

Measuring the pulse of prosperity: An Index of Economic Freedom Analysis

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PROJECT NAME	Measuring the Pulse of Prosperity: An Index of Economic Freedom Analysis
MAXIMUM MARKS	4 MARKS

7. Functional and Performance Testing

1. Functional Testing Definition:

Functional testing verifies that each feature of a software/system works according to requirements. It's about "does it do what it's supposed to do?" Key Points:

- Focuses on user requirements and business logic
- Checks inputs, outputs, and system behavior
- Usually black-box testing (tester doesn't care how it works internally) Functional Testing for Your Project

If you develop a system/dashboard to analyze economic freedom and tech stock data, functional testing would include: Feature Functional Test Example Data Import
Verify the system can load CSV/Excel/API data correctly Data Cleaning

2. Performance Testing Definition:

Performance testing checks how the system performs under various load conditions.

It's about "how well does it perform?" Key Aspects:

- Speed: Response time for queries and report generation
- Scalability: How system behaves with growing datasets (e.g., 10,000 → 1,000,000 data points)
- Stability/Load: Can it handle multiple users at the same time?
- Stress: How system behaves under extreme conditions or limited resources