7. What are various Processing in NLP (natural language processing)? Explain syntactic processing, Discourse and pragmatic processing in detail.

UNIT - IV

- **8.** (a) What is knowledge? Explain the components of knowledge base.
 - (b) Explain the various stages of knowledge acquisition in detail.
- **9.** What is Expert System? What are the different applications of expert systems? Also explain the expert system shells.

Roll No.

97693

BCA 6th Semester Examination – April, 2019

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 one question from each Unit. Question No. 1 is compulsory. All questions carry equal marks.

- **1.** Answer the following in brief:
 - (a) What is the difference between problem solving and planning?
 - (b) What is problem reduction?

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- (c) What capabilities must a machine possess to be called it as intelligent?
- (d) What is knowledge representation?
- (e) Explain the concept of forward chaining.
- (f) Explain the Representing instances.
- (g) Discuss use of heuristic function.
- (h) Explain the importance of Artificial Intelligence.

UNIT - I

- **2.** What is Artificial Intelligence? Explain the applications areas of Artificial Intelligence in detail. Also explain the various A. I. techniques in detail.
- **3.** (a) Explain Hill climbing and Best first search technique in detail.

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(b) What is Production System ? Explain its characteristics in detail.

UNIT - II

- **4.** (a) What do you mean by knowledge representation?

 What are the characteristics of a knowledge representation system? Explain how can inheritable knowledge be represented?
 - (b) What is Computable function and predicate? Explain in detail.
- **5.** (a) Explain the various approaches used in knowledge representation in detail.
 - (b) Discuss various inference rules for formal logic.

UNIT - III

6. What is Learning? Explain Rote learning, learning by taking advice and explanation based learning in detail.

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P. T. O.