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

True and False. It is also written as True and False

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

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 ).**

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

**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?**

==, !=, <, >, <=, and >=.

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

== is the equal to operator that compares two values and evaluates to a Boolean, while = is the assignment operator that stores a value in a variable.

Eg:

a=2 **#assignment operator**

b=2 **#assignment operator**

print(a==b) **#equal to operator**

**Output:**

True

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

**spam = 0**

**if spam == 10: #Block – 1**

**print('eggs')**

**if spam > 5: #Block – 2**

**print('bacon')**

**else: #Block – 3**

**print('ham')**

**print('spam')**

**print('spam')**

Output :

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.**

spam **=** int(input("Input a no."))

**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?**

Ctrl + C

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

When break is used, the execution of loop will be stopped at once, and the control exits from the loop.

When continue is used in the loop, it will move the execution to the start of the loop, by skipping a particular iteration in the loop and the control remains within the loop

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

Output of all the functions will be same.

range(10): calls up from 0 to 10, not including 10

range(0,10): Starts from zero and ends a position before the ending i.e. 9 will be taken and not 10.

range(0,10,1): same as above, but here the incremented value is also specified, in this case it was 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.**

**#Using For Loop**

print("For Loop")

**for** i **in** range(1,11):

print(i)

**#Using While Loop**

print("While Loop")

a **=**1

**while** a **<=** 10:

print(a)

a**+=**1

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

spam.bacon()