## THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE





# Faculty of Engineering & Technology

#### DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

#### HIGHER DIPLOMA IN COMPTUER STUDIES

#### **END OF STAGE I EXAMINATIONS**

#### **APRIL/MAY 2010 SERIES**

## **ORGANISATION & APPLICATION**

**TIME: 2 HOURS** 

## **Instructions to Candidates**

- Answer any **THREE** out of the **FIVE** Questions.
- All Questions carry equal marks.

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## **Question ONE**

- (a). (i). Define the term Capacity Planning.
  (ii). Explain any FOUR objectives of capacity planning.
  (iii). Outline the procedures for determining capacity.
  (2 Marks)
  (8 Marks)
  (4 Marks)
- (b). Explain the **THREE** forms of restructuring. (9 marks)

#### **Question TWO**

- (a). Explain any **FOUR** principles of an ideal Capital Investment. **(8 Marks)**
- (b). Horizon Company Limited plans to purchase share of stock of a corporation for Shs.250. The corporation is expected to give Horizon Company Limited Shs.10 as dividends at the end of the year. The market price of the dividends is expected to be Shs.275 per share at year end.

## Required:

Calculate the return for Horizon Company Limited. (7 Marks)

- (c). State any **FOUR** causes of:
  - (i). Over capitalization
  - (ii). Under capitalization

(8 Marks)

### **Question THREE**

A-Z Company Limited bought a patrol van on  $1^{\rm st}$  January, 2007 at Shs.360,000 estimated to last five years, after which it will have a scrap value of Shs.60,000. The vehicle was sold on  $31^{\rm st}$  December, 2009 for Shs.200,000.

#### Required;

Show the following accounts:-

- (i). Motor vehicle account
- (ii). Provision for depression on motor vehicle account.
- (iii). Disposal of motor vehicle account.

(23 Marks)

## **Question FOUR**

(a).	Describe the stages of quality control.	(9 Marks)
(b).	Explain any <b>FOUR</b> factors that determine product design.	(8 Marks)
(c).	List the <b>TWO</b> objectives of product development.	(2 Marks)

#### **Question FIVE**

- (a). The MOGUL Company Ltd requires 1000 components per month throughout the year for manufacturing automobile generators. If ordering costs is £25 per year, unit cost is £2.50 per component, and annual inventory holding costs are charged at 20%.
  - (i). Find economic order quantity for this component.
  - (ii). If the company decides to operate with a back order inventory policy, then taking back order cost to be £5 per unit per year, find the new EOQ.

(10 Marks)

(b). A company requirement for 10 days is 6300 units. The ordering cost per order is £10 and the carrying cost per unit is £0.26. The following is the discount schedule applicable for the company;

Lot Size	<b>Discount Rate</b>
1 – 999	-
1000 - 1499	1%
1500 - 2499	1.5%
2500 - 4999	3%
Above 5000	5%

## Required;

Determine the best ordering policy given the discount.

(13 Marks)