## COMPUTER SCIENCE 2 0595

## CAMEROON GENERAL CERTIFICATE OF EDUCATION BOARD

General Certificate of Education Examination / Technical and Vocational Education Examination

JUNE 2020	CE REVISION	ORDINARY / INTERMEDIATE LEVELS
Subject Title	COMPUTER SCIENCE	
Paper No.	2	
Subject Code No.	0595	

## **Two Hours**

Answer any FIVE questions.

All questions carry 20 marks each. For your guidance, the approximate mark for each part of a question is indicated in brackets.

You are reminded of the necessity for good English and orderly presentation in your answers.

In calculations, you are advised to show all the steps in your working, giving your answer at each stage.

Calculators and phones are NOT allowed.



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l. (a)	Give the role of each of the following types of system buses:	
	(i) Address bus	(2 marks)
	(ii) Control bus	(2 marks)
	(iii) Data bus	(2 marks)
(1.)		
(b)	Briefly describe the characteristics of a compact disc (CD) in terms of: (i) How data is stored	(3 marks)
	(ii) The physical layout of tracks and sectors on the CD.	(2 marks)
(c)	(i) Sketch and label a block diagram of a simplified computer system, that shows the	
(-)	information processing.	(3 marks)
	(ii) Describe the main activity of each stage and give one example of a device used.	(6 marks)
. (a)	State the main difference between	
	<ul> <li>(i) A Server and a Client in a Client-Server network.</li> <li>(ii) Synchronous and asynchronous data transmission.</li> </ul>	(2 marks)
	<ul><li>(ii) Synchronous and asynchronous data transmission.</li><li>(iii) Parallel and serial data transmission.</li></ul>	(2 marks)
(b)	Give the main role of the following networking devices:	(2 marks)
(0)	(i) Repeater	(2 marks)
	(ii) Bridge	(2  marks) (2  marks)
	(iii) Router	(2 marks) (2 marks)
	(iv) Modem	(2 marks)
(c)	Convert the following numbers to the indicated bases showing clearly the steps involved:	
	(i) FD <sub>16</sub> to binary	(3 marks)
	(ii) 305 <sub>8</sub> to hexadecimal	(3 marks)
. (a)	Differentiate between gratery of from 1 all at the Construction	
. (a)	Differentiate between system software and application software. Name an example in each	
(b)	Explain the following features of a word processor:	(4 marks)
(-)	(i) Editing	
	(ii) Mail merging	
	(iii) Cropping	
	(iv) Formatting	(4 marks)
(c)	(i) Briefly describe the differences between Manual Information System and an Aut	omated
	Information System.	(4 marks)
	(ii) Give two examples of Computerised Information Systems.	(2 marks)
4.15		()
(d)	(i) Name any four components of a Data Transmission System.	(4 marks)
	(ii) Briefly describe the role of any two of the components listed above.	(2 marks)
. (a)	Study the lines of codes written in HTML below and answer the questions that follow:	
()	study the mes of codes written in TTIVE below and answer the questions that follow:	
	1. <html></html>	
	2. <head></head>	
	3. <title> Computer Science </title>	
	4. <body></body>	
	5. <marquee><font color="red" size="16"><q><u> T</u></q></font></marquee>	HANK YOU
	6.	
	7. <hr "50%"="" <math="" align="center" color="&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;8. &lt;ol type = " i"="" size="16" start="" width=""/> \approx "3">.	<"suita
	9. <li>Senglish Language</li>	
	10. <li>Computer Science</li>	
	11. <li>Arithmetic </li>	
	12.	
	13.	
	14.	
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<ul> <li>(ii) Give the general name of software commonly used to interpret codes written in HTML. (1 mark) Briefly explain the output</li> <li>(iii) In lines 8 to 12 (4 marks)</li> <li>(iv) In line 7 (5 marks)</li> <li>(v) Write HTML code that will generate a hyperlink to a web page called CSC595. (3 marks)</li> <li>(b) Evaluate the following in binary arithmetic:</li> <li>(i) 11010112 + 101112 (2 marks)</li> <li>(ii) 10110012 - 110112 (3 marks)</li> </ul> (a) Table 1 is used to register student's information in a certain school. Table 1 (ii) What do you understand by the term key field? (2 marks) (ii) Which of the fields in Table 1 is suitable to used as a key field? Give a reason for your answer. (2 marks) (iii) Which of the fields in Table 1 is suitable to used as a key field? Give a reason for your answer. (2 marks) (iii) Give appropriate data types for the entries in the following fields: ADMISSION NUMBER, NAME OF STUDENT, DATE OF BIRTH, CLASS. (4 marks) (b) Briefly explain what you understand by each of the following: <ul> <li>(i) Bootstrap</li> <li>(ii) Brotstrap</li> <li>(ii) Brotstrap</li> <li>(iii) Brotstrap</li> <li>(iii) Brotstrap</li> <li>(iii) Brotstrap</li> <li>(iii) Camarks with source that with the following:</li> <li>(2 marks)</li> <li>(3 marks)</li> </ul>		3	
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Figure 1 R	(c)	Determine the logic expression that corresponds to the output P, R and O, in terms of A and B, c	(6 marks) on the logic
	Ċ		(6 marks)

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- 7. (a)
- You are requested by a Principal to make recommendations for types and specifications of computers for the school computer laboratory.
  - (i) Name three characteristics of the system unit you will recommend and say how these are important for proper functioning of the laboratory. (6 marks)
  - (ii) Name one characteristic of the monitor you will recommend and say how this is important for the laboratory. (2 marks)
- (b) A student gets up a 5:30 AM and performs the following activities shown in Table 2 within the indicated duration, in order to get to school.

No.	Activity	Duration in Minutes
1.	Facial clean-up	10
2.	Heat water for shower	15
3.	Prepare breakfast	10
4.	Take a shower	15
5.	Clean shoes	5
6.	Dress up	15
7.	Take breakfast	10
8.	Walk to school	15

Assuming that activities 2 and 3 can start at the same time, as well as activities 5 and 6,

- (i) Draw a Gantt chart for the above activities.
- (ii) What do you understand by the terms:
  - Critical path
  - Slack time
- (iii) Determine the critical path for these activities.

(4 marks) (2 marks)

(6 marks)

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