



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE

DIPLOMA IN INFORMATION TECHNOLOGY

(DIT MOD I)

END OF SEMESTER 2010 EXAMINATION

APRIL/MAY 2010 SERIES

INTERNET APPLICATION PROGRAMMING I

TIME: 2 hours

INSTRUCTIONS TO CANDIDATES

SECTION A: COMPULSORY Question.

SECTION B: Answer any **TWO** Questions.

SECTION A

Question ONE

- (a). Distinguish between systems software and application software and give further sub-classifications for each. **[4 marks]**
- (b). Explain any **TWO** advantages of using word processing as compared to a typewriter. **(4 Marks)**
- (c). Explain any **THREE** formatting features, which can be used in a word processing document. **(6 Marks)**
- (d). Explain the following computer application areas:
- (i). Mathematical and statistical analysis.
 - (ii). Design work
 - (iii). Weather fore-casting systems.
 - (iv). Scientific, engineering and research application.
- (8 Marks)**
- (e). Ken High School has received a donation of computer from the world bank. The school wishes to use computers to aid in the learning process. Using the information:
- (i). State any **THREE** advantages of applying the computer systems in the school.
 - (ii). State any **THREE** limitations of (e).
- (6 Marks)**
- (f). State any **TWO** functions of Operating Systems. **(2 Marks)**

SECTION B

Question TWO

- (a). There are numerous application of computers in medicine, explain any **THREE** examples of these applications. **[9 marks]**
- (b). Explain any **THREE** criteria by which an application's suitability to the use of computers. **[6 marks]**
- (c). Explain each of the following areas of artificial intelligence giving examples of each.
- Robotics
 - Expert systems

(5 Marks)

Question THREE

(a). A college admits 2000 students in different courses each year, The Secretary writes admission letters to each student. This exercise takes one month since the letter of offer contains three pages. Use this information to answer the following questions:

(i). Propose an approach that would help the secretary generate the letters faster and economically. **[2 Marks]**

(ii). Outline the steps the secretary would use to generate the letters using the approach in (i). **(4 Marks)**

(b). Explain the steps could have been used to:

- (i). Insert clip art
- (ii). Picture from a file
- (iii). Bar chart
- (iv). Pie Chart

(8 Marks)

(c). Explain the components of Microsoft Word Interface given below:

- (i). Status bar
- (ii). Title bar
- (iii). Windows icons

(6 Marks)

Question FOUR

(a). The table below shows the names of students with their corresponding marks for Physics and Maths created in a word processing program. Use it to answer the questions that follows:

The Mombasa Polytechnic University College			
Faculty of Engineering			
Department of Computer Science			
Sno.	Name	Physics	Maths
1	Harun	56	65
2	Smith	85	66
3	Jamal	57	36
4	Jane	58	96
5	Karanja	87	52
6	Gideon	64	45
7	Said	68	59

Outline the steps that could have been used to be following:

- (i). Create the table as shown above.
- (ii). Insert new column to for the total marks.
- (iii). Insert new row above row three.
- (iv). Shade row one.
- (v). Increase the height of the first row by 0.2 inch.

(10 Marks)

- (b). Write an expression to calculate:
 - (i). Total marks for each student.
 - (ii). Average marks for each subject.

(2 Marks)

- (c). Word provides a quick tool for switching text between uppercase and lowercase letters. You can also format text so that first letters of each line or each word become uppercase. Explain how this tool is used.

(8 Marks)

Question FIVE

- (a). Use the students result table shown to answer the questions that follow.

	A	B	C	D	E	F	G	H	I	J
1										
2	Students No.	Full Name	Access	Excel	Word	ISM	SAD	Pascal	Total	Average
3	100/0112	Salim Ali	66	56	65	60	58	58		
4	100/2055	Jane Macharia	65	85	63	68	65	56		
5	100/2345	Henry Mark	85	56	52	25	62	53		
6	100/1244	Juma Abdi	88	63	25	65	68	54		
7	100/0255	Hassan Ahmed	76	62	74	35	69	57		
8	100/1522	Fatma Ali	58	45	65	58	98	61		
9	100/2100	Karisa Mutu	87	64	68	21	64	62		
10	100/2111	Haji Athman	76	61	72	68	53	66		
Subject Average										

1. Write a formula that finds the sum of all subjects marks for the student whose number is 100/0112.
2. Write a formula that finds the average of Access marks to two decimal places for all students.
3. Write a formula that finds the total number of subjects done in the table.
4. Write a formula that calculates the maximum score for student number 100/0255.

[8 marks]

- (b). Explain any **THREE** benefits of using Ms Access database. **(6 Marks)**

- (c). You want a database table to store your friends contact addresses. List down any **THREE** fields with their suitable data types you would have in the table.
(6 Marks)