



Avinashilingam Institute for Home Science and Higher Education for Women

(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)

Re-accredited with 'A+' Grade by NAAC. Recognised by UGC Under Section 12B

Coimbatore - 641 043, Tamil Nadu, India

Master's Degree Examination – June / July 2021

II Semester

Class: I PG

Major: Information Technology

Time :3 Hours

Max.Marks:100

20MITC08 Deep Learning

Part- A

10x1=10

Choose the Correct Answer

- How many layers Deep learning algorithms are constructed?
a. 2 b. 3 c. 4 d. 5 CO1K1
- Which of the following is well suited for perceptual tasks?
a. Feed forward b. Recurrent c. Convolutional d. Reinforcement CO1K2
- Deep learning algorithms are _____ more accurate than machine learning algorithm in image classification.
a. 33% b. 37% c. 40% d. 41% CO2K2
- Which neural network has only one hidden layer between the input and output?
a. Shallow b. Deep c. Recurrent d. Feed forward CO2K1
- Which of the following is/are Limitations of deep learning?
a. Data labelling b. Obtain huge training dataset
c. Both a and b d. None of the above CO3K1
- CNN is mostly used when there is an
a. Structured data b. Unstructured data
c. Semi-structured data d. Both a and b CO3K2
- Which tool is best suited for solving Deep Learning problems
a. R b. Tensor Flow c. SK-Learn d. Excel CO4K2
- How calculations work in Tensor Flow
a. through RDD b. through vector multiplications
c. through computational graphs d. through map reduce tasks CO4K2
- Which of the following is true about reinforcement learning?
a. The agent gets rewards or penalty according to the action
b. It's an online learning
c. The target of an agent is to maximize the rewards
d. All the above CO5K1
- Hidden Markov Model is used in
a. Supervised Learning b. Unsupervised Learning
c. Reinforcement Learning d. All the above CO5K2

Part – B

5x6=30

Answer ALL questions

Each answer should not exceed 400 words or two pages

- 11.a. Classify the mechanics of machine learning. CO1K2
(or)
- 11.b. Express the limitation of linear neurons. CO1K2
- 12.a. Extend the concepts on gradient descent. CO2K2
(or)
- 12.b. Write a note on Stochastic gradient descent. CO2K3
- 13.a. Summarize the Tensor Flow variable operations. CO3K5
(or)
- 13.b. Demonstrate the session in Tensor Flow. CO3K3
- 14.a. Explain the process of max pooling. CO4K4
(or)
- 14.b. Show the pipelines of image processing. CO4K3
- 15.a. Compare Explore Vs Exploit policy Vs Value Learning. CO5K4
(or)
- 15.b. Give detail about pole-cart with policy gradients. CO5K2

Part – C

5x12=60

Answer ALL questions

Each answer should not exceed 800 words or four pages

- 16.a. What is Deep Learning. Explain its uses and applications. CO1K4
(or)
- 16.b. Discuss about Feed forward neural network. CO1K5
- 17.a. Construct the work of back propagation algorithm. CO2K3
(or)
- 17.b. Point out the prevention of over fitting in Deep neural network. CO2K4
- 18.a. Express the logistic regression model in Tensor Flow. CO3K2
(or)
- 18.b. Define Tensor Flow. Reframe how does it compare to alternatives? CO3K5
- 19.a. Sketch the architectural description of convolutional networks. CO4K3
(or)
- 19.b. Illustrate the visualizing learning in convolutional networks. CO4K4
- 20.a. What is Reinforcement Learning? Outline its working process? CO5K4
(or)
- 20.b. Apply the structure of Markov decision processes. CO5K3
