



**THE KENYA POLYTECHNIC UNIVERSITY
COLLEGE**

DEPARTMENT OF SURVEYING & MAPPING

HIGHER DIPLOMA IN LAND SURVEY

END OF YEAR I EXAMINATIONS

NOVEMBER 2007

INFORMATION TECHNOLOGY & ENTREPRENEURSHIP

EDUCATION

3 HOURS

INSTRUCTIONS TO CANDIDATES:

You should have the following for this examination:

Answer booklet

Scientific calculator

This paper consists of TWO sections, A and B.

Answer THREE questions from section A and TWO questions from section B.

All questions carry equal marks and the maximum marks for each part of a question are as shown.

This paper consists of 3 printed pages.

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SECTION A: INFORMATION TECHNOLOGY

Answer any THREE questions from this section.

1. (a) List THREE categories of data collection methods. (3marks)
- (b) Describe briefly the following data processing modes:
 - (i) Online
 - (ii) Distributed
 - (iii) Real time
 - (iv) Batch
 - (v) Interactive (20 marks)
- (c) Outline any TWO computer input devices. (2 marks)
2. (a) List the stages of systems development. (9 marks)
- (b) Outline the aims of feasibility study stage in systems development. (16 marks)
3. (a) Describe the following data processing modes:
 - (i) Synchronous
 - (ii) Asynchronous (5 marks)
- (b) Discuss the following terms used in networking communication:
 - (i) Half duplex
 - (ii) Duplex
 - (iii) Parallel
 - (iv) Serial (20 marks)
4. (a) Describe an expert system. (20 marks)
- (b) List FIVE applications of expert systems. (5 marks)
5. (a) List any FIVE operating systems. (5 marks)
- (b) Outline THREE network topologies. (9 marks)
- (c) List any FIVE applications of networking. (5 marks)
- (d) Explain how information would be sent between two devices that are 500km apart over an analogue network. (6 marks)

SECTION B: ENTREPRENEURSHIP EDUCATION

Answer any TWO questions from this section.

6. (a) Discuss the factors influencing the growth of the small Enterprise sector in Kenya. (12 marks)
- (b) What are the disadvantages of borrowing money from commercial banks? (8 marks)

7. (a) (i) What is a project? (2 marks)
- (ii) Using a diagram explain the four phases of a project. (8 marks)
- (b) Describe personal traits entrepreneurs require for effective networking and interpersonal relationships. (10 marks)
8. (a) Advise a small business owner on the importance of record keeping. (10 marks)
- (b) From the following information prepare a trading, Profit and Loss account for ABC company for the period ending 30th June, 2007. (12 marks)

	Kshs.
Capital	1, 800, 000
Motor vehicle	500, 000
Sales	900, 000
Purchases	650, 000
Opening stock	50, 000
Advertising	19, 000
Accrued expenses	5, 000
Salaries and wages	20, 000
Water	1, 000
Lighting	2, 500
Transport	4, 000
Interest on loan	3, 500
IDB loan	350, 000
Bank overdraft	15, 000
Purchases returns	15, 000

Stock as at 30th June, 2007 was worth shs.20, 000. KRA demands 30% tax on income.