

**M. SC. (COMPUTER SCIENCE) SEM – III (CHOICE BASED  
CREDIT & GRADE SYSTEM) : SUMMER - 2018  
SUBJECT : ARTIFICIAL INTELLIGENCE**

Day : **Friday**  
Date : **20/04/2018**

**S-2018-0928**

Time : **03.00 PM TO 06.00 PM**  
Max. Marks : 60

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**N.B.**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the right indicate **FULL** marks.
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**Q.1** What is Intelligent agent? Elaborate the structure of an intelligent agent. (15)  
Explain how to convert intelligent agent into learning agent.

**OR**

What do you mean by uninformed search? Describe the following uninformed search strategies- BFS, DFS

**Q.2 A)** Answer any **ONE** of the following: (08)

- i) Differentiate between propositional logic and predicate logic.
- ii) What is a frame? How do it differs from semantic net?

**Q.2 B)** Answer any **ONE**: (07)

- i) Differentiate between backward chaining and forward chaining.
- ii) What is Bayesian Network? Give an example.

**Q.3** Answer any **THREE**: (15)

- a) What is knowledge engineering?
- b) What is an interface? State interface rules involving quantifiers.
- c) Explain heuristic search in brief.
- d) What is decision tree? Give an example.
- e) Discuss different types of communicating agents in brief.

**Q.4** Write short notes on **ANY THREE**: (15)

- a) Knowledge acquisition
- b) Neural network
- c) Genetic algorithm
- d) Expert system
- e) Passive learning in a known environment

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