



[University of Choice]

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
[MMUST]**

**MAIN CAMPUS
UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR**

**SECOND YEAR FIRST SEMESTER REGULAR EXAMINATIONS
FOR THE DEGREE
OF**

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

COURSE CODE: BCS 217

COURSE TITLE: INTRODUCTION TO ARTIFICIAL INTELLIGENCE

DATE: 15/12/2023

TIME: 8:00 - 10:00 AM

INSTRUCTIONS TO CANDIDATES

Answer Question ONE and choose any other Two.

TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over. ►

QUESTION ONE [30 MARKS]

- a) Define the term Intelligence, giving the different types. {6 marks}
- b) Briefly explain the four things for rationality. {6 marks}
- c) Give a brief comparison of the performance measure of different software agent. {6 marks}
- d) Define the term AI to represent systems that think rationally specifying the author[s]. {4 marks}
- e) What positive impact does Artificial Intelligence bring to the developing world? {8 marks}

QUESTION TWO [20 MARKS]

- a) Expound on the concept of real time development of AI project. {10 marks}
- b) Explain in detail the types of problems, giving at least two examples. {10 marks}

QUESTION THREE [20 MARKS]

- a) Outline the capabilities that a computer would need to possess to pass the TTT. {10 marks}
- b) Explain what you understand by problem spaces. {10 marks}

QUESTION FOUR [20 MARKS]

- a) Construct a PEAS for a healthcare agent, explaining each concept in detail. {10 marks}
- b) What is the criteria of measuring problem-solving performance of an expert system. {10 marks}

QUESTION FIVE [20 MARKS]

- a) Imagine you were an engineer working on an expert system, explain some of the stakeholders you would involve. {10 marks}
- b) What are some of the knowledge representation issues that are unique with expert systems. {10 marks}