

**M. Tech.-IV (Information Technology) (CBCS – 2015 Course) :**

**SUMMER - 2019**

**SUBJECT: SELF STUDY PAPER-II**

**ARTIFICIAL INTELLIGENCE AND APPLICATIONS**

Day: Thursday  
Date: 13/06/2019

Time: 11.00 AM TO 02.00 PM  
Max Marks: 60

**S-2019-3512**

**N.B.:**

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Assume suitable data if necessary.
- 4) Answer to both the sections should be written in **SAME** Answer book.

**SECTION-I**

**Q.1** Explain the future scope of AI in machine learning. **(10)**

**OR**

**Q.1** Explain the future scope of AI in Robotics. **(10)**

**Q.2** Explain control strategies forward and backward chaining. **(10)**

**OR**

**Q.2** Explain best first search with suitable example. **(10)**

**Q.3** Explain frame system to represent knowledge. **(10)**

**OR**

**Q.3** Explain horn's clauses as integrity constraint. **(10)**

**SECTION-II**

**Q.4** Explain the component of planning system. **(10)**

**OR**

**Q.4** Discuss the various parsing techniques. **(10)**

**Q.5** Discuss Bayesian network with suitable example. **(10)**

**OR**

**Q.5** Explain various expert system shells with neat diagram. **(10)**

**Q.6** Explain explanation based learning system with suitable example. **(10)**

**OR**

**Q.6** Discuss vision-based robot positioning using neural networks. **(10)**

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