



GOVERNMENT COLLEGE OF ENGINEERING, JALGAON

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Name of Examination : **Summer 2021** - (Preview)

Course Code & Course Name : **CO454C - Elective III-Fuzzy Logic and Neural Network**

Generated At : **19-04-2022 15:02:58**

Maximum Marks : **60**

Duration : **3 Hrs**

[Edit](#) [Print](#) [View Answer Key](#) [Close](#) **Answer Key Submission Type:** Marking scheme with model answers and solutions of numerical

Instructions:

1. All questions are compulsory.
2. Solve any two sub questions from Que No. 1, 2 and 3
3. All the sub questions in Que No. 4 and 5 are compulsory
4. Illustrate your answer with suitable figures/sketches wherever necessary.
5. Assume suitable additional data; if required.
6. Use of logarithmic table, drawing instruments and non programmable calculators is allowed.
7. Figures to the right indicate full marks.

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|---|-----|
| 1) a) Compare supervised and un-supervised neural learning | [6] |
| b) Draw and explain MADALINE Network | [6] |
| c) Draw and explain McCulloch-Pitts model of neuron | [6] |
| 2) a) Draw and explain architecture of a radial basis function network | [6] |
| b) State and explain various steps in the backpropagation learning algorithm? | [6] |
| c) Draw and explain Bi-directional associative memory | [6] |
| 3) a) State and explain Kohonen Algorithm | [6] |
| b) Draw and explain Hopfield recurrent neural network | [6] |
| c) Draw and explain application of neural networks in pattern recognition | [6] |
| 4) a) Write and explain properties of fuzzy set | [6] |
| b) Explain fuzzification process with suitable example | [6] |
| 5) a) Draw and explain the application of fuzzy control system in share market analysis | [6] |
| b) How neural networks are used in natural language processing | [6] |

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