**Module 3**

**MCQ’s**

**1) What does ANN stand for?**

A. Artificial Neural Network

B. Automated Neural Network

C. Advanced Neural Network

D. All of the above

Answer) A

**2) What is the output of a single neuron in an ANN?**

A. A scalar value

B. A vector of values

C. A tensor of values

D. None of the above

Answer) A

**3) What is TensorFlow Playground?**

A. A web-based tool for training and visualizing ANNs

B. A software library for building ANNs

C. A physical device for running ANNs

D. None of the above

Answer) A

**4) How are ANNs related to the human brain?**

A. ANNs are completely unrelated to the human brain

B. ANNs are models of the human brain

C. ANNs are a type of computer hardware that mimics the human brain

D. ANNs are a type of software that mimics the human brain

Answer) B

**5) What does the formula T(°F) = T(°C)\*9/5+32 represent?**

A. The conversion of Fahrenheit to Celsius temperature

B. The conversion of Celsius to Fahrenheit temperature

C. The conversion of Kelvin to Fahrenheit temperature

D. The conversion of Fahrenheit to Kelvin temperature

Answer) B

**6) What is the purpose of the "Data" tab in TF Playground?**

A. To load and visualize data for machine learning models

B. To store data generated by machine learning models

C. To analyze data from weather sensors

D. To display data on a map for geospatial analysis

Answer) A

**7) What types of machine learning models can be trained in TF Playground?**

A. Only deep learning models

B. Only supervised learning models

C. Both deep and shallow learning models

D. None, TF Playground is not designed for machine learning model training

Answer) C

**8) What is the most common type of file format used with Pandas read function?**

A. .csv

B. .txt

C. .xlsx

D. .json

Answer) A

**9) What happens if the file specified in the Pandas read function does not exist?**

A. The function will return an error message

B. The function will create a new file with that name

C. The function will prompt the user to enter a valid file name

D. The function will terminate the program

Answer) A

**10) Which of the following is NOT a step involved in reading in a file with Pandas read function?**

A. Importing the Pandas library

B. Specifying the file location and name

C. Specifying the data types for each column

D. Calling the read function with the specified file location and name

Answer) C

**11) When querying the model for a prediction, what input is typically provided?**

A. The entire dataset used for training

B. A subset of the data not used for training (e.g. a validation set)

C. A completely new dataset not seen by the model before

D. No input is needed, the model will automatically generate a prediction

Answer) C

**12) What are some features of TensorFlow?**

A. Built-in optimizers, losses, and metrics

B. Only supports basic linear regression

C. Limited to a small number of layers in a neural network

D. No support for custom penalties

Answer: A