



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**SCHOOL OF EDUCATION**

**DEPARTMENT OF SPECIAL NEEDS EDUCATION**

**UNIVERSITY EXAMINATION FOR THE DIPLOMA IN SPECIAL NEEDS**

**EDUCATION**

**1<sup>ST</sup> YEAR 1<sup>ST</sup> SEMESTER 2017 / 2018 ACADEMIC YEAR**

**MAIN CAMPUS**

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**COURSE CODE: ESN 2118**

**COURSE TITLE: COMPUTER APPLICATIONS IN SPECIAL NEEDS EDUCATION**

**EXAM VENUE:**

**STREAM: DIPLOMS -SNE**

**DATE: DECEMBER 2017**

**EXAM SESSION:**

**TIME: 1 ½ HOURS**

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**INSTRUCTIONS:**

- 1. Answer Question 1 (Compulsory) and ANY other two questions**
- 2. Candidates are advised not to write on the question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

### QUESTION 1 [30 MARKS]

- a) People with disabilities face a variety of barriers to computer use. These barriers can be grouped into three functional categories, outline them. **(3 Marks)**
- b) Outline components of computer hardware units **(5 Marks)**
- c) Most of the operating systems used in Kenyan institutions are developed by Microsoft Company. State any other **TWO** non- Microsoft operating systems which can also be used in institutions **(2 marks)**
- d) Milka wants to create a document using Microsoft word 2010. She does not know how to use any word processor. Explain to her how she would open Microsoft word 2010 and create a new document. **(4 Marks)**
- e) Highlight steps you would follow to create a folder in my documents location **(4 marks)**
- f) Define Operating System and list any **FOUR** functions of an operating system (6 marks)
- g) Explain three functions played by Central Processing Unit (CPU)/Processor(6 marks)

### QUESTION 2 [20 MARKS]

- a) The secondary school wants the computer systems to be more accessible to students with disabilities. Describe, with examples, input and output devices which are available for students with disabilities. **(8 marks)**
- b) A system is a combination of several components brought together to achieve a given objective. Discuss the **FOUR** elements of a Computer Systems **(8 marks)**
- c) Distinguish clearly between System software and application software and give at least one example in each **(4marks)**

### QUESTION 3 [20 MARKS]

- a) State and explain any five health issues which can arise from prolonged use computers. Suggest a solution for each health issue mentioned **(10 marks)**
- a) Outline three advantages of using word processing and mention any four features contained in the Microsoft Word screen. **(7 Marks)**
- b) Classify the following keyboard keys
  - i. Num Lock, Print Screen
  - ii. Home, End, Page up ,Arrow Key
  - iii. F1, F2, ... F12**(3 Marks)**

#### QUESTION 4 [20 MARKS]

- a) Nemtech Company limited has been advised by a strategic specialist to purchase computers and enforce their utilization in their daily operations. you have been invited to the internal strategic committee to deliberate on the next move;
- Outline two advantages and two disadvantages of computers that they are likely to experience. **(4mks)**
  - Explain two network topologies that the organization can implement **(4mks)**
  - Describe three different computer system security threats that they are likely to encounter **(6mks)**
  - Discuss three preferable mechanisms they should consider to counter the envisioned threats **(6mks)**

#### QUESTION 5 [20 MARKS]

Your supervisor learnt that you are a graduate of Diploma with IT from Jaramogi Oginga Odinga University of Science and Technology. Your boss needs assistance from you with analysis of results for a Maths test. You are provided with an excel sheet containing raw score. You are expected to generate an excel sheet that is similar to the one shown below. You MUST use excel formulas to generate the table below.

- Briefly describe how you format the “ROW SCORE” so that values less than 40 marks will display bold, italicized text with black font and grey background color. **(4 marks)**
- Write the formula that automatically generates the “LETTER GRADE” column from the raw score data. How would you format the results to look like what is shown below? **(8 marks)**
- Write a formula that generates the text shown on the comments column. How would you format the text to appear as shown below. **(8 marks)**

S/NO	NAME	RAW SCORE	LETTER GRADE	COMMENTS
		<b>Maths</b>	<b>Maths</b>	
<b>1</b>	Framk Ambame Mwara	62	B	PASS
<b>2</b>	Gamhimgi Jamas Mding'i	77	A	PASS
<b>3</b>	Mgimeka Myamae Meka	<b>24</b>	<b>F</b>	<b>FAIL</b>
<b>4</b>	Michae Wycleff Kebacha	71	A	PASS
<b>5</b>	Charama Jay	40	D	PASS