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

Ans) 1. a = True

2. b = False

We have to make sure that T and F in Tue and False should be in uppercase.

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

Ans) Three Boolean operators are – are, not & and

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 evaluates).

Ans) **And** – True and True – True

False and False – False

False and True – False

True and False – False

**OR -** True and True – True

False and False – False

False and True – True

True and False – True

**Not**- True not is False

False not is True

4. What are the values of the following expressions?

Ans - (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) 1 - !=

2 - ==

3 - <

4 - >

5 - <=

6 - >=

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 the operator which stores the value, but == is the operator which compares the values

D = 10 - # it is an assignment operator

if D == 10:

print (“it is a comparison operator”)

7. Identify the three blocks in this code:

spam = 0

if spam == 10:

print('eggs')

if spam > 5:

print('bacon')

else:

print('ham')

print('spam')

print('spam')

Ans) ham

spam

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) spam = int(input("Enter a number"))

print()

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 statement will not continue the loop and it will take the execution outside the loop if the condition is satisfied, but the continue statement will take the execution to the start in the loop.

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

Ans) range(10) – it means that the range will start from 0 and end at 9 (before10), in this python will auto consider the initial position as 0 and step value as 1.

range(0,10) – it means that range will start from 0 and end at 9 (before10)

rane(0,10,1) – it means that the range will start from 0 and end before 10 i.e 9 and will step value is is 1 in each iteration.

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 i in range(11):

print(i)

i = 1

while i<=10:

print(i, end = ' ')

i = i+1

print ()

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

Ans) spam.bacon()