1. **One of the fields on a farm contains a text box that accepts numeric values in the range of 18 to 25. Identify the invalid Equivalence class.**

**Solution:**

Equivalence partitioning: <=18 to >=25 Boundary value: 17 18 19 24 25 26

Valid equivalence: 18 to 25

Invalid equivalence: >18 or < 25

Values: 12,22,28

1. **In an Examination, a candidate has to score a minimum of 24 marks in order to clear the exam. The maximum that he can score is 40 marks. Identify the valid and invalid equivalence values if the student clears the exam.**

**Solution:**

**Equivalence partitioning:** 0 to 23 -🡪 Fail **Boundary value:** 23 24 25 39 40 41

24 to 40 -🡪 Pass

More than 40 -🡪 Invalid score

24 to 40 🡪 Valid Equivalence

>24 or <40 -🡪 Invalid Equivalence

1. **The switch is switched off once the temperature falls below 18 and then it is turned on when the temperature is more than 21. Identify the equivalence classes.**

**Solution:**

**Equivalence partitioning:** Class 1: 0 **>**17 **Boundary Value:** 17 18 19 21 22 23

Class 3: More than 21

1. **A program validates numeric fields as follows: Values less than 10 are rejected, Values between 10 to 21 are accepted, values greater than or equal to 22 are rejected.**

**Solution:**

**Equivalence Partitioning:** 0 to 9 -🡪 Rejected **Boundary Values:** -1 0 1 8 9 10

10 to 21 -🡪 Accepted **Boundary Value:** 11 20 21 22

<= 22 -🡪 Rejected **Boundary Value:** 23

1. **Given the following specification, identify equivalence classes, if you are less than 18, you are too young to be insured. Between 18 and 30 inclusive, you will receive a 20% discount. Anyone over 30 is not eligible for a discount.**

**Solution:**

**Equivalence Partitioning:** 1 to 17 🡪 Too young to insured **Boundary Values:** 0 1 2 16 17 18

18 to 30 🡪 Receive 20% Discount 19 29 30 31

<30 🡪 Not eligible for discount 32

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