Q.17 What is single layer perception network. Discuss. (CO2)

Q.18 Explain perception training algorithm for multiple output classes. (CO2)

Q.19 Write comparison between adaptive linear neuron network and multiple adaptive linear neuron network. (CO3)

Q.20 Explain architecture of Back propagation network. (CO3)

Q.21 Write the applications of neural networks in medical field. (CO4)

Q.22 Discuss about characters recognition networks. (CO4)

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Write in brief about basic model of neural network. Also discuss various types of learning in neural networks. (CO1)

Q.24 Discuss about multiple adaptive linear neuron networks in detail. (CO3)

Q.25 What is Robot Kinematics. Explain in detail the process identification networks for it. (CO4)

3rd Sem / Artificial Intelligence & Machine Learning

Subject : Neural Networks

Time : 3 Hrs.   M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 What is full form of ANNs? (CO1)

a) Artificial Neural Node

b) AI Neural Networks

c) Artificial Neural Networks

d) Artificial Neural Numbers

Q.2 Example of a unsupervised feature map? (CO3)

a) text recognition

b) voice recognition

c) image recognition

d) none of the mentioned

Q.3 Why do we need biological neural networks? (CO1)

a) to solve tasks like machine vision & natural language processing

b) to apply heuristic search methods to find solutions of problem

c) to make smart human interactive & user friendly system

d) all of the mentioned

Q.4 Which of the following is an Applications of Neural Networks? (CO4)

a) Automotive b) Aerospace

c) Electronics d) All of the above

Q.5 What is back propagation? (CO3)

a) It is another name given to the curvy function in the perceptron

b) It is the transmission of error back through the network to adjust the inputs

c) It is the transmission of error back through the network to allow weights to be adjusted so that the network can learn.

d) None of the Above

Q.6 What is the most direct application of neural network. (CO4)

a) vector quantization b) pattern mapping

c) pattern classification d) control applications

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Neural Networks are complex_____ with many parameters. (CO1)

Q.8 On an average neural networks have higher computational rates than conventional computers. (True/False) (CO2)

Q.9 Full form of RNN. (CO1)

Q.10 Automated vehicle is an example of_____ learning. (CO4)

Q.11 _____ is also called exploratory learning. (CO3)

Q.12 Write two similarities between artificial neural network and biological neural network. (CO1)

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Discuss about supervised, unsupervised and reinforcement learning. (CO1)

Q.14 Discuss the basic concept of artificial neural network. (CO1)

Q.15 Explain feedback neural networks. (CO1)

Q.16 Explain Delta Learning rule in brief. (CO2)