WORKSHEET 8

1. **State any four repetitive structures that are used in QBASIC.**

2. **When is For loop preferred over While and Do–Loop?**

3. **When is Block IF-THEN-ELSE preferred over the single line IF-THEN-Else statement?**

4. **Evaluate the following conditional statements. Answer should be given as -1 (true) or 0 (false).**

a) A>=7*5 AND B<=4+19   where A=89 and B=19

b) A<B OR B=C where A=25, B=17 and C=55

c) NOT (A>B AND A MOD 2 < >0)where A=35 and B=26

5. **The following program is supposed to print the first 10 multiples multiples of 7. What should be the value of the updation shown by a blank.**

C=7

WHILE C<=70

    PRINT C

    C=C+ ____

WEND

6. **The following program is supposed to display 20, 18, 16, 14, 12 ....2 what should be the value of STEP in the program.**

FOR I=20 TO 2 STEP _____

    PRINT I

NEXT I

7. **Convert the program written using DO WHILE-LOOP to FOR-NEXT loop.**
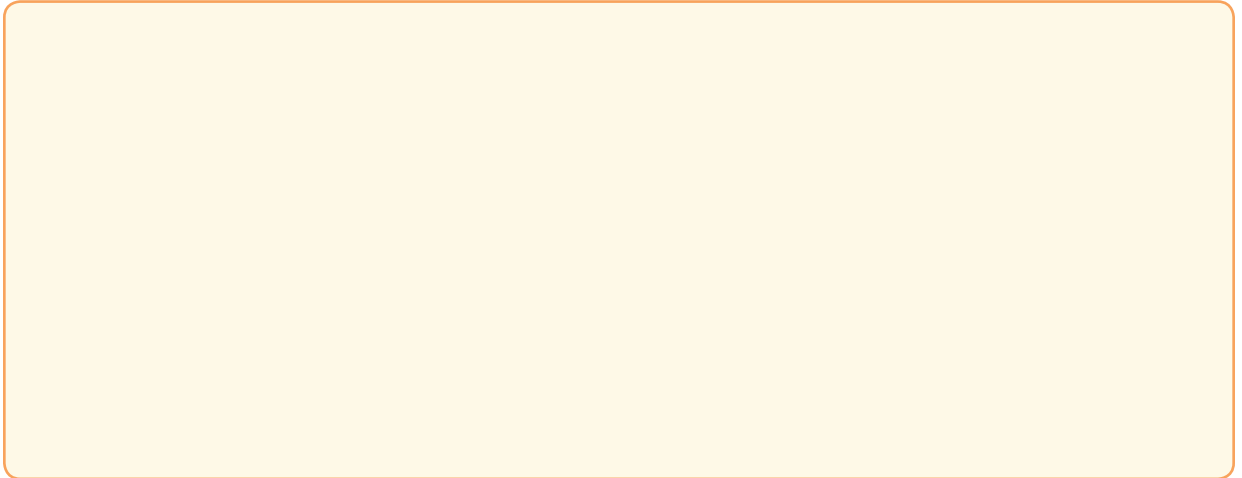
```
I=72
DO WHILE I>=8
    PRINT I
    I=I-8
LOOP
END
```

8. **Convert the following program written using DO WHILE-LOOP to DO UNTIL-LOOP.**
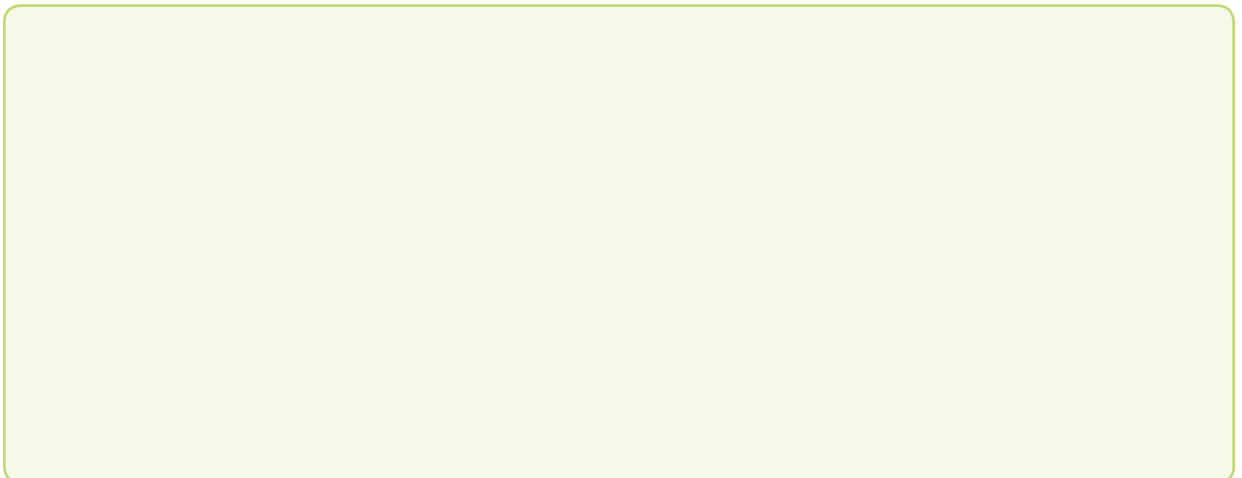
```
I=2
DO WHILE I<=13
    PRINT I
    I=I+3
LOOP
```

9. **What do you think will be the output of the following program:**

```
FOR I=1 TO 9
    PRINT I * I-1
NEXT I
```

10. **State whether True(T) or False(F):**

a) The EXIT WEND command is used to prematurely exit from a WHILE WEND loop.

b) Writing STEP with a FOR statement is absolutely necessary.

c) UNTIL used with DO ensures that a loop continues as long as the condition is yet to be satisfied.

d) If condition is evaluated to true the statement after THEN gets executed in an IF-THEN-ELSE statement.

e) NEXT is used to mark the end of a DO loop.

f) EXIT FOR is used to exit from a FOR loop prematurely.

g) A counter is used to count the number of times a statement or group of statements gets executed.

h) A Label is a name given to line for reference.

i) The MOD operator is used to modify the value of a variable.

j) GOTO is used to transfer control from one part of a program to another part.

11. Fill in the blanks with the given words:

EXIT DO	STEP -1	once	1(One)	Counter
GOTO	ELSE	WHILE-WEND	Control	0(Zero)

a) The statements after _____ gets executed when a condition is evaluated to false in an IF-THEN-ELSE statement.

b) _____ statement is used to transfer control from one line to another line.

c) _____ is used to keep track of the number of time a loop is being executed.

d) _____ is used to exit form a DO loop.

e) _____ decreases the value of a control variable by 1 in a FOR-NEXT loop.

f) _____variables is used to control the execution of a loop.

g) By default variables are initialized to _____.

h) If STEP is missing the default value of updating is _____.

i) DO-LOOP WHILE allows execution of a loop at least _____ even if the condition is false.

j) The _____ loop is another repetitive structure and is generally used when the number of iterations is not known.