97693

BCA 6th Semester.
Examination – November , 2018

ARTIFICIAL INTELLIGENCE

Paper : BCA-308

Time : Three Hours]   *[Maximum Marks : 80*

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt *five* questions in all selecting at least *one* question from each unit. Question No. 1 is *compulsory*. All questions carry equal marks.

1. Explain the following in brief :

    (a) Application areas of AI

    (b) Problem space

    (c) Issues in the design of the search problem

    (d) Constraint satisfaction

    (e) Learning by taking advice

    (f) Syntactic processing

    (g) Representing instances

    (h) Uses of expert system

UNIT – I

2. What is Artificial Intelligence ? Explain the nature and goals of AI in detail. Also explain AI techniques in detail.

3. Explain the following in detail :

(a) Hill Climbing

(b) Production system and its characteristics

UNIT – II

4. Explain the following in detail :

(a) Issues in knowledge representation

(b) Computable function and predicate

5. What do you mean by knowledge representation ? What are the characteristics of a knowledge representation system ? Explain how can inheritable knowledge be represented ? Also explain the various approaches used in knowledge representation.

UNIT – III

6. (a) What is natural language processing ? Also explain semantic processing in detail.

(b) What is learning ? Explain rote learning and explanation based learning in detail.

7. Explain the following in detail :

(a) Learning in problem solving

(b) Discourse and pragmatic processing

UNIT – IV

8. What is knowledge ? Explain the components of knowledge base. Also explain the various stages of knowledge acquisition in detail.

9. What is an Expert system ? What are the different applications of expert systems ? Explain in detail the expert system shells.

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