

**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**FIRST SEMESTER EXAMINATION: APRIL 2009**  
**INTRODUCTION TO INFORMATION TECHNOLOGY CAC 1203**  
**Time Allowed: 3 Hours**

**INSTRUCTIONS**

1. Answer **All Four** questions from Section A
2. Answer **Any Three** questions from Section B

**SECTION A [40 marks]**

1. Define the following terms:
  - a) System [2 Marks]
  - b) System's entropy [2 Marks]
  - c) Information system [2 Marks]
  - d) Source data automation [2 Marks]
  - e) Expert system [2 Marks]
2. Discuss auditing the operation of an Information System? [12 Marks]
3. What are the three components of an information system? [6 Marks]
4. Explain how a company can use Information Systems to improve its core competencies. [12 Marks]

**SECTION B [60 marks]**

\*PLEASE NOTE: Answer **Any Three** questions from Section B

**Question 1**

Clearly distinguish the managerial levels of an organization and discuss using a practical example the information system applicable at each level. [20 Marks]

**Question 2**

- a) How can a Transaction Processing System of a retail outlet chain help in an organization's strategic level planning? [10 Marks]

- b) Discuss the difference between Office Automation Systems and Knowledge Work Systems in the way they create and use knowledge and information. [10 Marks]

**Question 3**

- a) Distinguish between Decision Support Systems and Management Information Systems characteristics using practical examples. [12 Marks]
- b) Illustrate the model of Decision Support Systems and highlight some examples of their usage today. [8 Marks]

**Question 4**

- a) Discuss how a Group Decision Support System would be of use to an internationally represented organization to enhance group decision making. [12 Marks]
- b) Explain why an Executive Support System must be flexible and easy to use? [8 Marks]

**Question 5**

- a) How is an expert system different from a neural network? [6 Marks]
- b) Discuss artificial intelligence and its various applications. [10 Marks]
- c) Briefly elucidate on the concept of fuzzy logic. [4 Marks]