✅ Manual Testing & QA Scenarios

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1. How much experience do you have in understanding requirements and deriving test scenarios?
I have 6 years of testing experience (4 years automation) and regularly analyze requirements and user stories to derive complete functional, negative, and edge test scenarios while collaborating with stakeholders.

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2. Can you explain the difference between functional and non-functional testing?
Functional testing verifies **what** the system does (features and logic), while non-functional testing verifies **how** it performs (performance, security, scalability, usability).

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3. Major difference between smoke and sanity testing?
Smoke testing checks critical features of a new build for stability, while sanity testing verifies specific functionality after minor changes or fixes.

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4. Imagine a situation where the requirement document is missing or incomplete. How would you approach it?
I clarify requirements with stakeholders, analyze existing behavior and APIs, validate assumptions, and derive test scenarios to ensure proper coverage.

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5. Did you maintain clarification logs? What was their purpose and how would you approach it?
Yes, clarification logs track open questions and assumptions, helping align stakeholders and avoid requirement misunderstandings during testing.

✅ 1. What is Manual Testing?

Manual testing is a process where testers manually execute test cases without automation tools to verify whether the application behaves as expected.

✅ 2. What is Software Testing?

Software testing is the process of evaluating a system to find defects and ensure it meets business and user requirements.

✅ 3. What is SDLC?

Software Development Life Cycle (SDLC) is a structured process for developing software. Phases include:

- Requirement gathering
- Design
- Development
- Testing
- Deployment
- Maintenance

✅ 4. What is STLC?

Software Testing Life Cycle (STLC) defines testing phases:

- Requirement analysis
- Test planning
- Test case design
- Test environment setup
- Test execution
- Test closure

✅ 5. What is a Test Case?

A test case is a documented set of steps, input data, expected results, and execution conditions to validate a specific feature.

✅ 6. What is a Test Scenario?

A test scenario is a high-level description of what needs to be tested.

👉 Example: *Verify login functionality*

✅ 7. Difference between Test Case and Test Scenario?

- **Test Scenario:** High-level idea of testing
- **Test Case:** Detailed steps to execute testing

✅ 8. What is a Bug/Defect?

A bug is a deviation between expected and actual results in the software.

✅ 9. What is Severity and Priority?

- **Severity:** Impact of the defect on the system
- **Priority:** Urgency to fix the defect

👉 Example: Login failure = High severity & High priority

✅ 10. What is Regression Testing?

Regression testing ensures existing features still work after code changes.

✅ 11. What is Retesting?

Retesting verifies that a specific fixed defect is working correctly.

✅ 12. What is Smoke Testing?

Smoke testing is a quick check of major functionalities to confirm build stability.

✅ 13. What is Sanity Testing?

Sanity testing verifies specific functionality after minor changes.

✅ 14. What is Black Box Testing?

Black box testing validates functionality without knowing internal code.

✅ 15. What is White Box Testing?

White box testing tests internal code structure and logic.

✅ 16. What is Functional Testing?

Functional testing verifies features against business requirements.

✅ 17. What is Non-Functional Testing?

Non-functional testing checks performance, usability, security, and reliability.

✅ 18. What is UAT?

User Acceptance Testing (UAT) is testing performed by end users to validate business requirements.

✅ 19. What is Alpha and Beta Testing?

- **Alpha:** Internal testing by developers/testers
- **Beta:** Testing by real users in production-like environment

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✅ 20. What is Test Plan?

A test plan is a document describing scope, objectives, resources, schedule, and strategy for testing.

✅ 21. What is Test Strategy?

A test strategy outlines the overall testing approach and standards.

✅ 22. What is Exploratory Testing?

Exploratory testing is unscripted testing where testers explore the application to find defects.

✅ 23. What is Ad-hoc Testing?

Ad-hoc testing is informal testing without documentation.

✅ 24. What is Boundary Value Analysis?

Boundary Value Analysis is a technique focusing on testing values at the boundaries of input ranges.

👉 Example: If range is 1–100 → test 0,1,100,101

✅ 25. What is Equivalence Partitioning?

Equivalence Partitioning divides inputs into valid and invalid groups to reduce test cases.

✅ 26. What is Test Environment?

A test environment is a setup of hardware/software where testing is executed.

✅ 27. What is Test Data?

Test data is input used to execute test cases.

