Computer Science 016

05 Nov.2013 8.30am - 11.30 am

REPUBLIC OF RWANDA



RWANDA EDUCATION BOARD

ADAVANCED LEVEL NATIONAL EXAMINATIONS 2013

SUBJECT: COMPUTER SCIENCE

COMBINATIONS: MATHS-COMPUTER SCIENCE-ECONOMICS: MCE

MATHS-PHYSICS-COMPUTER SCIENCE: MPC

DURATION: 3 HOURS

INSTRUCTIONS:

1. Do not open this paper until you are told to do so.

2. This paper consists of **three** sections: **A**, **B** and **C**.

Section A: This section is compulsory.

Section B: Attempt three questions.

Section C: Attempt any one question.

3. Use only blue pen.

(55 marks)

(30 marks)

(15 marks)



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Section A: Attempt all questions (55 marks)

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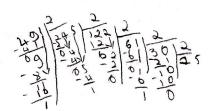
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1.	Define a flowchart.	(2marks)
2.	What makes up a Visual Application (Project)?	(7marks)
3.	What are the three ways for a variable to be declared?	(3marks)
4.	What are the three ways to connect to a database in Visual Basic?	(3Marks)
5.	Define Object Oriented Programming.	(3marks)
6.	Distinguish 'while' and 'do - while' statements.	(8marks)
7.	List the different types of parameter passing techniques.	(3marks)
8.	Define class.	(2marks)
9.	Where will you classify a member function?	(4marks)
10.	What is the use of a destructor?	(3marks)
11.	What is the difference between structure and a class?	(3 marks)
12.	Define virtual function.	(6marks)
13.	What is meant by pointer and null pointer?	(4marks)
14.	Give any two error handling functions and their purposes.	(4marks)



Section B: Attempt any three questions from this section. (30 marks)

- Define the following:
 - a) Branching Statements.

(2,5marks)

b) Looping Statements

(2,5marks)

c) if statement. when it grown to

(2,5marks)

d) while statement. "tration stat

(2,5marks)

Write a pseudocode of an algorithm that will read the two sides of a rectangle and calculate its area.

(7) Convert the binary number 1111011 to decimal number.

(10marks)

(10marks)

18. How does a main () function in C++ differ from main () in C?

(10marks)

19. What is ADO? What are its objects?

(10marks)

Section C: Attempt any one question from this section (15 marks)

- 20. Write a C program to print fibonacci series (0 1 1 2 3 5 8 13).
- 21. Write an algorithm to find the sum and average of three given numbers.