

Printed Pages—2

EMT041

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 2771

Roll No.

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**B. Tech.**

(SEM.VII) THEORY EXAMINATION 2011-12

**ARTIFICIAL INTELLIGENCE IN MANUFACTURING***Time : 3 Hours**Total Marks : 100***Note :- Answer all the questions.**

1. Answer any **two** from the following : **(10×2=20)**
  - (a) Explain the term Artificial Intelligence and list the application areas of AI.
  - (b) With a block diagram explain the components of Expert System.
  - (c) Discuss the attributes of intelligent behaviour.
  
2. Answer any **two** from the following : **(10×2=20)**
  - (a) Define Expert System and explain the structure and characteristics of Expert System.
  - (b) With an example explain the Goal-Driven-Reasoning in Expert System.
  - (c) Explain the different methods of acquiring the knowledge.

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*[Turn Over*

3. Answer any two from the following : (10×2=20)

- (a) What do you mean by Knowledge Representation ? Explain the different methods of representation.
- (b) With a block diagram explain the components of Expert System Shell.
- (c) Explain the role of expert system in computer aided Process Planning.

4. Answer any two from the following : (10×2=20)

- (a) What are the factors to be considered in Process Control ? Explain.
- (b) Explain the method of using Expert System in Management Information System.
- (c) Explain an Expert System for generating process plans.

5. Write short notes on any four of the following : (5×4=20)

- (a) Working memory
- (b) Explanations
- (c) Fault diagnosis
- (d) Expert system languages
- (e) Failure analysis.