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

ANS- true and false. Bool()

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

ANS- And, or and 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-

For AND

A B C
1 1 1
1 0 0
0 1 0
0 0 0

For OR

A B C
1 1 1
1 0 1
0 1 1
0 0 0

For NOT

0->1

1->0

4. What are the values of the following expressions?

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

not (5 > 4)

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

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

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

(not False) or (not True)

ANS- true

5. What are the six comparison operators?

ANS- six comparison operators are '==(equals to)', '!=(not equals to)', '>(greater than)', '<(smaller than)', '>=(greater than equals to)', and '<=(smaller than equals to)'.

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

ANS- x=5

X+=3

7. Identify the three blocks in this code:

ANS-

spam = 0

if spam == 10:

print('eggs')

if spam > 5:

print('bacon')

else:

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- spam = 1

if spam == 1:

   print('hello')

spam = 2

if spam == 2:

  print('Howdy')

  print('Greetings!')

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

ANS- we can **use the break statement**

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

ANS- The break statement terminates the whole iteration of a loop whereas continue skips the current iteration.

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

ANS- in range(10), and (0,10) it will generate a sequence of integers. And for range(0,10,1) it will generate a sequence of increment of +1 integers.

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(1,10):

   print(i)



#while loop

i = 1

while(i<=10):

   print(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- def bacon()