

Name..... Index No.....
 School..... Signature

840/1
 COMPUTER STUDIES
 PAPER 1
 July/August 2017
 2½ hours



WAKISSHA JOINT MOCK EXAMINATIONS
Uganda Certificate of Education
COMPUTER STUDIES
Paper 1

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

- This paper consists of **three** sections **A, B and C**.
- Section A contains **20 compulsory** objective-type questions.
 The correct alternative **A, B, C or D** for each question must be written in the box provided on the right hand side of each question.
- Section B consist of **six compulsory** structured questions. Answers to this section must be written in the spaces provided.
- Section C contains **three** essay questions. Attempt only **one**. Answers to this section must be written in the answer booklets/sheets provided.

For examiners' use only.

MCQ	Q.21	Q.22	Q.23	Q.24	Q.25	Q.26	Q.27	Q.28	Q.29	Total

SECTION A (20 MARKS)

Choose the most correct answer and write the corresponding letter in the box on the right hand side.

1. A document with copyrighted materials is marked with:
A. ©
B. ®
C. €
D. @
☐
2. Which of these factors does not affect the internet speeds?
A. Worldwide uses.
B. Band width.
C. Traffic.
D. Type of transmission.
☐
3. The system clock,
A. is a storage device.
B. shows the time and date.
C. determine data process speeds.
D. turns off the computer after along live.
☐
4. language is referred to as the first generation programming language:
A. Assembly
B. COBOL
C. Machine code
D. SQL
☐
5. Which of the following is a file extension for an image file:
A. .gif
B. .dre
C. .ppt
D. .xls
☐
6. A set of rules that govern exchange of data between hardware or software components in a network is called
A. laws of communication.
B. debugging.
C. simplex transmission.
D. protocols.
☐
7. The editing tool that enables the user to find words or phrases with similar meaning (synonyms) is
A. auto complete.
B. thesaurus.
C. auto correct.
D. find and replace.
☐

8. The following features existed in the mechanical era machines except:
- A. moving parts.
 - B. mechanical gears.
 - C. punched cards.
 - D. vacuum tubes.
9. The term file compression means
- A. reduction in the size of files.
 - B. increasing the size of the files.
 - C. maintaining the size of the files.
 - D. combining files.
10. The scientific milestone of using integrated circuits (IC) was a characteristic of the
- A. first generation.
 - B. second generation.
 - C. third generation.
 - D. fourth generation.
11. Which of the following is the standard storage capacity of a compact disk:
- A. 100 KB.
 - B. 4.2 GB.
 - C. 700 MB.
 - D. 1.44MB.
12. The historical development of computers can be divided into two main ages namely:
- A. Non-electronic and electronic computers.
 - B. Big size and small size computers.
 - C. First and second generation.
 - D. Analog and digital computers.
13. The weaving loom and analytical engine are considered the grand parents of modern computing because they
- A. had large physical size.
 - B. required human intervention.
 - C. could be programmed using punched cards.
 - D. have both invented by mathematicians.
14. A computer laboratory is a
- A. special room where computers are stored.
 - B. special room where computers are set up for safe use.
 - C. room where computers are sold.
 - D. room where one can tap internet.
15. The best practice to avoid eye strain when using cathode ray tube monitor is to
- A. mount an antiglare filter.
 - B. use a bigger monitor.
 - C. sit a distance away from the monitor.
 - D. reduce the light on the screen.

Turn Over

16. The presentation software has many views, which one is the convenient way of viewing all slides in the presentation?
- A. Slide sorter view.
B. Normal view.
C. Outline pane.
D. Slide pane.
17. Which of the following describes the purpose of the web page?
- A. Downloading files on the internet.
B. Uploading files on the internet.
C. Making money on the internet.
D. creating awareness about something on the internet.
18. The data cable of a computer is specified as 32-bit, this means it can transfer
- A. 32 bytes at a time.
B. 4 bits at a time.
C. 8 characters at a time.
D. 4 characters at a time.
19. The areas of data storage on a diskette are made up of
- A. cylinders.
B. FATS.
C. sectors.
D. governors.
20. The main advantage of a local area network is to
- A. enable the sharing of power source.
B. help in forming a link between users.
C. enables sharing of resources such as printers.
D. increase processor speed of the stand alone computers.

SECTION B (60 MARKS)

Answer **all** questions in this section. Answers should be written in the spaces provided.

21. (a) Define the following as used in computer studies. (02 marks)
- i) Bit.

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- ii) Word length.

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(b) i) Give **two** reasons why computers use binary codes (02 marks)

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ii) Differentiate between a **Nibble** and a **byte** (02 marks)

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(c) Convert: -

i) 1110101_2 to decimal. (02 marks)

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ii) 1001_{10} to binary. (02 marks)

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22. (a) (i) What is data integrity in relation to data processing. (02 marks)

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(ii) List down **four** parameters that measure data integrity. (04 marks)

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(b) In data processing there are various modes of processing data, state **four** factors considered when choosing a specific mode of data processing. (04 marks)

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23. (a) Explain the meaning of the following terms in relation to computer programming.

i) Source program. (03 marks)

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ii) An object code.

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iii) A translator.

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(b) Give **two** ways how interpreted program is different from compiled program.

(04 marks)

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(c) List **three** stages of a program development.

(03 marks)

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24. (a) (i) Explain the function of the following in data communication. (02 marks)

i). Bridge.

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ii). Gateway.

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(b) (i) Name **three** types of cables used in data communication. (03 marks)

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(ii) State **three** advantages and **two** disadvantages of using fibre optic cables for data communication.

Advantages;

(03 marks)

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Disadvantages

(02 marks)

25. (a) A hospital would like to use a relational database to keep track of its patients.
Give **four** different tables that may be included in this database. (04 marks)

- (b) List down **three** advantages that will result from using the database. (03 marks)

- (c) Mention **three** challenges of using electronic database to keep track of patients' records in a hospital. (03 marks)

Turn Over

26. (a) (i) Define the term artificial intelligence as used in ICT. (01 mark)
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- (ii) List **four** main application areas of artificial intelligence. (04 marks)
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- (b) (i) Mention **three** ways in which a computer can help a doctor during consultation with a patient. (03 marks)
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- (ii). Give **two** advantages of using computers to monitor the health conditions of patients in a hospital instead of using nurses. (02 marks)
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SECTION C (20 MARKS)

Answer only **one** question from this section.

27. (a) Define the term device driver. (02 marks)
- (b) How does an operating system contribute to the performance of a computer system. (18 marks)
28. (a) Define the following terms as used in spread sheets. (04 marks)
- (i) Label.
- (ii) Formula.
- (iii) Values.
- (iv) Function.
- (b) Explain the advantages of electronic spreadsheet over the manual spreadsheets (16 marks)
29. (a) Passwords are very important to computer users in their operations. List down **four** ways how passwords can be protected and safe guarded. (04 marks)
- (b) Explain the various methods used to protect computer data and systems from theft and loss. (16marks)

END