1.What are the two values of the Boolean data type? How do you write them?

**Ans.** “True” and “False”

2. What are the three different types of Boolean operators?

**Ans.** “and” ”or” “not”

3. Make a list of each Boolean operator's truth tables (i.e. every possible combination of Boolean values for the operator and what it evaluate ).

**Ans. and or not**

**A B A\*B A+B not(A) not(B)**

**1 1 1 1 0 0**

**1 0 0 1 0 1**

**0 1 0 1 1 0**

**0 0 0 0 1 1**

4. What are the values of the following expressions?

(5 > 4) and (3 == 5) = **False**

not (5 > 4) = **False**

(5 > 4) or (3 == 5)= **True**

not ((5 > 4) or (3 == 5))=**False**

(True and True) and (True == False)=**False**

(not False) or (not True)=**True**

5. What are the six comparison operators?

**Ans.equalto( ==),less than(<),greater than(>),less than equal to(<=),greater than(>=),not equal(!=)**

6. How do you tell the difference between the equal to and assignment operators?Describe a condition and when you would use one.

**Ans.** “==”is comparison equal to operator it contains two equal sign and “=” is the assignment operator it contain one equal sign .for eg. Assignment operator **a=19** , comparison operator **a==a**

7. Identify the three blocks in this code:

spam = 0

if spam == 10: **(block1)**

print('eggs')

if spam > 5: **(block2)**

print('bacon')

else: **(block3)**

print('ham')

print('spam')

print('spam')

8. Write code that prints Hello if 1 is stored in spam, prints Howdy if 2 is stored in spam, and prints Greetings! if anything else is stored in spam.

**Ans.** if(spam==1):

Print(“Hello”)

Elif(spam==2):

Print(“Howdy”)

Else:

Print(“Greetings!”)

9.If your programme is stuck in an endless loop, what keys you’ll press?

**Ans. ctrl+C**

10. How can you tell the difference between break and continue?

**Ans. Break :** break is used to end any loop at any point.

**Continue:** continue is used to skip the part you want to avoid as output.

11. In a for loop, what is the difference between range(10), range(0, 10), and range(0, 10, 1)?

**Ans.**Range(10):It prints numbers from 0 to 9. It takes the initial values as 0.

Range(0,10): It prints numbers from 0 to 9.Initial value 0 ,and final value 9.

Range(0,10,1): It prints numbers from 0 to 9.Initial value 0 ,and final value 9 with step function 1.

12. Write a short program that prints the numbers 1 to 10 using a for loop. Then write an equivalent program that prints the numbers 1 to 10 using a while loop.

**Ans.for loop:**

for i in range(1,11):

print(i,end=”,”)

**While loop:**

i=1  
while(i<11):

print(i,end=”,”)

i=i+1

13. If you had a function named bacon() inside a module named spam, how would you call it after importing spam?

**Ans.** from spam import bacon

bacon()