

**BOARD DIPLOMA EXAMINATION****MID-II****ARTIFICIAL INTELLIGENCE***For Final Year Computer Science*

Time : 1 : 00 Hour

Max. Marks : 20

**PART-A****4 × 1 = 4****Note :** Answer *all* questions and each question carries *One* marks.

1. Define conditional probability.
2. State uncertain evidence.
3. Define learning.
4. Define decision tree.

**PART-B****2 × 3 = 6****Note :** Answer any *Two* questions and each question carries *Three* marks.

5. (a) List the difficulties in reasoning with uncertain information.  
(or)  
(b) State uncertain evidence.
6. (a) List the advantages of decision tree.  
(or)  
(b) State inductive learning with example.

**PART-C****2 × 5 = 10****Note :** Answer *Two* questions and each question carries *Five* marks.

7. (a) Explain about probabilistic inference in polytrees.  
(or)  
(b) Explain about Bayes network <sup>2.5 3.10</sup>
8. (a) Explain about Decision tree learning algorithm with example. <sup>4.20</sup>  
(or)  
(b) Explain about forms of learning.