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

**Ans :** There are two values for the Boolean data type.

There are two values are : True and False

Write as the : a = True, b = False

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

**Ans :** AND, OR AND NOT these are types of Boolean operators.

**Q.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 :**

True and True is True.

True and False is False.

False and True is False.

False and False is False.

True or True is True.

True or False is True.

False or True is True.

False or False is False.

not True is False.

not False is True.

**Q.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**

**Q.5. What are the six comparison operators?**

**Ans :** <,>,<=,>=,==,!=

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

**Ans : “**==” 🡪Equal to(Comparison operator), “=” 🡪Assignment operator

When we declare the value to the variable in the python that time we use a “=”assignment operator. E.g. a = 5

“==” used when compare two values E.g. 5==4 and provide output in the form of the True or False.

**Q.7. Identify the three blocks in this code:**

**Ans :** First block is if spam == 10, second block is if spam > 5, third block is else.

Output is :

ham

spam

spam

spam = 0

if spam == 10:

print('eggs')

if spam > 5:

print('bacon')

else:

print('ham')

print('spam')

print('spam')

**Q.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 the any integer number : “))

if spam == 1:

print('Hello')

elif spam == 2:

print('Howdy')

else:

print('Greetings!')

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

**Ans : CTRL + C**

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

**Ans :** break keyword is used for the terminating the loop whereas continue keyword is used to skip that line and continuous execution of the loop.

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

**Ans : range(10) 🡪**  This for loop execution from the 0, 10 here it’s take the starting 0 by default.

**range(0,10) 🡪** This for loop execution from the 0, 10 but here bit start and End index is given.

**range(0,10,1) 🡪** This for loop execution from the 0, 10 but here bit start and End index is given also given the step index as 1.

**Q.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 : Using For loop :**

for i in range(1,11):

print(i)

**Using While loop:**

i=1

while i <= 10:

print(i)

i= i + 1

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

**Ans :** spam.barcon()