Black Box Testing for Add Product Page

1. Product ID

- **EC1**: Valid Product ID (must be numeric).
- **EC2**: Invalid Product ID (e.g., "123!", "P@#").
- **EC3**: Empty Product ID.

2. Image URL / Detail Image URL

- **EC4**: Valid URL (must be URL).
- **EC5**: Invalid URL (e.g., "image.jpg", "www.example").
- **EC6**: Empty URL.

3. Short Title / Long Title

- **EC7**: Valid Title (numeric and special character must be with alphabet).
- **EC8**: Invalid Title (e.g., only numeric "12345").
- **EC9**: Empty Title.

4. MRP / Cost

- **EC10**: Valid numeric value (must be positive).
- **EC11**: Invalid numeric value (e.g., negative, "abc",0).
- **EC12**: Empty field.

5. Discount

- **EC13**: Valid discount value (must be numeric and non negative).
- **EC14**: Invalid discount value (e.g., -10, "discount").
- **EC15**: Empty discount.

6. Quantity

- **EC16**: Valid quantity (must be positive).
- **EC17**: Invalid quantity (e.g., -5, "abc",0).
- **EC18**: Empty quantity.

7. Description

- **EC19**: Valid description (non Empty).
- **EC20**: Empty description.

8. Discount Tag

- **EC21**: Valid input (non empty).
- **EC22**: Empty field.

9.Tagline

- **EC23**: Valid input(non empty).
- **EC24**: Empty field.

Test cases:-

Sr. No	Equivalence Class Covered	All Required Inputs	Expected Output	Actual Output
1	EC1, EC4, EC7, EC10, EC13, EC16, EC19,EC21, EC23	Product ID: "12345", Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "Smartphone", MRP: 1000, Cost: 800, Discount: 20, Quantity: 10, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Product added successfully	Product fail to be add
2	EC2	Product ID: "12345@", Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "Smartphone", MRP: 1000, Cost: 800, Discount: 20,	Error: Invalid Product ID	Error: Invalid Product ID

		Quantity: 10, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"		
3	EC2	Product ID: "12345", (same as above) Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "Smartphone", MRP: 1, Cost: 800, Discount: 20, Quantity: 10, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Error:Product ID must be unique	Product not able to list
4	EC3	Product ID: "", Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "Smartphone", MRP: 1000, Cost: 800, Discount: 20, Quantity: 10, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Error: empty Product ID	Error: empty Product ID
5	EC5	Product ID: "12345", Image URL: "://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "Smartphone", MRP: 1000, Cost: 800, Discount: 20, Quantity: 10, Description: "High-quality phone",	Error: Invalid Image URL	Error: Invalid Image URL

		Discount Tag: "Save 20%", Tagline: "Best Smartphone"		
6	EC5	Product ID: "12345", Image URL: "https://example.com/image.jpg", Detail Image URL: "://example.com/detail.jpg", Short Title: "Phone", Long Title: "Smartphone", MRP: 1000, Cost: 800, Discount: 20, Quantity: 10, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Error: Invalid Detail Image URL	Error: Invalid Detail Image URL
7	EC5	Product ID: "12345", Image URL: "", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "Smartphone", MRP: 1000, Cost: 800, Discount: 20, Quantity: 10, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Error: empty Image URL	Error:empty Image URL
8	EC6	Product ID: "12345", Image URL: "https://example.com/image.jpg", Detail Image URL: "", Short Title: "Phone", Long Title: "Smartphone", MRP: 1000, Cost: 800, Discount: 20, Quantity: 10, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Error: empty Detail Image URL	Error: empty Detail Image URL

9	EC8	Product ID: "12345", Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "464", Long Title: "Smartphone", MRP: 1000, Cost: 800, Discount: 20, Quantity: 10, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Error: Short Title is Invalid	Error: Short Title is Invalid
10	EC8	Product ID: "12345", Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "12345", MRP: 1000, Cost: 800, Discount: 20, Quantity: 0, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Error:Invalid Long Title	Error:Invalid Long Title
11	EC9	Product ID: "12345", Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "", MRP: 1000, Cost: 800, Discount: 20, Quantity: 10, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Error: empty Long Title	Error: empty Long Title

12	EC9	Product ID: "12345", Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "", Long Title: "Smartphone", MRP: 1000, Cost: 800, Discount: 20, Quantity: 10, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Error: empty Short Title	Error: empty Short Title
13	EC11	Product ID: "12345", Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "Smartphone", MRP: -1000, Cost: 800, Discount: 20, Quantity: 10, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Error: Invalid MRP	Error: Invalid MRP
14	EC11	Product ID: "12345", Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "Smartphone", MRP: 1000, Cost: -800, Discount: 20, Quantity: 10, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Error:invalid cost	Error:invalid cost

15	EC11	Product ID: "12345", Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "Smartphone", MRP: 0, Cost: 800, Discount: 20, Quantity: 10, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Error: Invalid MRP	Error: Invalid MRP
16	EC11	Product ID: "12345", Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "Smartphone", MRP: 1000, Cost: 0, Discount: 20, Quantity: 10, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Error: Invalid Cost	Error: Invalid Cost
17	EC12	Product ID: "12345", Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "Smartphone", MRP: 1000, Cost:"", Discount: 20, Quantity: 10, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Error: empty Cost	Error: empty Cost

18	EC12	Product ID: "12345", Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "Smartphone", MRP:"", Cost:"800", Discount: 20, Quantity: 10, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Error: empty MRP	Error: empty MRP
19	EC14	Product ID: "12345", Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "Smartphone", MRP: 1000, Cost: 800, Discount: -20%, Quantity: 10, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Error: Invalid discount value	Error: Invalid discount value
20	EC15	Product ID: "12345", Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "Smartphone", MRP: 1000, Cost: 800, Discount: "", Quantity: 10, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Error: Empty discount	Error: Empty discount

21	EC17	Product ID: "12345", Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "Smartphone", MRP: 1000, Cost: 800, Discount: 20, Quantity: @2, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Error: Invalid quantity	Error: Invalid quantity
22	EC17	Product ID: "12345", Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "Smartphone", MRP: 1000, Cost: 800, Discount: 20, Quantity: 0, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Error:invalid Quantity	Error:invalid Quantity
23	EC18	Product ID: "12345", Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "Smartphone", MRP: 1000, Cost: 800, Discount: 20, Quantity:"", Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Error: Empty quantity	Error: Empty quantity

24	EC20	Product ID: "12345", Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "Smartphone", MRP: 1000, Cost: 800, Discount: 20, Quantity: 10, Description: "", Discount Tag: "Save 20%", Tagline: "Best Smartphone"	Error: Empty description	Error: Empty description
25	EC22	Product ID: "12345", Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "Smartphone", MRP: 1000, Cost: 800, Discount: 20, Quantity: 10, Description: "High-quality phone", Discount Tag: "", Tagline: "Best Smartphone"	Error: Empty Discount Tag	Error: Empty Discount Tag
26	EC24	Product ID: "12345", Image URL: "https://example.com/image.jpg", Detail Image URL: "https://example.com/detail.jpg", Short Title: "Phone", Long Title: "Smartphone", MRP: 1000, Cost: 800, Discount: 20, Quantity: 10, Description: "High-quality phone", Discount Tag: "Save 20%", Tagline: ""	Error: Empty Tagline	Error: Empty Tagline