

COMPUTER SCIENCE
S5 MCE



KAMONYI DISTRICT

HOLYDAYS WORK, 2024-2025

SUBJECT: COMPUTER SCIENCE

COMBINATIONS:

- MATHEMATICS-COMPUTER SCIENCE-ECONOMICS **(MCE)**

INSTRUCTIONS:

- 1) Write your names on the answer sheet.
- 2) Do not open this question paper until you are told to do so.
- 3) This paper consists of **THREE** sections: **A, B** and **C**.

Section A: Attempt ALL questions. (55 marks)

Section B: Attempt any THREE questions. (30 marks)

Section C: Attempt any ONE question. (15 marks)

- 4) Use only a blue or black pen.

SECTION A: ATTEMPT ALL QUESTIONS. (55 marks)

- 01) State the advantages of using database management system than a file system of an end user. **(5 marks)**
- 02) Define: **(6 marks)**
 - a. Protocol
 - b. Network topology
 - c. IP address
 - d. Portable device
- 03) What is a control in VB? Give three of its examples. **(5 marks)**
- 04) State 5 examples of portable devices. **(5 marks)**
- 05) Differentiate RDB from RDBMS. **(5 marks)**
- 06) What advantages does fiber optics have over other media? **(5 marks)**
- 07) Explain the difference between a one-to-many and a many-to-many relationship. Give an example for each. **(5 marks)**
- 08) Explain the common disadvantages of using computer network **(5 marks)**
- 09) Distinguish a weak entity from strong entity. **(5 marks)**
- 10) Using array, write a C++ program to find the average of marks obtained by 5 students. **(5 marks)**

11) What is the difference between CLI and GUI? **(4 marks)**

SECTION B: ATTEMPT ANY THREE QUESTIONS. (30 marks)

13) Write code of a VB 6.0 program which displays the sum and average of numbers ranging from 0 to 10 use do...loop until. **(10 marks)**

14) Using a pointer, write a C++ program that will display an area and volume of a sphere (area= $4\pi r^2$, volume= $\frac{4}{3}\pi r^3$). **(10 marks)**

15) Write a Java program to display the following sequence of numbers: 100, 90, 80, 70, 60, 50, 40, 30, 20, 10, 0. **(10 marks)**

16) Compare a peer to peer network and a client server network. **(10 marks)**

17) By using While ...Wend loop Write a VB program that computes the sum of even numbers from 0 to 50. **(10 marks)**

18) Using a class, write a C++ program to find the largest number in two number entered by the user. **(10 marks)**

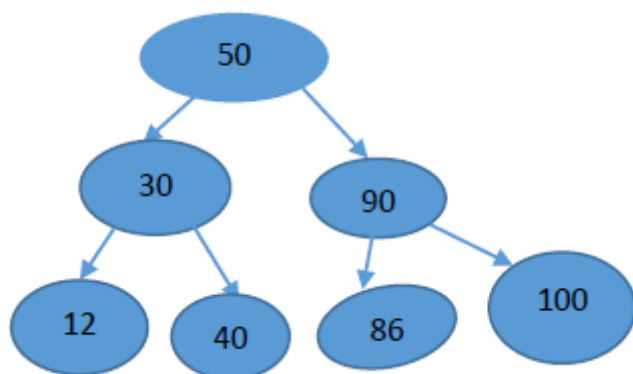
SECTION C: ATTEMPT ANY ONE QUESTION. (15 marks)

18) Create a class called employee that contains a name (an object of class string) and an employee number (type long). Include a member function called getdata() to get data from the user for insertion into the object, and another function called putdata() to display the data. Assume the name has no embedded blanks.

Using C++ write a main() program to exercise this class. It should create an array of type employee, and then invite the user to input data for up to 100 employees. Finally, it should print out the data for all the employees.

(15 marks)

18) a) Determine the order in which the elements would be accessed during an in-order, pre-order and post-order traversal. **(12 marks)**



b) Determine the path between 50 and 86.

(3 marks)

