

451/1  
COMPUTER STUDIES  
PAPER 1  
JULY / AUGUST 2009  
2 ½ HOURS

## JOINT INTERSCHOOLS EVALUATION TESTS JISSET 2009

COMPUTER STUDIES  
PAPER 451/1  
JULY / AUGUST 2009

### INSTRUCTIONS TO CANDIDATES.

- *Section A is compulsory.*
- *Write all your answers in the spaces provided in the answer sheet*
- *Answer question 16 and any other three questions in section B*

A	1-15	
B	16	
	17	
	18	
	19	
	20	

1. In each of the following situations state the most appropriate data processing mode.

a). Hotel reservations (1mk)

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b). Pay roll preparations (1mk)

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2. a) What is a page description language? (1mk)

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.....

b) State two types of page description languages in the market today (2mks)

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.....

3. State two consequences of a poorly implemented system change over strategy (2mks)

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4. a) What is a section break as used in word processing? (1mk)

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.....

b) State two section breaks that can be used in a word processor (2mks)

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5. a) State four levels of system testing (2mks)

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.....  
b) In relation to programming, what is meant by:

i). Language syntax

(1mk)

.....  
.....

ii). Semantic

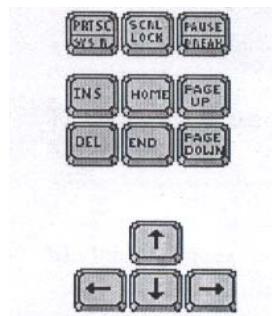
.....  
.....

6. Distinguish between Job scheduling and job sequencing

(2mks)

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.....

7. The diagram below represents a set of keys on the computer keyboard. Study it and use it to answer the questions that follow



a) Give the appropriate name given to the first set of keys in the diagram

(1mk)

.....  
.....

b) State what the following key combination will do when pressed in Microsoft word 2003

i). Ctrl + END

(1mk)

.....

ii). Ctrl + DEL

(1mk)

.....

8. Distinguish between central processing unit (CPU) and microprocessor (2mks)

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.....

9. Suppose that i and j are integer type variables that have been assigned the values of 3 and -5 respectively. What is the value of the following Boolean expressions? (2mks)

a).  $(i \text{ DIV } 2) \geq (j + 6)$

b).  $i - 3 = j + 5$

.....  
.....

10. a) State two characteristics of Rom (2mks)

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.....

b) Name two devices other than the typical computer where ROM may be used (2mks)

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.....

11. State the functions of the following devices:

a). Net work interface card (NIC) (1mk)

.....  
.....

b). Expansion slot (1mk)

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.....  
12. For each of the following printers state the print modes

a). Dot matrix (2mks)

.....

b). Inkjet printer (2mks)

.....

13. a) What is meant by disk defragmentation? (1mk)

.....

.....

b) State the purpose of disk defragmentation (2mks)

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.....

14. Give any **THREE** differences between artificial neural networks and an expert system (3mks)

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.....

15. Define the following terms as used in computing

i). Bluetooth (1mk)

.....

.....

ii). MP3 (1mk)

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**SECTION B**

Answer questions 16 and any other three questions in this section

16. Students in your class are divided into two groups: Group A with Biology students and Group B with Chemistry students. Biology students attend their lessons on Fridays and Chemistry students on Tuesdays. A program is required to read the name of each student and the group he/she belongs to terminate by QUIT.

Print a list showing the name, day and subject that each student should attend class for that subject.

a). write a pseudocode for this program (5mks)

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b). draw a flowchart for this program (6mks)

c) Give two differences between procedural and non procedural programming languages (4mks)

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.....  
17. A student at Kula Mawe High school was asked to name four computer consumables. The student responded by naming the following; Toner, ink cartridge, plotter pen, ink ribbon.

a). Which of the items mentioned is likely not to be actively used in a school situation (1mk)

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b). Explain to the rest of the students what is meant by:

i). Toner cartridge (2mks)

.....

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ii). Ink cartridge (2mks)

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iii). Ink ribbon (2mks)

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.....

c). Output devices are classified as either hard copy or softcopy devices.

i). Name two hard copy output device that can be used in a busy architectural firm (2mks)

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.....

ii). State two reasons why the user may prefer softcopy to hard copy output device (2mks)

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.....

d). Use the two's binary compliment method of subtraction to work out the following (4mks)

$$4561.55_8 - 10011111.001_2$$

.....

.....  
 18. a). Explain the meaning of the following field properties;

i). Validation rule (1mk)

.....  
 .....

ii). Validation text

.....  
 .....

b). Below are two table structures of files in a database

Table A		Table B	
Field	Data type	Field	Data type
Employee name	text	Employee no	Number
Employee number	Auto number	Data employed	Data/time
DOB	Date/ Time	Department	Text
Address	Text	Salary	Currency

i). which of the two tables is likely to be the parent table (1mk)

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ii). It is advisable to ‘enforce referential integrity’ when creating a relationships. What do you understanding by the term referential integrity?. (2mks)

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 .....

iii). The field ‘employee no’ in table B likely to be the foreign key. What is a foreign Key? (2mks)

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 .....

iv). Which fields in both tables is most appropriate for creating a relationship? (1mk)

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.....  
v). What would make the relationship between the table fail to work? (2mks)

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c) i). In databases the field properties specify finer details related to the fields and the table entries expected. State **THREE** field properties. (3mks)

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ii). State **THREE** functions of a database (3mks)

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19. a). i). Explain three communication services offered through internet (3mks)

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ii). Describe the following internet terms (2mks)

Sign Up

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Download

.....  
.....

b). The following is a spreadsheet relating to a farmer.

	A	B	C
1	Crop	Amount	Remark
2	Maize	150	
3	Bean	300	
4	Cashew nuts	850	
5	Cabbages	1036	

i). a function =IF(B2<200 “Not Viable”), IF (B2> 300,” Moderate”), IF (B2>1000, “Viable”))). Give the appropriate result returned in cells C2, C3, C4 and C5 (2mks)

ii). Text can easily be selected using a mouse in word processing. How do you select

a). Multiple paragraph

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b). Vertical block of text

.....

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c). Distinguish between (2mks)

i). A window and an orphan in word processing

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ii). Computer Crime and Computer abuse

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d). i). Give one purpose of drop caps on a text paragraph (1mk)

.....

ii). What is meant by artificial intelligence? (1mk)

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iii). Give two application of artificial intelligence (2mks)

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20. You were typing a document on the computer and the power of the computer was abruptly interrupted. When the computer was restarted, the document was no longer in memory.

a). i). explain why the document was not in memory (1mk)

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ii). Give **TWO** precautions that can be employed to ensure that a document is not completely lost in the event of a power interruption. (2mks)

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b). The two diagrams below represent two softcopy output devices.

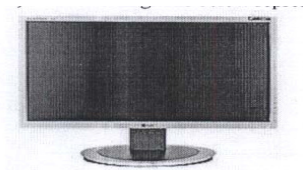


Figure 1



Figure 2

i). Name them (2mks)

Figure1 .....

Figure2 .....

ii). Other than the typical computer, name other two devices that use the device labeled figure 1 above in the diagrams as output devices. (2mks)

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c). Briefly explain how data is saved on the following secondary storage devices

i). Floppy disk (4mks)

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ii). Magnetic tape (4mks)

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