[A-30]

SC

Q1   **Choose the correct answer.** |08|

1   Which of the following is true for neural networks?
    a) The training time depends on the size of the network.
    b) Neural networks can be simulated on a conventional computer.
    c) Artificial neurons are identical in operation to biological ones.
    d) a and b both

2   What are the advantages of neural network over conventional computers?
    a) They have ability to learn by example
    b) They are more fault tolerant
    c) They are more suited for real time operation due to their high comp.rate
    d) all of them are true.

3   A typical biological neuron is composed of a_____
    a) Cell body   b) A tubular axon   c) dendrites   d) All

4   A correlation learning is also called_____learning.
    a) None   b) Hamming   c) winner takes   d) Hebbian

5   A three months old child is an example of which type of learning system.
    a) Reinforcement learning.   b) Active learning
    c) Un-Supervised learning   d) Supervised learning

6   Recurrent neural network contains connections from_____ nodes to _____
    a) O/P to O/P   b) I/P to I/P   c) O/P to I/P   d) I/P to O/P

7   Automated vehicle is an example of_____
    a) Active learning   b) Supervised learning
    c) UnSupervised learning   d) Reinforcement learning

8   A full form of RBF is
    a) Radio basic function   b) Radio based function
    c) Radial basis function   d) Radial basic function

Q2		Answer in short. [**ANY SEVEN**].	[14]
	1	Define: Forecasting.	
	2	Draw the Basic neural model.	
	3	What are the main components of biological neuron?	
	4	What is an artificial neural network ?	
	5	Define: Unsupervised learning	
	6	Write down the full form of ART , LVQ and SOM	
	7	Distinguish between supervised learning and unsupervised learning	
	8	What is neuron?	
	9	Write down the types of winner take all networks.	

Q3	A	Explain human bodies neurons structure.	[06]
Q3	B	What do you mean by artificial neural networks?	[06]

OR

Q3	B	Describe the structure and function of single neuron.	[06]

Q4	A	What can neural network be used for?	[06]
Q4	B	Explain about auto-association and hetro-association.	[06]

OR

Q4	B	Explain forecasting and function approximation.	[06]

Q5	A	Explain supervised learning.	[06]
Q5	B	Define the radial basis function network.	[06]

OR

Q5	B	Write down about Feed forward networks for forecasting.	[06]

Q6	A	Describe Hamming network and maxnet.	[06]
Q6	B	Write down about counter propagation network.	[06]

OR

Q6	B	Explain Kohonene's map.	[06]

— ✗ —