



NATIONAL OPEN UNIVERSITY OF NIGERIA
14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS
SCHOOL OF SCIENCE AND TECHNOLOGY
MAY/JUNE 2012 EXAMINATION

CIT478 Artificial Intelligence

TIME ALLOWED: 2½ Hours.

Answer any four (4) questions

- 1a. What is Artificial Intelligence? (6 marks)
- 1b. List five (5) tasks that an AI system can do. (10 marks)
- 1c. Mention two ideas in AI? (4 marks)
- 1d. List five (5) tasks that an AI system cannot do. (5 marks)
- 2a Explain the term “Heuristic” . (4 marks)
- 2b Write short notes on the following AI programming languages:
 - (i) LISP
 - (ii) Prolog(5 marks each)
- 2c. Mention three (3) features of Knowledge Representation Language (9 marks)
- 3a . What is an Expert System? (4 marks)
- 3b List (6) types of Expert Systems you know? (12 marks)
- 3c. Mention three (3) disadvantages of an Expert system.(9marks)
- 4a. Explain the word ROBOTICS and list its three (3) Components. (8 marks)
- 4b. List and explain any three (3) types of Robots you know. (12 marks)
- 4c. List five (5) areas where Robots can be used. (5 marks)
- 5a. What are Intelligent Agents? (6marks)
- 5b. Write short notes on the following:
 - (i) Hill Climbing
 - (ii) Depth-First-Search(5 marks each)
- 5c. What are the fundamental faculties of Intelligence? (5 marks)
- 5d. Mention any two (2) areas where LISP can be used. (4 marks)
- 6a. Explain Knowledge Representation in terms of the distinct roles it plays.(6 marks)
- 6b. Write short note on each of the following:
 - (i) Natural language processing

- (ii) Rationality
(5 marks each)

6c. List any three (3) characteristics of Knowledge Representation. (9 marks)