

## NATIONAL OPEN UNIVERSITY OF NIGERIA 14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS MARCH/APRIL 2016 EXAMINATION

## SCHOOL OF SCIENCE AND TECHNOLOGY

COURSE CODE: CIT478

COURSE TITLE: Artificial Intelligence (2 Credits)

Answer any four (4) questions in  $2^{1}/_{2}$  Hours. Each question carries  $17^{1}/_{2}$  marks.

- **1(a)** Explain the term "Agent " in Artificial Intelligence. Identify three different environments where an Agent can operate on. (7 marks)
- 1(b). List and explain three (3) things that AI can do. (6 marks)
- 1(c) Outline three fields that are linked or associated with AI ( $4^{1/2}$  marks)
- 2(a) What is an Expert System? List three (3) types of Expert systems (7marks)
- 2(b) Outline and explain three (3) advantages of an Expert system. (6 marks)
- 2( c) Identify three (3) disadvantages of an expert system  $(4^{1/2} \text{ marks})$
- 3(a) What is Artificial Intelligence (AI)? (5 marks)
- 3 (b) Identify any five domain of AI (8 marks)
- 3(c) Mention three (3) things that AI system cannot do yet ( $\mathbf{4}^{1/2}$  marks)
- 4(a) Describe a Turning Test in AI (5 marks)
- 4(b) Outline four (4) major advances in areas of AI (8 marks)
- 4(c) Outline three fields that are linked or associated with AI ( $4^{1/2}$  marks)
- 5(a) What is Robotics? (5 marks)
- 5(b) Mention and explain four (4) types of Robot (8 marks)
- 5(c) List three (3) areas where Robots can be used  $(4^{1/2})$  marks)
- 6(a) Give the full meaning of the following acronyms:
  - (i)
  - GIGO
  - (ii) UCS
  - (iii) LDS
  - (iv) KBS
  - (v) FOL
  - (vi) IPL
  - (vii) XML (9 marks)
- 6(b) Mention and explain three (3) areas where LISP can be used. (6 marks)

6(c) Identify three (3) features of Knowledge Representation Language (4<sup>1/2</sup> marks)