Name: ………………………………………………………………… Index No: …………

840/1

**Computer Studies**

*Paper One*

**Theory**

2 ½ hours

August, 2019



**JINJA JOINT EXAMINATION'S BOARD (JJEB)**

**UGANDA CERTIFICATE OF EDUCATION**

**Computer Studies**

August 2019

**Paper One**

**(***Theory***)**

2 Hours 30 Minutes

**INSTRUCTIONS TO CANDIDATES:**

1. *This paper is made up of* **three** *Sections* **A***,* **B** *and* **C** *respectively.*
2. *Answer all questions in section* **A** *and* **B***.*
3. *Attempt only one question in Section* **C***.*
4. *Answers in Section* **A** *should be written in the box provided against each question.*
5. *Use of relevant examples will lead to bonus marks.*

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **FOR OFFICIAL USE ONLY** | | | | | | | | | | |
| **MCQ** | **21** | **22** | **23** | **24** | **25** | **26** | **27** | **28** | **29** | **TOTAL** |
|  |  |  |  |  |  |  |  |  |  |  |

**SECTION A: (20 MARKS)**

*This section is made up of* **20 multiple choice questions***. Write a correct letter in the box provided for each of the questions.*

1. Which of the following is a special characteristic of second generation computers?
2. Use of simple programming languages like BASIC.
3. Introduction of integrated circuits.
4. Use of graphical user interfaces.
5. Computers stored data on magnetic tapes.
6. A computer mouse is used to perform the following tasks:
7. Moves the cursor on the screen.
8. Installs computer programs.
9. Carries out cold booting of a computer.
10. Selects icons on a graphical user interface.
11. (i) and (ii).
12. (ii) and (iii).
13. (iii) and (iv).
14. (i) and (iv).
15. A ……………………… is a kind of computer software provided at no cost.
16. shareware
17. freeware
18. custom made
19. off – the – shelf
20. A facility in a word processor that enables text to start away from the left or right hand margin of a document is:
21. Word wrap.
22. Drop cap.
23. Mail – merge.
24. Indentation.
25. Computer hardware devices to work well after installation, a ……………… is needed to enable a system to establish communication with the device.
26. driver
27. software patch
28. device manager
29. computer program.
30. A ……………………… protocol is necessary when delivering data across a network.
31. IP
32. HTTP
33. TCP
34. SMTP
35. Intersection of a row and a column is an electronic spreadsheet is referred to as a:
36. Cell
37. Worksheet.
38. Workbook.
39. Name Box.
40. A ……………………. is a tool that enables the user to walk through a given website.
41. Search button
42. hyperlink
43. Browser
44. E-mail address
45. A ……………………. is the field property that sets the limit of data range to be entered into a given database field.
46. Caption.
47. Default value
48. Validation rule
49. Validation text
50. Which of the following is an ethical issue in relation to computer use?
51. Data backups.
52. Use of UPS.
53. Software piracy.
54. Burglar proofing.
55. In a slide master, the following can be modified:
56. Master text style.
57. Speaker notes.
58. Presenter views.
59. Font colour.
60. (i) and (iv).
61. (i) and (ii).
62. (ii) and (iii).
63. (iii) and (iv).
64. Which one of the following is **NOT** an example of a language translator?
65. Complier.
66. Debugger.
67. Assembler.
68. Interpreter.
69. A …………………………. computer can interact with data in discrete form.
70. Special – purpose
71. Digital
72. General – purpose
73. analogue
74. Sound is to speakers and ……………………. is to printer.
75. print outs
76. light
77. printer copy
78. soft copy
79. Genuine computer software can be obtained in the following ways:
80. Downloading a freeware.
81. Getting from a friend.
82. Pirating.
83. Buying from an authorized software vendor.
84. (i) and (ii).
85. (ii) and (iii).
86. (i) and (iv)
87. (ii) and (iv)
88. Before buying a computer hardware component or software, a user should first know the computer’s ………………………… in order not be have a correct resource use.
89. CPU speed
90. system specification
91. screen resolution
92. cost of the item
93. A laptop computer can be classified by:
94. Cost.
95. Design.
96. Size.
97. Processing speed.
98. The following resources can be shared across a computer network by users:
99. Hardware.
100. Signals.
101. Data.
102. Files.
103. (i) and (ii).
104. (ii) and (iii).
105. (i) and (iii).
106. (i) and (iv).
107. The best way to have a view of scientific experiments that would be dangerous, can be done using:
108. Avionics.
109. Digital forensics.
110. Artificial intelligence.
111. Virtual reality.
112. During the website development process, the following activities are carried out in the maintenance phase:
113. Coding.
114. Updating the site.
115. Checking for computer viruses.
116. Assigning a Uniform Resource Locator (URL).
117. (i) and (ii).
118. (ii) and (iv).
119. (ii) and (iii).
120. (i) and (iv).

