# THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE 

Faculty of Business \& Social Studies
DEPARTMENT OF HOSPITALITY \& TOURISM

DIPLOMA IN TOURISM MANAGEMENT
(DTM J09/A09)

## QUANTITATIVE METHODS

END OF SEMESTER EXAMS
SERIES: APRIL/MAY 2010.
TIME: 2 HOURS

## INSTRUCTIONS TO CANDIDATES

1. The paper consists of TWO Sections A and B.
2. Section A is compulsory. Answer ALL questions.
3. Answer any TWO questions from Section B.
4. You may use calculators. DO NOT USE MBOILE PHONES.

## SECTION A <br> (Answer ALL questions)

Q. 1 (a) Define Statistics as Data.
(2 marks)
(b) Explain the SEVEN characteristics of statistics.
(c) Explain any FIVE limitations of statistics.
(d) State any FOUR functions of statistics.

## SECTION B

(Answer any TWO questions from this Section.)
Q. 2 (a) Define the following terms as used in statistics.
(i) Data
(ii) Attributes
(iii) Variables
(iv) Sample
(v) Frequency distribution.
(b) Explain any FIVE factors of choice between Primary and Secondary Data.
Q. 3 A survey of 370 students from Commerce Faculty and 130 students from Science Faculty revealed that 180 students were studying for only C.A Examinations, 140 for only Costing Examination and 80 for both C.A and Costing Examinations. The rest had offered part-time management courses.
Of those Studying for costing only 13 were girls and 90 boys belong to Commerce Faculty. In total there were 100 students studying for Costing from the Commerce Faculty. In all there were 110 boys in Science Faculty, 340 boys in Commerce Faculty and a total of 50 girls studying. Out of those studying for both C.A and Costing, 72 were from Commerce Faculty amongst which 70 were boys. There were 3 girls in total studying for both C.A and Costing.

Present the above information in a tabular form filling all blanks.
Q. 4 Calculate Mean, Median and Mode from the following data:

| Profits | Frequency | Profits <br> (Kshs.000,000 | Frequency |  |
| :---: | :---: | :---: | :---: | :---: |
| (Kshs.000,000) | 4 | $10-60$ |  |  |
| $10-20$ | 16 | $10-70$ | 124 |  |
| $10-30$ | 56 | $10-80$ | 137 |  |
| $10-40$ | 97 | $10-90$ | 146 |  |
| $10-50$ |  |  | 150 | $(20$ marks) |

Q. 5 (a) Explain any FOUR qualities of a good Average.
(8 marks)
(b) Find the standard deviation from the following data.

| Age under: | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of persons <br> dying: | 15 | 30 | 53 | 75 | 100 | 110 | 115 | 125 |

