



REPUBLIQUE DU CAMEROUN
PAIX – TRAVAIL – PATRIE

MINISTERE DES ENSEIGNEMENTS
SECONDAIRES

REGION DE CENTRE



REPUBLIC OF CAMEROON
PEACE – WORK – FATHERLAND

MINISTRY OF SECONDARY EDUCATION

CENTRE REGION

<p>CENTRE REGIONAL MOCK EXAMINATION</p>	<p>SUBJECT CODE NUMBER 796</p>	<p>PAPER NUMBER 2</p>
	<p>SUBJECT TITLE INFORMATION AND COMMUNICATION TECHNOLOGY</p>	
<p>CANDIDATE NAME:</p> <p>CANDIDATE NUMBER:</p> <p>CENTRE NUMBER:</p>		
<p>ADVANCED LEVEL</p>	<p>DATE: Monday, 25 March 2024</p>	

Two and a half hours (2½ hours)

Answer any SIX Questions.

All questions carry 17 marks each. For your guidance, the approximate mark for each part of a question is indicated in brackets.

You will be marked on your ability to use good English, to organize information clearly and to use specialist vocabulary where appropriate.

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

Question 1

- a) Explain the following terms as used in the word processing.
- i. Indenting (1 mark)
 - ii. Alignment (1 mark)
 - iii. Footnote (1 mark)
- b) Describe the role of an operating system in:
- i. Memory management (2 marks)
 - ii. Job scheduling (2 marks)
 - iii. Error handling (2 marks)
- c) What is multimedia? (2 marks)
- d) Differentiate between analogue and digital data (2 marks)
- e) Outline three advantages of using computers for data processing over other types of office and business equipment. (4 marks)
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Question 2

- a) Convert the following numbers to their decimal equivalent.
- i. 11.011_2 (2 marks)
 - ii. 127_8 (2 marks)
- b) CRACSCICT teacher's college has decided to automate its library for effective services to the students. Identify two methods they are likely to use to gather information during system development (2 marks)
- c) What do the following terms mean in relation to internet?
- i. Downloading (2 marks)
 - ii. Hyperlink (2 marks)
 - iii. Web browsers (2 marks)
- d) List two advantages of using database systems (2 marks)
- e) In a database system, data integrity ensures the correctness and completeness of the data in the database. Differentiate the following types of integrity constraints:
- i. Validity integrity (1 mark)
 - ii. Entity integrity (1 mark)
 - iii. Referential integrity (1 mark)
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Question 3

- a) File organization refers to the arrangement of records on secondary storage. Briefly describe the following file organization methods.
- i. Serial (1 mark)
 - ii. Sequential (1 mark)
 - iii. Random (1 mark)
- b) Your School has decided to replace its library control system. The current system was implemented ten years ago but has restricted reporting facilities and has a text – based interface. The school intends to replace the old system with a new computerized system, and is now considering both 'parallel running' and 'direct changeover'
- i. Briefly explain the terms parallel running and direct change over as used in system implementation. (4 marks)
 - ii. Give two disadvantages of direct changeover over parallel running (2 marks)
 - iii. Identify two main risks of direct changeover during system implementation (2 marks)
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- iv. Mention any two advantages of running both the manual system and the computerized system simultaneously (2 marks)
- c) What is a website? (2 marks)
- d) Name two facilities that are needed to connect to the internet. (2 marks)

Question 4

- a) You are the manager at a new supermarket. You would like to hire an individual with a disability to assist with clerical work. Choose a specific disability and provide an example of an office job that you could hire this individual to perform. Additionally, describe the type(s) of device(s) you may need to provide to enable the person to succeed in the job. (4 marks)
- b) THREE terms associated with the quality of an image are ‘pixel’, ‘resolution’ and ‘graphics card’.
 - i. Define the term ‘pixel’. (1 mark)
 - ii. Explain the term ‘resolution’. (2 marks)
 - iii. Give TWO examples of applications that might require high resolution. (2 marks)
 - iv. Explain the function of a graphics card (2 marks)
- c) What is an Integrated Software package and give two examples (3 marks)
- d) Give reasons why operating system is the first software to be installed in the computer (2 marks)
- e) Define Data communication (1 mark)

Question 5

- a) Explain the term ‘computer vision syndrome’. (2 marks)
- b) List FOUR conditions that may result from computer vision syndrome. (2 marks)
- c) Describe THREE ways in which computer vision syndrome can be reduced or prevented (3 marks)
- d) Define the terms ‘intellectual property’ and ‘trademark’ (4 marks)
- e)
 - i. Explain the term ‘digital citizenship’. (2 marks)
 - ii. List TWO aspects of digital citizenship (3 marks)
- f) Explain why an algorithm would not be executed by a computer (1 marks)

Question 6

- a) How can computers be used in business and industry in Cameroon (4 marks)
- b) A teacher keeps a class list containing the following data for each student: Name, Student index number, Text scores.
 - i. State the data type for each of these fields: (3 marks)

	Field name	Data type
1	Name	
2	Student index number	
3	Test scores	

- ii. What is the Primary key field for the record? (1 mark)
- c) What electronic technology characterized each of the generation of computers? (3 marks)

	Generation	Technology
1	First	
2	Second	
3	Third	

- d) State the meaning of the following machine cycle process (3marks)
- (i) Fetching
 - (ii) Decoding
 - (iii) Execute
- e) State in an orderly manner the stages of SDLC (3 marks)

Question 7

- a) What is Video conferencing? (2 marks)
- b) Draw a flowchart for computing sum and average of five numbers and translate it to a simple c-program (10 marks)
- c) Briefly describe the NAND and the NOR gate with their corresponding truth tables (4 marks)
- d) What is a universal logic gate? (1 mark)

Question 8

- a) What is an Ethernet? (2 marks)
- b) Differentiate between E-trading and E-commerce (4 marks)
- c) Define the following types of computer crimes and give example in each case
- i. Computer Assisted Crime (2 marks)
 - ii. Computer Related Crime (2 marks)
- d) A software development schedule is shown in the table below.

Activity	Predecessor	Duration(Days)
A	-	2
B	A	3
C	A	1
D	B	4
E	C	1
F	C	2
G	D,E	4
H	F,G	2

- i. Draw a Gantt chart for this project. (3 marks)
 - ii. Determine the critical path of this project. (2 marks)
- e) What is an Information system? (2 marks)