



ZIMBABWE

**MINISTRY OF HIGHER AND TERTIARY EDUCATION
HIGHER EDUCATION EXAMINATIONS COUNCIL
(HEXCO)**

HIGHER NATIONAL DIPLOMA

IN

INFORMATION TECHNOLOGY

**SUBJECT: Advanced Systems Analysis
and Design**

PAPER NO: 710/SO1

OCTOBER/NOVEMBER 2013 EXAMINATION

REQUIREMENTS

INSTRUCTIONS TO CANDIDATE

Answer ALL questions.

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This paper consists of 2 printed pages.

QUESTION 1

- a) Briefly describe the following as they are used in Object Oriented Approach to systems development:
- i) Class association (2 marks)
 - ii) Entity (2 marks)
 - iii) Generalisation (2 marks)
 - iv) Inheritance (2 marks)
 - v) Method (2 marks)
- b) Describe the following:
- i) Systems Analysis (5 marks)
 - ii) Systems Design (5 marks)

QUESTION 2

Explain the following approaches to Systems Analysis and Design:

- a) Traditional Approach (5 marks)
- b) Structured Approach (5 marks)
- c) Prototyping Approach (5 marks)
- d) Information Engineering Approach (5 marks)

QUESTION 3

- a) Briefly explain any five (5) tests for feasibility. (10 marks)

- b) Identify, draw and explain data flow diagram (DFD) symbols. (10 marks)

1) unit progress
2) integration
3. system
4) Acceptance

QUESTION 4

- a) Discuss any two changeover methods. (10 marks)
- b) Justify the design of system controls. (5 marks)
- c) Explain the role of GANTT chart in project management. (5 marks)

direct
parallel
Pilot

audit trail
input
output
security

QUESTION 5

Discuss the roles of the Systems Analyst under the following:

- a) Change Agent - (5 marks)
- b) Supporting Expert - (5 marks)
- c) Consultant - (5 marks)
- d) Project Manager - (5 marks)

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