Candidate’s name: 

Signature: 

(Do not write your School/Centre name or Number anywhere on this booklet)

840/1

COMPUTER STUDIES

Paper 1

Oct./Nov. 2019

2½ hours

UGANDA NATIONAL EXAMINATIONS BOARD

Uganda Certificate of Education

COMPUTER STUDIES

Paper 1

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

Write your name, signature, random and personal numbers in the spaces above.

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 must be written in the box provided on the right hand side of each question.

Section B contains six compulsory structured questions. Answers to section B must be written in the spaces provided in the question paper.

Section C contains three equally weighted practical-theory questions. Answer only one question. Answers to Section C must be written in the answer booklet(s) provided.

Any additional question(s) answered will not be marked.

For Examiners’ Use only

<table>
<thead>
<tr>
<th>MCQ</th>
<th>Q21</th>
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<th>Q24</th>
<th>Q25</th>
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<th>Q27</th>
<th>Q28</th>
<th>Q29</th>
<th>TOTAL</th>
</tr>
</thead>
</table>

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SECTION A (20 MARKS)

Answer all questions in this section

1. Raw facts in computing is a description of
   A. information.
   B. text.
   C. data.
   D. numbers.

2. In a spreadsheet software, a cell is
   A. a box that stores data.
   B. an intersection of a row and a column.
   C. another name for spreadsheet windows.
   D. a collection of different rows.

3. Which of the following pairs consists of system software only?
   A. Operating Systems and Programming languages.
   B. Presentations and Spreadsheets.
   C. Word processors and Databases.
   D. Operating Systems and Presentations.

4. The combination of buttons that can be used to restart the computer is
   A. CTRL + ALT + ENTER.
   B. CTRL + ALT + DEL.
   C. CTRL + SHIFT + DEL.
   D. CTRL + SHIFT + ENTER.

5. The error message “No operating system found” during system start-up could be a result of
   A. inadequate RAM.
   B. a problem with the VGA.
   C. a full hard disk.
   D. a disconnected hard disk.

6. A computer program that takes one or more object codes and assembles them into a single executable program is
   A. a bug.
   B. a compiler.
   C. a linker.
   D. an interpreter.

7. Which of the following is a set of input devices only?
   A. Mouse, scanner and printer.
   B. Projector, printer and monitor.
   C. Speakers, printer and scanner.
   D. Keyboard, scanner and joystick.
8. In web publishing, the procedure of developing a website is
   (i) Planning.  (iii) Deploying.
   (ii) Designing.  (iv) Creating.
   A. (i), (iii), (ii) and (iv).
   B. (iv), (i), (iii) and (ii).
   C. (ii), (iv), (iii) and (i).
   D. (i), (ii), (iv) and (iii).

9. Computer $X$ has devices; RAM, Network card and Video card.
   Computer $Y$ has devices; Video card, RAM and hard disk.
   Computer $Z$ has devices; Video Card, Hard disk and Network card.
   Which computers are more likely to be connected to the Internet?
   A. $X$ and $Z$.
   B. $Y$ and $Z$.
   C. $X$ and $Y$.
   D. $X$ only.

10. A command line of C: prompt that will display the directories and files found
    on the hard disk can be written as
    A. C:\ > rd
    B. C: \ > dir
    C. C: \ > ren
    D. C: \ > rmdir

11. Which of the following is a feature of a Word Processor Software?
    A. Cell.
    B. Animation.
    C. Drop Cap.
    D. Record.

12. The Query Criteria that can be used to find the students who are less than or
    equal to 14 years old is
    A. $\leq 14$.
    B. $\geq 14$.
    C. $< or = 14$.
    D. $> or = 14$.

13. The option used to view all slides on a screen is
    A. notes pages view.
    B. outline view.
    C. slide show.
    D. slide sorter view.
14. Which of the following categories of computers is arranged in order of size from the largest to smallest?

A. Mainframe computers, Super computers, Personal computers, Minicomputers.
B. Super computers, Mainframe computers, Minicomputers, Personal computers.
C. Minicomputers, Mainframe computers, Super computers, Personal computers.
D. Super computers, Personal computers, Minicomputers, Mainframe computers.

15. The device that provides a computer with power temporarily when the main supply is off is

A. Power Supply Unit.
B. Power Stabilizer.
C. Uninterruptible Power Supply.
D. Power Surge Unit.

16. In HTML, which code will be used to display the heading “Information Communication Technology” on a web page?

A. `<h1> Information Communication Technology </h1>`
B. `<h1> Information Communication Technology </h1>`
C. `</h1> information Communication Technology </h1>`
D. `<h1> Information Communication Technology </h1>`

17. The rules governing data exchange on a network are called

A. protocols.
B. settings.
C. standards.
D. transmissions.

18. A professional who is responsible for maintenance, configuration and computer system operations in a company is a

A. Systems Administrator.
B. Systems Analyst.
C. Database Administrator.
D. Software Engineer.

19. Which security measure is used to control data access in a computer?

A. Burglar proofing.
B. Antivirus.
C. Password.
D. CCTV camera.
20. The safety precautions observed in a computer laboratory are:
   (i) Avoid carrying foods and beverages to the computer laboratory.
   (ii) Always follow the correct procedure for starting and shutting down the computers.
   (iii) Sit on a stool while using a computer.
   (iv) Don’t use radiation filters screens on bright monitors.

A. (i) and (iii).
B. (ii) and (iv).
C. (iii) and (iv).
D. (i) and (ii).

SECTION B (60 MARKS)

Answer all questions in this section.
All answers must be written in the spaces provided.

