layer in Convolution Neural Network.  I. Pooling layers are applied before the convolutional layer.  II. It reduces the size of feature maps, which in turn makes computation faster because the number of training parameters is reduced.  III. It combines each group of the outputs of the previous layer into a single neuron   1. I only 2. II only 3. I and III 4. **II and III** | 1 | BL1 | 5 | 2 | 2.3.1 |