# NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA <br> (An Autonomous Institute) <br> Affiliated to Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh, Lucknow M.TECH 

FIRST YEAR (SEMESTER-II) THEORY EXAMINATION (2020-2021)
(Objective Type)

## Subject Code: AMTAI0201

Subject: Machine Learning

Max. Mks. : 40
Time : 70 Minutes

## General Instructions:

Il questions are compulsory
Question No- 1 to 5 are objective type question carrying 2 marks each.
Question No- 6 to 20 are also objective type/Glossary based question carrying 2 marks each.

| Q.No | Question Content | Question Image | Category | Sub Category | Marks | $\begin{gathered} \hline \text { Options } \\ \text { Randomization } \\ \hline \end{gathered}$ | Type | Difficulty | Correct | Option1 | Option2 | Option3 | Option4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Which of the following algorithm are not an example of ensemble learning algorithm? |  | Single Choice Questions | Single Choice Questions | 2 |  | Single Choice | Brilliant | Decision Trees | Random Forest | Extra Trees | Gradient Boosting | Decision Trees |
| 2 | Where does the Bayes rule can be used? |  | Single Choice Questions | Single Choice Questions | 2 |  | Single <br> Choice | Brilliant | Answering probabilistic query | Solving queries | Increasing complexity | Decreasing complexity | Answering probabilistic query |
| 3 | What is the name of node which take binary values TRUE (T) OR FALSE (F)? |  | Single Choice Questions | Single Choice Questions | 2 |  | Single Choice | Brilliant | Binary Node | Dual Node | Binary Node | Two-way Node | Ordered Node |
| 4 | Function of dendrites is: |  | Single Choice Questions | Single Choice Questions | 2 |  | Single <br> Choice | Smart | Receptors | Receptors | Transmitter | Both receptor \& transmitter | None of the Above |
| 5 | Which of the following are not learning methods in ML? |  | Single Choice Questions | Single Choice Questions | 2 |  | Single Choice | Smart | Human Prediction Learning | Supervised Learning | Human Prediction Learning | Semi-Supervised Learning | Un-Supervised Learning |
| 6 | Where does Bayes rules can be used_ |  | Glossary I | Glossary I | 2 |  | Single Choice | Brilliant | Answering <br> Probabilistic Queries | Artificial Neural Network | Discrete and Continous | Answering <br> Probabilistic Queries |  |
| 7 | The full form of ANN\  |  | Glossary I | Glossary I | 2 |  | Single <br> Choice | Brilliant | Artificial Neural Network | Artificial Neural Network | Discrete and Continous | Answering Probabilistic Querie |  |
| 8 | In Baysian Network Variable is\  |  | Glossary I | Glossary I | 2 |  | Single <br> Choice | Brilliant | Discrete and Continous | Artificial Neural Network | Discrete and Continous | Answering <br> Probabilistic Queries |  |
| 9 | Support Vector Machine (SVM) can be used for $\qquad$ |  | Glossary II | Glossary II | 2 |  | Single Choice | Brilliant | classification and Regression | classification and Regression | Line | Decision Boundaries |  |
| 10 | In SVM, Hyper-plane is a |  | Glossary II | Glossary II | 2 |  | Single Choice | Smart | Decision Boundaries | classification and Regression | Line | Decision Boundaries |  |
| 11 | In SVM, if the number of input features is 2, then the Hyper-\ plane is a |  | Glossary II | Glossary II | 2 |  | Single Choice | Smart | Line | classification and Regression | Line | Decision Boundaries\  |  |
| 12 | A decision tree created with the aim to achieve very minimal entropy may result in $\qquad$ |  | Glossary III | Glossary III | 2 |  | Single <br> Choice | Brilliant | Over-Fitting | Over-Fitting | Under-Fitting\  | Top-Down |  |
| 13 | Pre-pruning the decision tree may result in $\qquad$ |  | Glossary III | Glossary III | 2 |  | Single Choice | Brilliant | Under-Fitting\  | Over-Fitting | Under-Fitting\  | Top-Down |  |
| 14 | A decision tree is built in _____ fashion |  | Glossary III | Glossary III | 2 |  | Single <br> Choice | Smart | \ Top-Down | Over-Fitting | Under-Fitting | \ Top-Down |  |
| 15 | $\square$ is used to influence a variable directly by all the others. |  | Glossary IV | Glossary IV | 2 |  | Single Choice | Brilliant | Fully Connected | Description of the | Fully Connected | Conditionally independent |  |
| 16 | ___ <br> \ is the consequence between a node and its predecessors while creating Bayesian Network. |  | Glossary IV | Glossary IV | 2 |  | Single <br> Choice | Brilliant | Conditionally independent | Complete Description of the domain | Fully Connected | Conditionally independent |  |
| 17 | The Bayesian network provides |  | Glossary IV | Glossary IV | 2 |  | Single Choice | Smart | Description of the | Description of the | Fully Connected | Conditionally independent |  |


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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18 | The output at each node is called $\qquad$ |  | Attempt All Questions | 3X2=06 | 2 |  | Single Choice | Smart | Node\ Value | Bayesian Network | Node\ Value | FeedBack |  |
| 19 | In which ANN, _____loops are allowed. |  | Attempt All Questions | 3X2=06 | 2 |  | Single Choice | Brilliant | FeedBack | Bayesian Network | Node Value | FeedBack |  |
| 20 | The full form of BN in Neural Networks is |  | Attempt All Questions | $3 \mathrm{X} 2=06$ | 2 |  | Single Choice | Smart | Bayesian Network | Bayesian Network | Node Value | FeedBack |  |