21. (a) State any two characteristics of the second generation computers. (02 marks)
   (i) ...........................................................................................................
   ...........................................................................................................
   (ii) ...........................................................................................................
   ...........................................................................................................

   (b) List any two areas in which computers can be used in business. (02 marks)
   (i) ...........................................................................................................
   ...........................................................................................................
   (ii) ...........................................................................................................
   ...........................................................................................................

   (c) Explain the meaning of the following characteristics of computers:
   (i) Deligence (02 marks)
   ...........................................................................................................
   ...........................................................................................................
   ...........................................................................................................
22. (a) (i) What is an executable file?  (01 mark)

(ii) Give two examples of file extensions of executable files.  (02 marks)

(iii) A computer system indicates that an executable file of a particular program has been corrupted. Give two likely causes for the corrupted file.  (02 marks)

(b) A student has access to the tabulated storage media below:

<table>
<thead>
<tr>
<th>Media</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDD</td>
<td>4GB</td>
</tr>
<tr>
<td>Flash Disk</td>
<td>1024 MB</td>
</tr>
<tr>
<td>DVD-R</td>
<td>4.7 GB</td>
</tr>
</tbody>
</table>

Choose the most appropriate medium for carrying out the following tasks, if one medium is used for only one task:  (03 marks)

(i) To send a 1 GB music file to a friend in a neighbouring school.

(ii) To transfer a 2048 MB file from one standalone computer to another in a school laboratory.
(iii) To store 3072 MB video clip.

(c) Why is it important for a user to save files to a secondary storage? (02 marks)

23. (a) Explain the following as used in spreadsheets:

(i) Cell range. (02 marks)

(ii) Absolute cell reference. (02 marks)

(iii) Relative cell reference. (02 marks)

(b) Define a field in database. (01 mark)

(c) Study the database table below and answer questions that follow:

<table>
<thead>
<tr>
<th>Patient Id</th>
<th>Name</th>
<th>D.o.B</th>
<th>Gender</th>
<th>Phone</th>
<th>Doctor Id</th>
<th>Doctor</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>134</td>
<td>Jeff</td>
<td>4-Jul-1993</td>
<td>Male</td>
<td>7876453</td>
<td>01</td>
<td>Dr Hyde</td>
<td>03</td>
</tr>
<tr>
<td>178</td>
<td>David</td>
<td>8-Feb-1987</td>
<td>Male</td>
<td>8635467</td>
<td>02</td>
<td>Dr Jekyll</td>
<td>06</td>
</tr>
<tr>
<td>198</td>
<td>Lisa</td>
<td>18-Dec-1979</td>
<td>Female</td>
<td>7498735</td>
<td>01</td>
<td>Dr Hyde</td>
<td>03</td>
</tr>
<tr>
<td>210</td>
<td>Frank</td>
<td>29-Apr-1983</td>
<td>Male</td>
<td>7943521</td>
<td>01</td>
<td>Dr Hyde</td>
<td>03</td>
</tr>
<tr>
<td>258</td>
<td>Rachel</td>
<td>8-Feb-1987</td>
<td>Female</td>
<td>8367242</td>
<td>02</td>
<td>Dr Jekyll</td>
<td>06</td>
</tr>
</tbody>
</table>

(i) How many fields are shown in the table? (01 mark)
(ii) Identify **two** fields suitable for a primary key in the table.  

24. (a) **What is a URL?**  

   (02 marks)  

(b) **Explain a tag** as used in web-designing.  

   (02 marks)  

(c) (i) **Define a Search Engine.**  

   (02 marks)  

   (ii) **Give an example of a search engine.**  

   (01 mark)  

(d) **Outline three** advantages of a server based LAN over a peer-to-peer.  

   (03 marks)  

   (i)  

   (ii)  

   (iii)  

25. (a) **Give three** uses of a Word Processor.  

   (03 marks)  

   (i)  

   (ii)
(iii) ........................................................................

(b) Explain the importance of mail merge in a Word Processor. (02 marks)

........................................................................

........................................................................

(c) Give two advantages of an electronic presentation over a manual presentation. (02 marks)

(i) ........................................................................

........................................................................

(ii) ........................................................................

........................................................................

(d) Name the presentation feature that would be applied to: (03 marks)

(i) Objects and texts to determine their movement during a slide show.

........................................................................

(ii) An object or a word to connect to another slide.

........................................................................

(iii) Slides to determine the visual movement as one slide changes to another during a slide show.

........................................................................

26. (a) Identify the software needed for the tasks below: (04 marks)

(i) System booting ........................................................................

(ii) Removing malware ........................................................................

(iii) Sending an electronic document .........................................................

(iv) Developing a computer software. .........................................................

(b) Explain the term multitasking as applied to computers. (02 marks)

........................................................................

........................................................................

........................................................................
(c) Give **one** function for each of the following software development tools:

(i) Debugger

(ii) Flow chart tool

**SECTION C (20 MARKS)**

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

*Answers to the question must be written in the answer booklet provided.*

27. As part of class assessment, your teacher has requested the senior four students to design any practical project. You have decided to design school report cards.
   Illustrate the steps you would take to design a computerized program for making these reports.  
   
   **(20 marks)**

28. The following devices; an Uninterruptible Power supply, PC blower, a CCTV camera and a modem have been purchased by the ICT department. As a computer student you have been tasked to;

   (a) give reasons for the purchase of each of the devices.  
   (b) suggest any **five** physical measures that may safeguard the purchased devices. 

   **(10 marks)**

29. (a) While working in an application, the computer freezes. Explain any **five** ways in which you would manage the computer freeze. 

   (b) A friend seeks to make his computer performance faster. Suggest any **five** ways you would increase the operational speed. 

   **(10 marks)**