✅ 28. What is Defect Life Cycle?

Defect Life Cycle stages include:

New → Assigned → Open → Fixed → Retest → Closed/Reopened

✅ 29. What is Agile Testing?

Agile Software Development testing is continuous testing integrated with development cycles.

✅ 30. What are Entry and Exit Criteria?

- **Entry criteria:** Conditions to start testing
- **Exit criteria:** Conditions to stop testing

□ What are Scrum Ceremonies?

- Scrum ceremonies are structured meetings in Agile that help teams plan, collaborate, review progress, and continuously improve.
- There are **5 main Scrum ceremonies**:

✅ 1. Sprint Planning

Purpose: Decide what work will be done in the upcoming sprint.

When: At the start of every sprint

Participants: Product Owner, Scrum Master, Development Team

Key activities:

- Select items from the product backlog
- Define sprint goal
- Break work into tasks
- Estimate effort

👉 **Interview answer tip:**
Sprint planning ensures the team clearly understands what to deliver and how to achieve it within the sprint.

✅ 2. Daily Scrum (Daily Stand-up)

Purpose: Track progress and identify blockers.

When: Daily (usually 15 minutes)

Each member answers 3 questions:

- What did I do yesterday?
- What will I do today?
- Are there any blockers?

👉 **Interview answer tip:**
Daily Scrum improves communication, transparency, and quick problem resolution.

✅ 3. Sprint Review

Purpose: Demonstrate completed work to stakeholders.

When: End of sprint

Activities:

- Show working product increment
- Collect stakeholder feedback
- Update backlog if needed

👉 **Interview answer tip:**
Sprint review ensures alignment with business expectations.

✅ 4. Sprint Retrospective

- **Purpose:** Improve team processes.
- **When:** After sprint review
- **Focus areas:**
- What went well?
- What didn't go well?
- What can be improved?

👉 **Interview answer tip:**
Retrospective promotes continuous improvement and team growth.

✅ 5. Backlog Refinement (Grooming)

- **Purpose:** Prepare backlog items for future sprints.
- **When:** Ongoing activity during sprint
- **Activities:**
- Clarify requirements
- Add details
- Estimate effort
- Prioritize backlog

👉 **Interview answer tip:**
Backlog refinement keeps the backlog organized and sprint-ready.

📝 Quick Interview Summary (Best Short Answer)

If interviewer asks:

👉 *“What are Scrum ceremonies?”*

You can say:

Scrum ceremonies are structured Agile meetings including Sprint Planning, Daily Scrum, Sprint Review, Sprint Retrospective, and Backlog Refinement. These ceremonies help teams plan work, track progress, review deliverables, and continuously improve processes.

✅ CI/CD Questions

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1. What is a CI/CD pipeline?
A CI/CD pipeline automates code integration, testing, and deployment to enable faster releases and early defect detection.

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2. Can you explain Jenkins and its role in automation?
Jenkins automates builds, test execution, and deployments in CI/CD pipelines, ensuring continuous testing and quick feedback.

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3. Imagine you ran execution using a YAML file and it is successful, but the automated report is not generated. What will you do?
I check pipeline logs, verify YAML report configuration and paths, confirm plugin installation and permissions, validate workspace output, and debug pipeline settings.

✅ SQL Questions

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1. Write a SQL query to find the first transaction done by all users for all days. (Example: Today $10, $120, Tomorrow $200, etc.)

👉 One-liner explanation:
Use ROW_NUMBER() with PARTITION BY user_id, transaction_date to rank transactions and select rank = 1.

✅ **Simple SQL Example**

Sample Table: transactions

user_id	date	amount	time
1	2026-02-01	10	09:00:00
1	2026-02-01	120	11:00:00
1	2026-02-02	200	08:30:00
2	2026-02-01	50	07:00:00
2	2026-02-01	80	10:00:00

Query

```
SELECT user_id, date, amount, time
FROM (
   SELECT *,
          ROW_NUMBER() OVER (
             PARTITION BY user_id, date
             ORDER BY time
          ) AS rn
   FROM transactions
) t
WHERE rn = 1;
```

✅ **Output**

user_id	date	amount	time
1	2026-02-01	10	09:00:00
1	2026-02-02	200	08:30:00
2	2026-02-01	50	07:00:00

👉 This shows the **first transaction per user per day**.