

# FORM FOUR CLUSTER KCSE MODEL10

## COMPUTER STUDEIS PAPER 1 QUESTIONS

### SECTION A (40 Marks)

1. List four devices located under the cover of the system unit.  
.....  
.....  
.....  
.....
2. Explain the emerging trends in micro computer technology in relation to:
  - i. Size  
.....  
.....
  - ii. Cost  
.....  
.....
3. Explain four reasons which make microcomputers suitable for personal computing work.  
.....  
.....  
.....  
.....
4. List two things that can spoil a printer if they are not of correct specification and explain what damage may be caused. ....  
.....  
.....
5. Distinguish between compiler and interpreter.  
.....  
.....
6. Mention three causes of eye strain in the computer room.  
.....  
.....
7. A computer teacher has put a rule that flash disks should not be used in computer laboratory.
  - a) Give two reasons for the rule. (2 marks)  
.....  
.....
  - b) Highlight two alternatives that can be used to achieve the same objectives. (2 marks)  
.....  
.....
8. Name four operations that can be performed on a relational database files.  
.....  
.....  
.....
9. a) State the purpose of registers in a computer system. (1 mark)  
.....  
.....

b) Name four types of registers found in central processing unit. (2 marks)

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

10. a) What is warranty with reference to the purchase of computers. (1 marks)

.....  
.....

b) List down two issues to understand about warrants. (2 marks)

.....  
.....

11. An organization intends to replace an existing system by carrying out the process in stages

a) Name this implementation strategy. (1 mark)

.....  
.....

b) Give two reasons why the organization is opting to use the implementation strategy in (a) above

12. Describe two functions performed by the CPU.

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

13. Define the following terms.

a) Port

.....  
.....

b) Data interface cable

.....  
.....

c) Power cable

.....  
.....

14. The following car details are to be entered in a database. Make, Date-of-manufacture, colour and cost.

a) Prepare a suitable database structure showing field names and their field data types. (2 marks)

b) Explain how you index the data such that cars of the same make and colour are together. (1 mark)

15. Name any four computing resources that can be distributed.

.....  
.....

### SECTION B (60 Marks)

16. a) Define the term selection to program control structures. (1 mark)

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

b) List four control structures used in writing a program. (4marks .....  
.....  
.....  
.....

c) With the aid of a Pseudocode and a flowchart, design an algorithm that would:

i) Prompt the user to enter two numbers X and Y.

ii) Divide X and Y. However, if the value of Y is 0, the program should display an error message "error: division by zero".

iii) Display the number and quotient for the Pseudocode (4marks)

Flowchart (6 marks)

17. a) Describe the octal number system. (2 marks)

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

b) Convert each of the following to the number system indicated.

i)  $111.101_2$  to decimal (3 marks)

ii)  $14.6875_{10}$  to binary (4 marks)

c) Convert the number  $-17_{10}$  into 8-bit  
i) Signed magnitude representation. (2 marks)

ii) Two's complement

(2 marks)

d) Perform the following binary arithmetic operation

(2marks)

$$110.11_2 + 11.011_2$$

18. a) Distinguish between Unshielded Twisted Pair (UTP) and Shielded Twisted Pair (STP) cables. (2 marks) .....

b(i) With an Aid of a diagram describe the mesh topology. (3 marks)

(ii) Highlight one advantage and two disadvantages of the above network topology. (3 marks) .....

(c) Highlight four limitations of computer networking. (4 marks) .....

(d) Define the following terms. (i) Data Terminal Equipment (1 mark) .....

(ii) Remote Terminal (1 mark)

.....

(iii) Internet (1 mark)

.....

19. a) Explain the 3 parts of a task bar. (3 marks)

.....

b) What is the meaning of the following terms as used in word processing. (2 marks)

(i) Autocomplete .....

.....  
(ii) Drop caps .....

c(i) Differentiate between formular and function as used in Ms Excel. (2 marks) .....

ii) Explain the meaning of legends as used in Ms Excel (2 marks) .....

d) List any four examples of DTP software available in the market today. (2 marks) .....

e) Distinguish between the following as used in Desktop publishing.

(i) Paste board and printable area. (2 marks)

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

(ii) Copying and moving text. (2 marks)

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

20. a) One of the function of an operating system is Job Scheduling. Explain what is meant by Job Scheduling. (3 marks) .....

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

b) Recently on 4th March 2013 Kenya went on election in which the results were to be transmitted electronically using mobile phones from all polling stations to the server. But the system (server) failed to work. i) State any four security threats that the system was prone to. (2 marks)

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

ii) Suggest any four control measures that the IEBC should take in future to ensure secure and safe tallying of votes. (4 marks) .....

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

c) What is the work of the following queries. (3 marks)

i) Update query .....  
.....  
.....

ii) Append query .....  
.....  
.....

iii) Make table query .....  
.....  
.....

d) The principal of Figoni Primary School wants to acquire a new operating system for her computer. Advise her stating three advantages of graphical user interface over command line interface. (3 marks) .....  
.....  
.....  
.....