



TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

CERTIFICATE IN INFORMATION TECHNOLOGY

ECT 1102: COMPUTER APPLICATION

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: JULY 2013

TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

This paper consists of **FIVE** questions. Attempt question **ONE** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **THREE** printed pages

SECTION A (COMPULSORY)

Question One

- a) Name any **THREE** functions used a spreadsheet application. **(3marks)**
- b) State any **FOUR** areas of application of spreadsheets. **(4 marks)**
- c) Explain any **FIVE** general features of spreadsheets. **(10 marks)**
- d) State any **THREE** types of spreadsheet application **(3 marks)**

Question Two

- a) (i) Explain the term Word-processing. **(2 marks)**
(ii) Explain any **TEN** features of Word-processing **(20 marks)**

Question Three

- a) Explain the term Database Management System **(2 marks)**
- b) Explain any **SIX** advantages of computerized Database Management System **(12 marks)**
- c) Explain any **THREE** types in Ms-Access Database Management system **(6 marks)**

SECTION B (ANSWER ANY ONE QUESTION)

Question Four

- a) Create a relational database using the table below. Call it PAYROLL.MDB.

| EMPNO. | FIRSTNAME | LASTNAME | SEX | AGE | HOURS | RATE |
|--------|-----------|----------|--------|-----|-------|------|
| 001 | JOHN | TWAIN | MALE | 31 | 101 | 1000 |
| 002 | MARY | MAGA | FEMALE | 34 | 300 | 250 |
| 003 | TOM | MWENDE | FEMALE | 21 | 350 | 1000 |
| 004 | JANE | PIUS | MALE | 27 | 350 | 250 |
| 005 | ANNE | PAUL | MALE | 30 | 250 | 400 |
| 006 | PETER | MICHAEL | MALE | 30 | 470 | 500 |
| 007 | MIRIAM | ISMAEL | FEMALE | 29 | 100 | 600 |
| 008 | AISHA | NEKESA | FEMALE | 44 | 200 | 1000 |

- b) Create **TWO** query files having records whose sex is FEMALE and MALE separately. Call them FEMALE and MALE respectively. **(20 marks)**

Question Five

- a) Mr. Kariuki is a Lecturer at Technical University of Mombasa and wishes to use Microsoft Excel to process the marks obtained by students during their end semester examinations. The table 1 below, shows the details entered in the program.

| | A | B | C | E | F | G | H | F | G |
|---|--------|----|------|----|-------|---------|-------------|---------|---|
| 1 | NAME | OS | MAIN | IP | TOTAL | AVERAGE | MAXIMU M | MINIMUM | |
| 2 | Mary | 56 | 23 | 57 | | | | | |
| 3 | Benta | 89 | 45 | 78 | | | | | |
| 4 | Salome | 52 | 66 | 78 | | | | | |
| 5 | Jane | 23 | 45 | 47 | | | | | |
| 6 | Amin | 46 | 38 | 56 | | | | | |
| 7 | Kirwa | 44 | 39 | 22 | | | | | |

Using the information in Table 1, determined:

- (i) Use appropriate formula to calculate Total Marks, Average Marks, Maximum Score, and Minimum Score for the students.
- (ii) Append a new column in the mark sheet and call it Grade
- (iii) Compute the Grade given that Average 750 is a PASS, otherwise FAIL
- (iv) Apply borders in worksheet

(20 marks)