

FORM FOUR CLUSTER KCSE MODEL11

COMPUTER STUDIES PAPER 1 QUESTIONS

SECTION A (40 Marks)

1. Explain the meaning of the following transmission impairments.
 - a) Attenuation.
 - b) Cross-talk.
2. a) Define the term file organization. (1mk)
b) Explain two methods of file access. (2mks)
3. List four number system that the design and organization of a computer may depend on.
4. Explain the meaning of the following terms as used in computer communication.
 - a) Modulation.
 - b) Demodulation.
5. Using one's complement, calculate $110112-1112$ and leave your answer in binary notation.
6. List three types of computers that are classified according to the type of signal they use when functioning.
7. In relation to DTP, explain the meaning of : (2mks)
 - a) Pasteboard
 - b) Master page
8. What is the main function of a primary key in a database.
9. Apart from a computer, give three other elements that are needed in order to connect to the internet.
10. a) Define the term virtual reality. (1mk)
b) Give three components of a virtual reality system. (3mks)
11. Highlight any two ways in which computers are used in industrial systems.
12. . Indicate the type of cell reference depicted by the following.
 - a) \$H\$5
 - b) H5
 - c) H\$5
13. List three components of a spreadsheet.
14. State two documents that are needed during the process of mail merging.
15. State any two components of a world wide web.

SECTION B (60 Marks)

16. a) Define the following terms as used in programming. (2mks)

i) Assembler

ii) Pseudo-code

b) With the aid of a flowchart segments, highlight two difference between the

REPEAT...UNTIL and WHILE....DO statement structure. (4mks)

c) Give the name and use of the flowchart symbol below. (2mks)



i) Name .

ii) Use

d)It is required that numbers from 5 to 100 in the series 5,10,15.....

100 are multiplied and the product displayed .

Design a flowchart for solving the problem. (7mks)

i) List any four methods that can be used to achieve the second stage in above.(4mks)

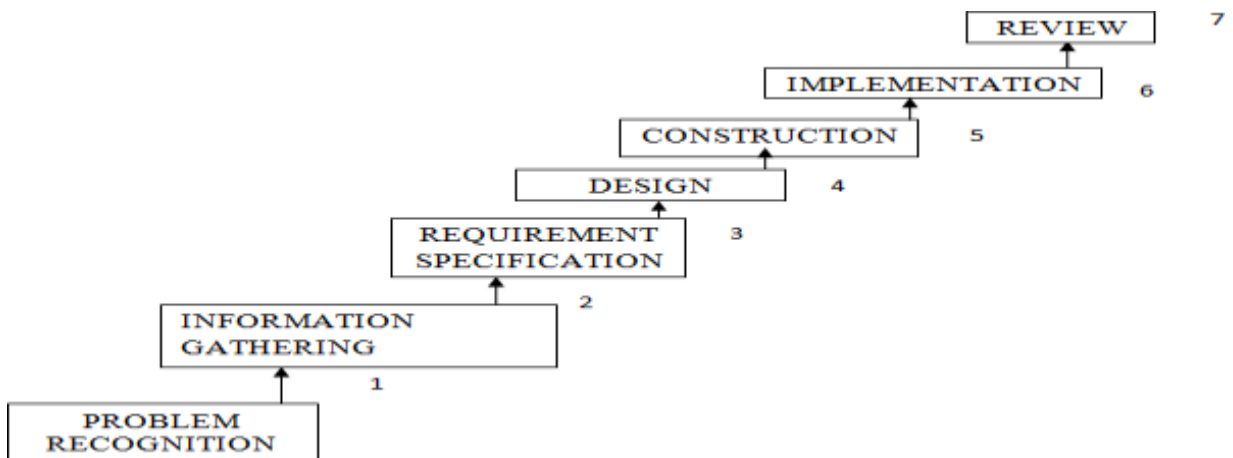
ii) List any four areas that have to be designed at the fourth stage. (4mks)

b) Explain the meaning of the following system characteristics. (4mks)

i)Entropy.

ii) Controls.

17. a) The following diagrams shows the stages of developing an information system.



i) List any four methods that can be used to achieve the second stage in above.(4mks)

ii) List any four areas that have to be designed at the fourth stage. (4mks)

b) Explain the meaning of the following system characteristics. (4mks)

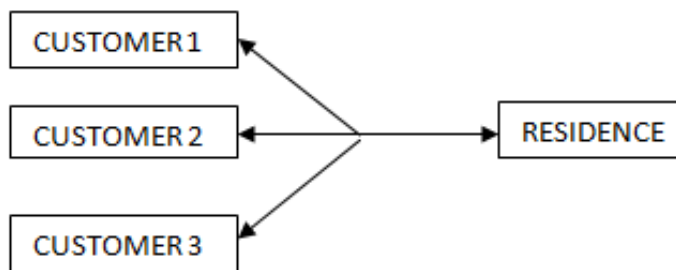
i) Entropy.

ii) Controls.

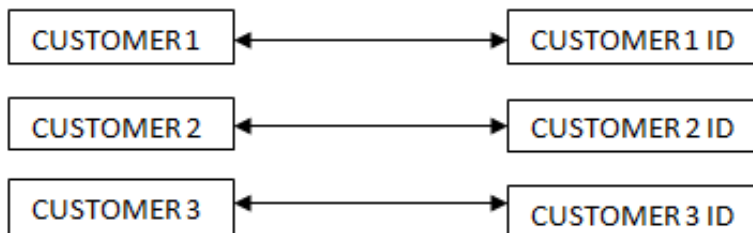
c) State the three function of an information system. (3mks)

18. The diagram below shows various entities, their attributes and relationship among them.

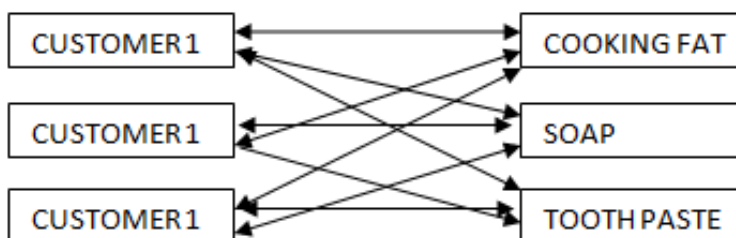
i)



ii)



iii)



a) Define the terms. (6mks)

i) Entity

ii) Attribute.

iii) Relationship.

b) Indicate the type of relationship depicted by the diagram above. (3mks)
c) i) Write the acronym DBMS in full. (1mk)

ii) State any three functions of DBMS. (3mks)

c) List any three database models. (3mks)

19. a) State three characteristics of RAM. (3mks)

b) The capacity of a computer memory is 128MB

.calculate the maximum number of nibbles the memory can support. (4mks)

c) List any (5mks)

i) Three pointing input devices.

ii) Two digitizing input devices.

d) State any three softcopy output devices. (3mks)

20.