



**THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE**

**(A Constituent College of JKUAT)**

(A Centre of Excellence)

# **Faculty of Engineering & Technology**

**DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY**

**CERTIFICATE IN INFORMATION TECHNOLOGY (CIT SEP12)**

**ECT 1102: COMPUTER APPLICATIONS**

**END OF SEMESTER EXAMINATION**

**SERIES: DECEMBER 2012**

**TIME: 2 HOURS**

**Instructions to Candidates:**

You should have the following for this examination

- *Answer Booklet*

This paper consist of **FIVE** questions  
 Answer question **ONE (COMPULSORY)** and any other **TWO** questions  
 Maximum marks for each part of a question are as shown  
 This paper consists of **THREE** printed pages

**Question One (Compulsory)**

- a) Explain any **TEN** features of word processing. **(20 marks)**

**Question Two**

- Explain any **TEN** general features of spread sheets. **(20 marks)**

**Question Three**

- a) Explain the term Database Management System **(2 marks)**

- b) Explain the following terms as used in Database Management System.

- (i) Data Item
- (ii) Field
- (iii) Record
- (iv) Database structure **(8 marks)**

- c) Explain the following Ms Access data types:

- (i) Memo
- (ii) Currency
- (iii) OLE object
- (iv) Yes/No **(8 marks)**

- d) State any **TWO** Database Management System application. **(2 marks)**

**Question Four**

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

<b>EMPNO.</b>	<b>FIRSTNAME</b>	<b>LASTNAME</b>	<b>SEX</b>	<b>AGE</b>	<b>HOURS</b>	<b>RATE</b>
001	JOHN	TWAIN	MALE	31	101	1000
002	MARY	MAGDA	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 records whose sex is FEMALE and MALE separately. Call them FEMALE and MALE respectively. **(20 marks)**

**Question Five**

Mr. Karuiki is a lecturer at Mombasa Polytechnic University College 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.

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	
<b>1</b>	<b>NAME</b>	<b>OS</b>	<b>MAIN</b>	<b>IP</b>	<b>TOTAL</b>	<b>AVERAGE</b>	<b>MAXIMUM</b>	<b>MINIMUM</b>
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, 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 > 50 is a PASS, otherwise FAIL
- (iv) Apply borders in worksheet.

**(20 marks)**