**Question 1**

**Validation-** a stage where by you are ensuring the program as whole is validity in terms of information since one can incur errors such as logical errors where by the program is not giving expected results. Let’s say your program is about bubble sorting and it’s running but not printing the sorted array.

**Verification**- a stage in programming where by you are checking that the program is functioning well in all means.

**Question 2**

Manual Testing – usually done in excel and includes test case id, test case, expected results

Unit test – a built in method for testing in python.

**Question 3**

**Test Case**-includes all specifications about the whole program

**Test Log**-includes date, name of the reviewer, date reviewed and comments

**Test plan**-includes detailed information about how are you going to test the code and even includes schedule.

**Question 4**

The **test plan** helps the developer or programmer to plan accordingly how is he/she going to test the program created making it easier to test the program which will reduce errors in the code as well as debug the code.

**Main components**

Objectives

Scope