1. (20%) Please draw a 2-3-2 neural network, you can use any transfer functions.
2. (10%) Why is back-propagation neural network called “back-propagation”?
3. (10%) Why can back-propagation neural network solve XOR problem?
4. (30%) For the network given the initial weights and biases are chosen to be

W1(0) = 1, b1 (0) = -2, w2(0) = -2, b2(0) = 1.

An input/target pair is given to be ((p = -1),(t=1)).

F1n = (n)2 f2n = 1/n

Please perform one iteration of back-propagation with = 1.

1. (30%) given , the initial weights and biases are chosen to be zero,

Transfer function F1n = 1/(1+e-n) f2n = (en-e-n)/ (en+e-n)

Please perform one iteration of back-propagation with = 1.