LA CHATELAINE JUNIOR COLLEGE
COMPUTER SCIENCE

CLASS VIII   CHAPTER 8-BASIC Programming

I. **Fill in the blanks(1 mark each)**

1. BASIC stands for Beginners All-purpose Symbolic Instruction Code.
2. BASIC is a high level language.
3. Resolving errors   in a program is called Debugging.
4. Algorithm is a finite set of steps to accomplish a task.
5. An error caused by a wrong spelling in a program is called syntax error.
6. Variable is a named memory location in a program.
7. Rem statement is used to comment a line in BASIC language.
8. Say statement is used to read a statement in BASIC language.
9. A Subroutine is used to repeat a block of code at various places in a program.
10. length is the string function which gives the length of the string.

II. **True or False(1 mark each)**

1. BASIC is a low level programming language. FALSE
2. The statement which is used to accept values from the user is input. TRUE
3. Cls statement clears the graphics output area. FALSE
4. Clg statement clears the text output area. FALSE
5. Fibonacci sequence is 0,1,1,2,3,5,8.. . TRUE

III. **Match the following(1 mark each)**

1. say   Gets a keyboard input [4]
2. print   return[5]
3. Rem   reads a statement[1]
4. input   prints output [2]
5. gosub   Comment Line[3]

IV. **Answer in one word/two words(1 mark each)**

1. How are the rules that specify the use of   programming language statements is called? Syntax.
2. Give a loop structure of BASIC. for loop ,while loop
3. How will you start a new program in BASIC 256? File menu-New option
4. How will you open an existing BASIC program in BASIC 256? File menu-Open option
5. How will you save a file in BASIC 256? File menu-Save option
6. What is the extension of BASIC file in BASIC 256? .kbs
7. What   does kbs stands for? Key board Script files.
8. Name the statement that causes the execution of the program to jump to the subroutine defined by a Label. gosub

9. Name the statement of the sub routine that sends control back to the called part of the program return
10. Name the string function which is used to print the sub string hell from the string hello . left

V. **Answer in one or two sentences(2 marks each)**
1. What are the main parts of a BASIC 256 editor? Program Area and Output Area
2. What are the 2 parts of the output area of BASIC 256.Text Output and Graphics Output .
3. Write a piece of code in BASIC to display the text hello in the output area. print "hello"
4. Write the print statement of BASIC using the arithmetic operator + to display the sum of 20 and 30.print 20+30
5. Write the print statement of BASIC to display the sum of 20 and 30 as Total=50
   print "Total= " ; 20+30
6. Write a statement in BASIC to accept name from the user.
   (Note:$ symbol is used only to accept text values)
   input "Enter your name", name$
7. Write a statement in BASIC to accept age from the user.
   (Note:$ symbol is NOT used here as age is a number)
   input "Enter your age", age
8. Write the command to draw a rectangle of length 50 and breadth 20 in the output area
   rect 0,0,50,20
9. In the BASIC statement rect 0,0,50,20 what does each number denote?
   0,0-They are the x and y coordinates of the Graphics output
   50-length of the rectangle
   20-breadth of the rectangle
10. Write the BASIC command to convert the string hello in lower case to upper case.
    print upper("hello")

VI. **Answer the following in brief(3 marks each)**
1. Name the following tool bar icons of BASIC 256.

Save-To save a program or instruction	Run-To execute a program or instruction	Debug-To locate and remove error from program

2. Write a BASIC program to accept your name and print welcome <name>.
   input "Enter your name",name$
   print "welcome ";name$
3. Underline all the numeric variables in the following program.
   Input "Your name is", Name$

Input "Which school do you study?", School$

Input "What you age?", Age

Input "What is your date of birth?", Birthdate

Input "In which month were you born?", Birthmonth$

4. Observe the below program carefully and give the output

i=1

while i<=5

print "Hello World"

i=i+1

end while

Hello World

Hello World

Hello World

Hello World

Hello World

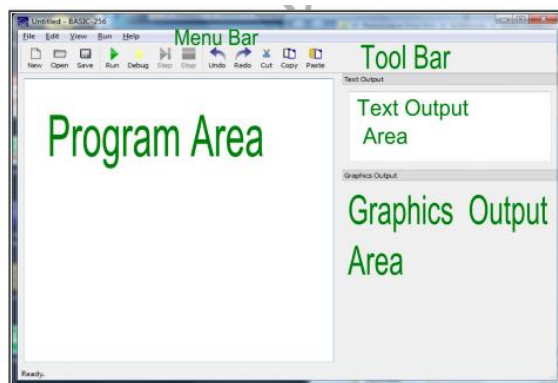(Note: while condition statements are executed until i<=5 is true   )

5. Write a program using a for loop to display first 10 natural numbers.

#Rem program to display first 10 natural numbers

for i=1 to 10

print i

next

VII.   **Answer the following in detail(5 marks each)**

1. Mark the sections of a BASIC 256 editor.

(In the below picture green texts are the answers.)

2. Write the steps to create a program and run in BASIC programming language.

➢   Open BASIC 256 editor

➢   Click on File menu -New

➢   Key in the program in the program area

3. Write a program in BASIC to accept a string from the user and reverse the same.

```
#Rem Program to accept a string and reverse the same
input "Enter a string ",word$
len=length(word$)
print "Reversed string is "     HELLO
for n=len to 1 step-1
print mid(word$,n,1);
next n
```

4. What is a subroutine in a BASIC program and state its advantages?

A subroutine is a code fragment which used to repeat a block of code at various places in a program.

Advantages:
➢ Multiple calls to a block of code are possible at different places in the program.
➢ A program is easier to read and understand.
➢ Reuse of code.

5. Write a subroutine to add 2 numbers and call the same.

```
#Rem To create a sub routine to add 2 numbers
input "Enter num1",num1
input "Enter num2",num2
gosub addition
end

addition:
result=num1+num2
print result
return
```

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