

Class:  
**CIS/CS/CT**  
**IRM/PM/P-E**

**INSTRUCTIONS**

- Answer ANY FOUR (4) questions out of 6
- All answers must be written in the Answer Booklet provided
- Time Allowed: 120mins

1. In ABC Group of Schools where you have just been employed as a System programmer, you are required by the Mathematics teacher to write a program to print multiples of 5 from 1 to 100 and find the sum and the average. Write a C++ to perform the task.
2. Write a C++ to perform the following operations:
  - a. Accepts 100 numbers from users
  - b. Finds and displays the sum of those numbers accepted in (a).
  - c. Finds and displays the largest of the numbers accepted in (a).
  - d. Finds and displays the smallest of the numbers accepted in (a).
3. Write a C++ program that does the following:
  - a. Asks a user how many courses he offered last semester.
  - b. Using for loop and array:
    - i. accepts the unit of the courses from the user.
    - ii. accepts scores obtained in the courses from the user.
  - c. Calculates the total grade point and total units for all the entered data in (b)
  - d. Calculates the grade point average
4. A telecommunication company gave you a contract to develop a mini software that will educate a new or prospective customer on how to have a functioning sim card. Using “nested if” design an application that determines if a customer has a functioning sim card based on if:
  - a) He has a sim card
  - b) Has registered the sim card
  - c) If the sim card is loaded with credit card
5. Develop a simple application for a primary three pupil to compute square, cube and quad of any number. Using C++ function structure, write a program that uses functions to compute squares, cube and quad of an integer.
6. Nigerian Government has contacted you to develop a real time voting system for the coming 2019 presidential election. The presidential candidates are:  
Ademola Tayo  
Makinde Kayode  
Olajire Adegoke  
Olufemi Bamiro  
With the use of switch case, develop a C++ application that
  - a. Allow a voter to vote for candidate of choice
  - b. Produce vote count for each candidate
  - c. Will continue to run until there is no more voter.