Name...Adm. No..........…………....

Class.................

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451/1

COMPUTER STUDIES

PAPER 1 (THEORY)

MARCH 2021

TIME: 2 ½ HRS

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Gianchere Friends High School

Terminal Computer Studies Examinations

Form 2 End of Term 2 100 Marks Exams

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Instructions to candidates

1. *This paper consists of TWO sections; A and B*
2. *answer all questions in sections A. (40 Marks)*
3. *Answer any four questions from section B. (60 Marks)*
4. *Answer all questions in English.*

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Score Summary for examiner's use only

SECTION	QUESTION	
A	1 – 13	
B	14	
	15	
	16	
	17	
	18	
TOTAL MARKS		

This paper consists of 9 printed pages.
Candidates should check to ensure that all pages are printed as indicated and that no question is missing.

Section A: 40 Marks

1. State **two** hardware technological differences between the second generation and the third generation computers. (**2 marks**)

2. State **two** ways of ensuring proper ventilation in a computer room. **(2 marks)**

3. (a) Explain the term toggle key as used in computer keyboard. **(2 marks)**

   (b) List examples of toggle keys on a computer keyboard. **(2 marks)**

4. State **three** factors to consider when selecting an operating system to install in a computer. **(3 marks)**

5. Differentiate between analogue data and digital data as used in computers. **(2 marks)**

6. State **two** reasons for the increased use of laptop computers in government offices. **(2 marks)**

7. a) Explain **three** features of a graphical user interface as used in computers. **(6 marks)**

b) State the function of each of the following computer keyboard keys:
(i) Caps Lock **(1 mark)**

(ii) Shift **(1 mark)**

(iii) Home **(1 mark)**

8. State **three** measures that should be put in place in a computer laboratory to safeguard users' health. **(3 marks)**

9. State **three** ways in which barcode readers may be used in schools. **(3 marks)**

10. State **three** advantage of flat panel monitors over cathode ray tube monitors as used in computers. **(3 marks)**

11. State **three** possible reasons for the extinction of daisy wheel printers in the market. **(3 marks)**

12. A law firm prefers to use hard Copy output over soft Copy output when handling documents for legal matters. State **two** reasons for this preference **(2 marks)**

13. Describe **two** characteristics of parallel cables (**2 Marks**)

14. a) Define the operating system   **(1 mark)**

b) State any **five** functions of the operating system   **(5 marks)**

c) Write the following acronyms in full   **(3 marks)**
   i) IRQ

   ii) WIMP

   iii) GUI

d) State **six** factors to consider when choosing an operating system   **(6 marks)**

15. a) Define the term internet   **(1 mark)**

b) State **four** requirements needed for internet access   **(4 marks)**

c) State any **three** services provided by the internet   **(3 marks)**

d) List **four** advantages of the internet   **(4 marks)**

e) State **three** precautions that your school can implement in order to restrict computer studies students from accessing inappropriate content on the internet   **(3 marks)**

16. a) Define the following terms as used with data security: **(4 marks)**
      i) Confidentiality

      ii) Integrity

      iii) Data Security

      iv) Computer virus

b) State any **five** symptoms of a computer infected with a virus   **(5 marks)**

c) Hacking is a computer crime associated with breaking into a computer system through cracking passwords to access information for purposes of financial gains or blackmail. Discuss any other **three** computer crimes.   **(6 marks)**

17. a) What are input devices as used in computer systems? **(1 mark)**

b) State **three** instances with **reason** where the use of a scanners is given a higher priority than Keyboards as a method of data entry. (**6 marks)**

c) State any **three** factors to consider when selecting an input device. **(3 marks)**

d) State the meaning of the following phrases as used with computer systems: **(2 marks)**
   i) 'Plug and Play'

   ii) 'GIGO'

e) List an input device appropriate for each of the following tasks: **(3 marks)**
   i) A botanist researcher wants to upload a picture of a new plant species into her laptop;

   ii) An engineer wants to upload her hard copy house plan into the computer;

   iii) A musician wants to record his audio music into the computer;

18. a) State **one** clear distinction between a power cable and interface cable   **(2 marks)**

b) Differentiate between parallel and serial interface cables   **(3 marks)**

c) USB cables are the most popular interfaces with small computers today.
   i) Write in full what the acronym USB stands for;   **(1 mark)**

   ii) State **three** advantages of USB interface over PS/2 interface.   **(3 marks)**

   iii) State any **two** application areas of USB cables which makes them more popular than other cables.   **(2 marks)**

d) State **four** safety precautions that should be observed before setting up computer hardware installation and maintenance activity.   **(4 marks)**