(Pages : 3) **E – 1893**

Reg. No. : .....

Name : .....

Sixth Semester B.Sc. Degree Examination, April 2018
Career Related FDP under CBCSS
Group2(b) : COMPUTER SCIENCE
Core Course
CS1642 : Artificial Intelligence
(2014 Admission Onwards)

Time : 3 Hours Max. Marks : 80

SECTION – A

(Very short answer type)

One word to maximum of **one** sentence. Answer **all** questions : **(10×1=10 Marks)**

1. Define AI.
2. What do you mean by knowledge ?
3. What is an Expert system ?
4. What do you mean by semantics ?
5. What is parsing ?
6. Name two commonly used languages for AI.
7. What is DENDRAL ?
8. What do you mean by speech synthesis ?
9. What is an algorithm ?
10. What do you mean by the term heuristic ?

P.T.O.

SECTION – B

(Short Answer)

Not to exceed **one** paragraph, answer **any eight** questions. **Each** question c
two marks. (8×2=1

11. What are frames ?
12. Write short notes on MYCIN.
13. List the two levels of knowledge representation.
14. How to analyse search algorithms ?
15. Write short notes on semantic nets.
16. Write the features of DENDRAL.
17. What do you mean by Natural Language Processing ?
18. Write short notes on PROLOG.
19. What is branching factor ?
20. What are scripts ?
21. What do you mean by speech coding ?
22. Distinguish between top down and bottom up parsing ?

SECTION – C

(Short Essay)

Not to exceed **120** words, answer **any six** questions. **Each** question carries **four marks.** (6×4=24 Mark

23. What are the characteristics of software agents ?
24. Explain alpha-beta pruning.
25. Distinguish between procedural and declarative representation.
26. Explain forward and backward reasoning.

27. Write note on fuzzy set operators.

28. Explain the steps in speech recognition.

29. Explain MINIMAX search procedure.

30. What are the applications of AI ?

31. Explain Robots.

SECTION – D

(Long Essay)

Answer **any two** questions. **Each** question carries **15** marks. **(2×15=30 Marks)**

32. Explain in detail the architecture of Expert systems.

33. Discuss the steps in Natural Language Processing.

34. Explain depth first, breadth first and best first search methods.

35. Write notes on :

    a) Predicate logic. (8)

    b) Propositional logic. (7)

(Pages : 2)

Reg. No. : .....

Name : .....

Sixth Semester B.Sc. Degree Examination, April 2019
Career Related FDP under CBCSS
Group 2(b) – COMPUTER SCIENCE
Core Course
CS1642
Artificial Intelligence
(2014 Admission Onwards)

Time : 3 Hours

Max. Marks : 80

SECTION – A
(Very Short Answer Type)

One word to maximum of **one** sentence. Answer **all** questions. **(10×1=10 Marks)**

1. Define Artificial Intelligence.
2. What is a frame ?
3. What do you mean by natural language processing ?
4. What are grammars ?
5. What is a script ?
6. Define the terms syntax and semantics.
7. What is parsing ?
8. Define meta knowledge.
9. LISP stands for _____
10. What do you mean by Artifical Neural Network ?

SECTION – B
(Short Answer)

Not to exceed **one** paragraph, answer **any eight** questions. **Each** question carries **two** marks. **(8×2=16 Marks)**

11. What are expert systems ?
12. What do you mean by alpha-beta pruning ?

P.T.O.

13. Write short notes on semantic nets.
14. What do you mean by speech synthesis ?
15. Write short notes on MYCIN.
16. What are the components of a script ?
17. What is the difference between procedural and declarative representation ?
18. Write short notes on PROLOG.
19. What is the difference between forward and backward reasoning ?
20. Explain knowledge representation.
21. What do you mean by speech coding ?
22. What is Min-Max in game playing ?

SECTION – C
(Short Essay)

Not to exceed **120** words, answer **any six** questions. **Each** question carries **four** marks. **(6×4=24 Marks)**

23. Briefly explain the features of DENDRAL.
24. Explain alpha-beta pruning.
25. What are the issues in NLP ?
26. What are the applications of an expert system ?
27. Briefly explain the different approaches to knowledge representation.
28. Write notes on propositional logic.
29. Explain the steps in speech processing.
30. Explain Hill climbing algorithm.
31. What are the applications of AI ?

SECTION – D
(Long Essay)

Answer **any two** questions. **Each** question carries **15** marks. **(2×15=30 Marks)**

32. Explain the steps and different types of parsing techniques.
33. Discuss the different types of search methods.
34. Write notes on : **8**
    a) Predicate logic. **7**
    b) Speech recognition.
35. Explain in detail the architecture of an expert system.
