

GREENLAWNS HIGH SCHOOL

Std VIII A,B,C

FINAL EXAMINATION YEAR 2018

MARKS : 80

COMPUTER SCIENCE

Time : 1 ½ hrs

Q1. Fill in the blank [10]

- a) \_\_\_\_\_ box is used to represent the conditional operations for checking or applying any condition.
- b) \_\_\_\_\_ is a rectangular shaped box which denotes processing of instruction.
- c) Flowchart is the \_\_\_\_\_ representation of problem logic.
- d) \_\_\_\_\_ is always used in a pair while designing the flowchart.
- e) The \_\_\_\_\_ operator works on a single variable or constant.
- f) A \_\_\_\_\_ is a named location in the memory, which stores data temporarily.
- g) Every Java statement must end with a \_\_\_\_\_.
- h) \_\_\_\_\_ operator checks the non-equality between two operands.
- i) \_\_\_\_\_ operator checks whether the first value is less than or equal to the second value.
- j) To find the remainder of a division \_\_\_\_\_ operator is used.

Q2. Which of the following are valid variable names and why/why not. [5]

- i) Data\_rec    ii) \_data    iii) my.file    iv) 1 data    v) date9\_7\_77

Q3. Write Java statements for the following expressions [10]

a)  $2a + 2b + 2c$

b)  $a^2 + b^2 + c^2$

c)  $x^3 + y^3 - xy/z$

d)  $\pi r^2$

e) 
$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Q4. Give the result of the following expressions where a=1, b=2 and c=3

a)  $a > b \& \& c * 3 \geq 5 + a$  [2]

b)  $++a < b++ \mid \mid --b < c--$  [2]

c)  $++a - b++$  [1]

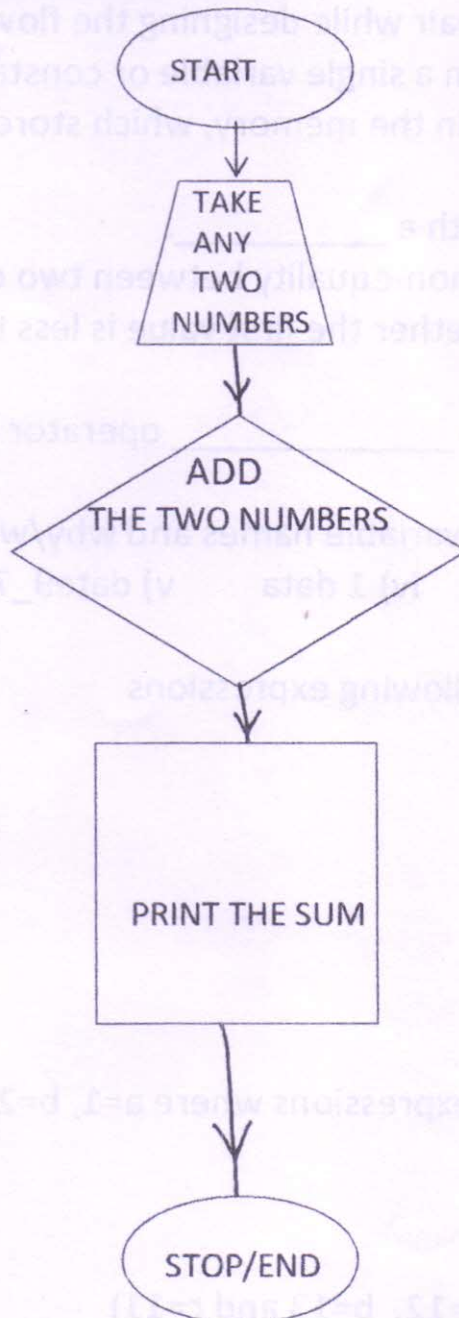
d)  $b++ + ++b + c++ + ++a$  (where a=12, b=13 and c=11) [2]

e)  $--a + b++ + ++a + --b * c++$  (where a=12, b=13 and c=11) [1 ½]

f)  $c++ + a++ * (++b)$  (where a=12, b=13 and c=11) [1 ½]

Q5. Write an algorithm and draw flowchart for the following : [10]

- a) Accept any two numbers. If the first number is greater than the second number, print their sum, otherwise print their product.
- b) Accept any one alphabet. Display the message Vowel if the entered alphabet is a vowel, otherwise display the message Not a Vowel.
- c) Write only algorithm to check whether a number is even or not.
- d) Correct the flowchart symbols and redraw it.
- Flowchart to add two numbers.



Q6. Explain the following terms:

[10]

- a) Bandwidth
- b) Link
- c) Web Portal
- d) Cloud Computing
- e) Internet Service Provider

Q7. Write one difference between the following pairs:

[10]

- a) Hub and Switch
- b) Interpreter and Compiler
- c) Internet Message Access Protocol and Simple Mail Transfer Protocol(function)
- d) Flowchart and Algorithm
- e) Division operator and Modulus operator(with example)

Q8. Answer the following :

a) List any three variable naming rule.

[3]

b) What is domain name servers? How is it related to URL?

[3]

c) Discuss briefly the role of Router and Gateway.

[3]

d) What is the basic function of following protocols?

[3]

i) TCP      ii) FTP

e) Explain any three limitations of Cloud Computing.

[3]

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