FACULTY OF SCIENCE
M.Sc. III Semester Examination, May 2006
(New)
COMPUTER SCIENCE
Paper 3.2
(Artificial Intelligence)

Time : 3 Hours]   *[Max. Marks : 100*

*Answer **all** questions.*

Section A – (Marks : 8 × 5 = 40)

1. What is the importance of artificial intelligence in computer science?

2. (a) I read a book

   (b) He likes novels

   (c) She reads fictions – convert into predicates.

3. What is statistical reasoning – explain with an example?

4. What is fuzzy logic – explain with an example?

5. Explain briefly neural networks and its importance in AI.

6. What is iterative deepening?

7. What is signal monotonicity?

8. Define neuron mathematically.

Section B – (Marks : 4 × 15 = 60)

9. (a) Explain :
   (i) generate and test; (ii) hill climbing-why do they fail and how search.

   Or

   (b) Explain problem spaces and state search problem with examples and importance in AI.

10 (a) Explain conceptual dependency in detail with examples.

   Or

   (b) Explain Bayesian networks with an example and its utility in AI.

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11 (a) Explain goal stack planning in detail and where do you use in AI.

Or

(b) How many approaches do you find in learning process and explain one in detail?

12. (a) How the human brain help us in formulating AI concepts and functionalities of the computer machine. Discuss in detail.

Or

(b) Define dilation, concentration and normalization and their importance in AI.

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