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Roll No

MMCM - 301(B).
M.E./M.Tech., III Semester
Examination, June 2016
Intelligent Manufacturing

Time : Three Hours

Maximum Marks: 70

Note : Attempt any five questions. All questions carry equal marks.

1. a) What are the different search techniques? Explain best first search techniques with a suitable example? 7
b) Explain in brief Application of knowledge based systems in design and manufacturing. 7
2. a) Explain the model of Artificial neuron. 7
b) Compare the structure and functioning of biological brain and neuron. 7
3. a) Explain the training method using back propagation algorithm with a suitable example. 7
b) What are the different applications of neural network in design manufacturing and management? 7
4. a) Explain the concept and characteristics of expert system. 7

- b) What are the different areas of application and domain where expert system is applicable? 7
5. a) Explain different properties of fuzzy sets and explain with a suitable example. 7
b) Discuss about the selection of membership function and also explain fuzzification. 7
6. a) Explain depth first and Breadth first search technique with suitable example. 7
b) What are different transfers function in a neural network? 7
7. a) Explain the architecture and energy functions of help field nets. 7
b) Write a short note on development of Expert system technology. 7
8. a) Explain Demorgan's low with an example. 7
b) Discuss about the application of fuzzy logic in manufacturing and design system. 7
