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

***Ans****: True and False are the two values of the Boolean data type.*

*It can be written as ‘True’ and ‘False’ where True = 1, False = 0*

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****: 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.  
False or True is True  
False or False is False  
True or False is True.  
not True is False.  
not False 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****: comparison operators as follows:*

*==, <,> ,!=, <=, >=*

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 equal to operator which compares the two values and give output in terms of Boolean while = is the assignment operator that store the value in a user define variable.*

*In a flow control statement, we use equal operator that gives Boolean value, and otherone is used in assignment operator for a variable.*

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****: the three blocks in above code is*

1. *The code lines written inside the if statement*
2. *Print(‘bacon’)*
3. *Print(‘ham’)*

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**: *I will terminate the program, click the stop button, or ctrl + c to stopping the running programme*.

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

***Ans****: break statement gives the immediate exit of the innermost loop by movie the execution to outside the loop and continue statement begins with next iteration of the while or loop.*

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

***Ans****:*

1. *range(10) 🡺 calls the range from 0 to 10 but does not include 10 which is last one in range.*
2. *range(0, 10) 🡺 call the loop from 0 to till the 10.*
3. *range(0, 10, 1) 🡺 tells the loop to increase the variable by 1 on each iteration between 0 to 10.*

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(1, 11):  
print(i)*

*and  
i = 1  
while i <= 10:  
print(i)  
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****: spam.bacon()*