Q1. What are the two values of the Boolean data type? How do you write them?

Ans: There are two Boolean values: True and False.

In Python values can be used in comparison operations, and Boolean logic can be formulated with the use of logic operations.

Q2. What are the three different types of Boolean operators?

Ans: AND, OR and NOT.

Q3. 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 and OR operator two input values checked, in that case for AND operator truth table as follows:

Inputs like A and B

A True and B True result is True

A False and B True result is False

A True and B False result is False

A False and B False result is False

For OR operator truth table as below:

A True OR B True result is True

A False OR B True result is True

A True OR B False result is True

A False OR B False result is False

For NOT operator only 1 input valid:

A True result is False

A False result is True

Q4. What are the values of the following expressions?

Ans:

(5>4) and (3==5) result is False

Not (5>4) result is True

(5>4) or (3==5) result is True

Not((5>4) or (3==5)) result is False

(True and True) and (True==False) result is False

(not False) or (not True) result is True

Q5. What are the six comparison operators?

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

Q6. How do you tell the difference between the equal to and assignment operators? Describe a condition and when you would use one.

Ans:

Assigning operator (=) is used for assigning value to a variable

Equal to operator (==) is used for comparing conditions

Q7.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: Here spam defined as value 0, in first condition checks if it equal to 10 then prints eggs,

in second condition it checks if it greaer than 5 then prints in bacon, then in third condition if both first conditions not met it will print ham, spam, spam vertically by row.

So, this code will print will print ham, spam, spam vertically by row.

Q8. Write code that prints Hello if 1 is stored in spam, prints Howdy if 2 is stored in spam, and print Greetings! If anything else is stored in spam.

If spam==1:

print(‘Hello’)

elseif spam==2:

print(‘Howdy’)

else:

print(‘Greetings!’)

Q9.If your programme is stuck in an endless loop, what keys you’ll press?

Ans: CTRL C

Q10. How can you tell the difference between break and continue?

Ans: If some condition is met in loop and break is used the loop will end and if continue it will execution and next iteration is followed.

Q11. In a for loop, what is the difference between range(10), and range(0,10,1)?

Ans: in range(10), the data is in between 0 to 9 no jumping condition is used.

In range(0,10,1), the data is specified as 0 to 0 in jump of 1

Q12. 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(1,10,1):

print(i)

i=1

while True:

print(i)

i+=1

if i==10:

break

Q13. If you had a function named bacon(), inside a module name spam, how would you call it after importing spam?

Ans: spam.bacon()