1) One of the fields on a form contains a text box which accepts numeric values in the range of 18 to 25. Identify the invalid Equivalence class.

a)   17
b)   19
c)   24
d)   21

Ans. a. 17

2) Input Box should accept the Number 1 to 10. Identify Equivalence partitioning and Boundary values for testing

Ans. EQUIVALENCE PARTITIONING-
-infinity to 0 | 1 to 10 | 11 to infinity
BOUNDARY VALUES-
0,1,5,10,11

3) Why Equivalence & Boundary Analysis Testing is used?

Ans. Equivalence Testing is used to calculate the effectiveness of test cases. We cannot test all the possible input domain values, because if we attempted this, the number of test cases would be too large. In this method, input data is divided into different classes, each class representing the input criteria from the equivalence class. We then select one input from each class.

BVA(boundary value analysis) is a technique used to reduce the number of test cases to test. This technique generally works where there is some RANGE of input values need to be tested. It is used to find the errors at boundaries of input domain rather than finding those errors in the center of input.

4) Write Test Cases For This Scenario:
If A Job Fails It Should Get Restarted Again. This Should Happen For Three Times. If It Fails again, then It should quit.

Ans. If A Job Fails It Should Get Restarted Again. This Should Happen For Three Times. If It Fails again, then It should quit

Test Case Id:1
Condition: If Job doesn't fail,
Expected:no need to restart, job is executed.
Test Case Id:2
Condition: If Job fails for first time,
Expected: it should restart, job is executed.
Test Case Id:3
Condition: If Job fails for second time,
Test Case Id:4
Condition: If Job fails for third time,
Expected: it should restart, job is executed.

Test Case Id:5
Condition: If Job fails for fourth time,
Expected: it should quit, job is not executed.

5) Write The Test Case/scenario For A Login Page?

Ans. If A Job Fails It Should Get Restarted Again. This Should Happen For Three Times. If It Fails again, then It should quit

Test Case Id:1
Condition: If Job doesn't fail,
Expected:no need to restart, job is executed.
Test Case Id:2
Condition: If Job fails for first time,
Expected: it should restart, job is executed.
Test Case Id:3
Condition: If Job fails for second time,
Expected:it should restart, job is executed.
Test Case Id:4
Condition: If Job fails for third time,
Expected: it should restart, job is executed.
Test Case Id:5
Condition: If Job fails for fourth time,
Expected: it should quit, job is not executed.

6) What Are The Test Cases/scenario For Mouse? (To verify the functionalities of a mouse)
Ans.

TestCaseId1.Condition:Connect to the computer/laptops
Expected:Mouse Working
TestCaseId2.Condition:Left click of the mouse
Expected:Select and execute
TestCaseId3.Condition:Right click of the mouse
Expected:Show options
TestCaseId4.Condition:.Verify the time duration between two left clicks, in order to consider it as double click
Expected:mouse working
TestCaseId5.Condition:verify if scroll is present at the top or not
Expected:Mouse working
TestCaseId5.Condition:Verify the speed of mouse pointer
Expected:Mouse working
TestCaseId7.Condition:Check the pressure required for clicking the mouse buttons
Expected:Mouse working

7) Write test cases/scenarios to verify the functionality of a printer?

Ans. TestCaseId1.Condition:Connect wire of the printer to the electric socket

Expected:Printer Working

TestCaseId2.Condition:Connect to a computer system .

Expected:Printer Working

TestCaseId3.Condition:Taking blank pages as an input resource

Expected:Printer Working

TestCaseId4.Condition:Availability for both coloured and blank and white ink.

Expected:Printer Working

TestCaseId5.Condition:Correct command from the computer.

Expected:Print Correct Document

TestCaseId5.Condition:Incorrect command from the computer.

Expected:Should not print

TestCaseId7.Condition:Only single print for single command

Expected:Printer Working

8) Write down test case/scenarios to list down possible steps to test a smart phone

Ans. TestCaseId: 1

Condition: Pressing the Power Button if turned Off

Expected: Smartphone Starts or Turns On

TestCaseId: 2

Condition: Tap or Touch the Screen

Expected: Smartphone responds.

TestCaseId: 3

Condition: Play some audio

Expected: Receive a Voice output

TestCaseId: 4

Condition: Press Volume Button

Expected: Volume increases/ decreases

TestCaseId: 5

Condition: Take photos/videos from Camera

Expected: Photos/videos are saved in the gallery

TestCaseId: 6

Condition: Record Audio

Expected: Audio gets recorded

TestCaseId: 7

Condition: Play songs using Earphones

Expected: Audio output received, hence earphone jack works

TestCaseId: 8

Condition: Turn on Wifi

Expected: Smartphone gets connected to wifi, hence the internet should work

TestCaseId: 9

Condition: Transfering/Receiving media via Bluetooth

Expected: Media is transferred/received with a success message
TestCaseId: 10
Condition: Installing Application
Expected: Application starts
TestCaseId: 11
Condition: Pressing the Power Button if turned On
Expected: Smartphone Turns Off

9) There is a text box which accepts numbers from 1-10. List down the test data which needs to be tested for Boundary value analysis.
Ans. 0,1,5,10,11

10) Suppose you have a bank account that offers variable interest rates:
5% for the first $1000 credit;
10% for the next $1000;
And 15% for the rest.
If you wanted to check that the bank was handling your account correctly what valid input partitions might you use?
Ans. -infinity to -1 | 0-1000 | 1000-2000 | 2000 and above

11) A mail order company charges $2.95 postage for deliveries if the package weighs less than 2 kg, $3.95 if the package weighs 2 kg or more but less than 5 kg, and $5 for packages weighing 5 kg or more.
Generate a set of valid test cases using equivalence partitioning.
Ans. -infinity to less than 0 | 0 to less than 2 kg | 2 to less than 5 kg | 5 kg or more

12) Boiling point of water is at 100 degrees Celsius. Determine the boundary values
Ans. 99,100,101

13) Exam pass – for 40 marks; merit at 60 and above; and distinction at 80 and above. Determine the boundary values
Ans. Boundary Values for the Following Cases:
For Pass: 39 , 40 , 41
For Merit: 59 , 60 , 61
For Distinction: 79 , 80 , 81

14) Order numbers on a stock control system can range between 10000 and 99999 inclusive. Which of the following inputs might be a result of designing tests for only valid equivalence classes and valid boundaries:
a)   1000, 5000, 99999
b)   9999, 50000, 100000
c)   10000, 50000, 99999
d)   10000, 99999

e) **9999, 10000, 50000, 99999, 100000**

Ans. e

15) A program validates a numeric field as follows:

Values less than 10 are rejected, values between 10 and 21 are accepted, values greater than or equal to 22 are rejected. which of the following input values cover all of the equivalence partitions?

a. 10,11,21
b. 3,20,21
c. 3,10,22
d. 10,21,22

Ans. c

16) Which test cases are written first: white boxes or black boxes?

Ans. White Box test cases are written first because they are performed by the developer.

17) Can you explain requirement traceability and its importance?

Ans. RTM is a document that maps and traces user requirement with test cases. The main purpose of Requirement Traceability Matrix is to see that all test cases are covered so that no functionality should miss while doing Software testing.

- Requirement Traceability Matrix helps to link the requirements, test cases, and defects accurately.
- The whole of the application is tested by having requirement traceability (End to End testing of an application is achieved).
- Requirement Traceability Matrix aids for software application getting tested in the stipulated time duration, the scope of the project is well determined and its implementation is achieved as per the customer requirements and needs and cost of the project is well controlled.
- Defect Leakages are prevented as a whole of the application is tested for its requirements.