**SECTION B: (60 MARKS)**

*In this section, fill in the spaces provided for questions 21 to 26. This section is compulsory.*

1. (a). State**two** characteristics of computing devices developed during the mechanical

era. (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(b). Explain the following terms used in relation to a good computer.

(i). **Artificial Intelligence**. (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(ii). **Automation**. (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(c). State **two** causes of computer system failure. (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(d). Write down **two** buttons on a computer’s keyboard that work as **ON** and **OFF**

switch. (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

1. (a). State any **two** parts that make up the Central Processing Unit. (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(b). (i). Give **two** characteristics of impact printers. (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(ii). State **one**reason for supplying computer software on a CD-ROM. (01 mark)

…………………………………………………………………………………………...

(c). Describe **one** use of a **Control Panel** during software installation. (02 marks)

…………………………………………………………………………………………...

(d). (i). Give **two** reasons for having a partitions in a hard disk. (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(ii). Identify the role of **Random Access Memory** in the booting process of a

computer. (01 mark)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

1. (a). Give **two** characteristics of number data type as used in a spreadsheet program. (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(b). (i). If I select a cell range **A4:E15**, how many cells have I selected? (01 mark)

…………………………………………………………………………………………...

(ii). State any **two** examples of cell referencing techniques used in an electronic

spreadsheet. (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(c). Explain the following field properties as used in database design.

(i). **Caption**. (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(ii). **Input mask**. (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(d). Give **one** requirement of a good primary key field in a database table. (01 mark)

…………………………………………………………………………………………...

1. (a). State **two** qualities of a good computer network. (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(b). Give **one** function of the following network protocols:

(i). **Internet Protocol (IP).** (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(ii). **Hyper Text Transfer Protocol**. (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(c). Give **two** activities that are carried out by a webmaster of an organisation. (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(d). Identify the possible actions that would be taken when the following HTML

statements are written and preview in an HTML editor.

(i). **<u>I love computer studies</u>** (01 mark)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(ii). **<marquee behavior = “alternate”>I love computer studies</marquee>** (01 mark)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

1. (a). Describe the following as used in a word processor.

(i). **Text highlight**. (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(ii). **Page orientation**. (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(b). State any **two** document referencing facilities that are found inside an

electronic word processor. (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(c). State **two** advantages of using a presenter view in a class presentation. (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(d). Give **two** specific data sections that a note page when printed can display

compared to a slide mode print. (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

1. (a). Define a **computer application program**. (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(b). State **three** factors to consider before buying a software program for use. (03 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(c). (i). Give **one** advantage of using a compiler by a programmer. (01 mark)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

(ii). What is a **source code**? (02 marks)

…………………………………………………………………………………………...

…………………………………………………………………………………………...

**SECTION C: (20 MARKS)**

*Attempt only one question from this section.*

1. (a). Outline **four** characteristics of a good pseudo code. (04 marks)

(b). A tax agency uses a manual system to determine tax income from a set of workers

basing on the following schedule.

|  |  |
| --- | --- |
| Range (shs) | Tax rate |
| 0 – 250,000 | 0% |
| 250,001 – 500,000 | 15% + Shs 5,000 |
| 500,001 – 750,000 | 25% + Shs. 15,000 |
| 750,001 - above | 30% + Shs. 20,000 |

You are required to design a flow chart that will diagrammatically represent this information. (16 marks)

1. Describe **five** computer networking devices you would use to set up a local area network for an organisation. (20 marks)
2. (a). Outline **five** causes of computer failure in a laboratory. (10 marks)

(b). Explain **five** ethical issues computer users should be concerned about while in a

computer laboratory. (10 marks)