Here are **20 MCQs** from each of your slides:

**📘 SQT\_4: Maturity Models — 20 MCQs**

1. **Which organization developed the original CMM?**  
   A. NASA  
   B. IEEE  
   C. Software Engineering Institute (SEI) ✅  
   D. ISO
2. **What does CMM stand for?**  
   A. Certified Management Method  
   B. Capability Maturity Model ✅  
   C. Controlled Maturity Matrix  
   D. Computed Metrics Model
3. **How many maturity levels are there in CMM?**  
   A. 4  
   B. 6  
   C. 5 ✅  
   D. 3
4. **Which CMM level is associated with process standardization?**  
   A. Managed  
   B. Defined ✅  
   C. Repeatable  
   D. Optimizing
5. **Which level in CMM involves continuous process improvement?**  
   A. Managed  
   B. Initial  
   C. Optimizing ✅  
   D. Repeatable
6. **In CMM, which level is characterized by chaotic processes?**  
   A. Defined  
   B. Initial ✅  
   C. Managed  
   D. Repeatable
7. **What is the focus of Level 2 (Repeatable) in CMM?**  
   A. Data analysis  
   B. Project management ✅  
   C. Test automation  
   D. Documentation
8. **What does CMMI stand for?**  
   A. Capability Maturity Model in Industry  
   B. Capability Model for Metrics Improvement  
   C. Capability Maturity Model Integration ✅  
   D. Certified Model for Management Improvement
9. **When was the first version of CMMI released?**  
   A. 1999  
   B. 2002 ✅  
   C. 1986  
   D. 2010
10. **Which organization co-developed CMMI?**  
    A. ISO  
    B. IEEE  
    C. SEI (CMU) and US Department of Defense ✅  
    D. Apple
11. **What is the final level in CMMI?**  
    A. Quantitatively Managed  
    B. Initial  
    C. Optimizing ✅  
    D. Defined
12. **Which maturity model evaluates testing processes specifically?**  
    A. CMM  
    B. TPI  
    C. TMM ✅  
    D. TQM
13. **TPI stands for:**  
    A. Test Process Integration  
    B. Test Process Improvement ✅  
    C. Total Process Improvement  
    D. Testing Performance Index
14. **Who developed the TPI model?**  
    A. Ilene Burnstein  
    B. William Perry  
    C. Tim Koomen and Martin Pol ✅  
    D. Glenford Myers
15. **How many maturity levels does TPI have?**  
    A. 5  
    B. 13 ✅  
    C. 4  
    D. 10
16. **What are TPI maturity levels denoted as?**  
    A. 1 to 10  
    B. A to D ✅  
    C. I to V  
    D. 0 to 100
17. **What is the first step in TPI improvement?**  
    A. Purchase tools  
    B. Determine an area for improvement ✅  
    C. Train developers  
    D. Design test cases
18. **Which TMM level focuses on defect prevention and optimization?**  
    A. Level 3  
    B. Level 2  
    C. Level 5 ✅  
    D. Level 1
19. **TMM ATRs refer to:**  
    A. Automated Test Results  
    B. Activities, Tasks, and Responsibilities ✅  
    C. Audit Test Reviews  
    D. Accepted Test Reports
20. **In TMM, who are the three perspectives of ATRs?**  
    A. Developers, Testers, Clients  
    B. Developers, Customers, Analysts  
    C. Managers, Testers, Customers ✅  
    D. Leaders, Users, Reviewers

**📘 SQT\_5: Quality Assurance — 20 MCQs**

1. **Which QA activity focuses on eliminating the sources of errors?**  
   A. Defect Reduction  
   B. Defect Containment  
   C. Error Source Removal ✅  
   D. Failure Recovery
2. **Which activity uses rollback and redo techniques?**  
   A. Inspection  
   B. Testing  
   C. Fault Tolerance ✅  
   D. Error Blocking
3. **Which is NOT a core QA activity?**  
   A. Defect Prevention  
   B. Defect Distribution ✅  
   C. Defect Reduction  
   D. Defect Containment
4. **Defect prevention occurs mostly during which phase?**  
   A. Post-release  
   B. Earlier development phases ✅  
   C. During marketing  
   D. At maintenance
5. **What is the goal of error blocking?**  
   A. To reduce testing cost  
   B. To automate the build  
   C. To prevent faults from being injected ✅  
   D. To execute test cases
6. **Which technique is considered static in QA?**  
   A. Simulation  
   B. Testing  
   C. Inspection ✅  
   D. Execution tracing
7. **Testing is best classified under which QA category?**  
   A. Defect Prevention  
   B. Defect Containment  
   C. Defect Reduction ✅  
   D. Error Management
8. **Walkthroughs are a form of:**  
   A. Informal testing  
   B. Formal inspection  
   C. Informal inspection ✅  
   D. Structured debugging
9. **Formal inspections require:**  
   A. End-user participation  
   B. Automated tools only  
   C. Coordinated team effort ✅  
   D. Only developers
10. **Which of the following helps in fault-tolerance?**  
    A. Boundary value analysis  
    B. N-Version Programming (NVP) ✅  
    C. Beta testing  
    D. Regression testing
11. **Accident in defect containment is defined as:**  
    A. A bug in the system  
    B. A test case failure  
    C. A failure with severe consequences ✅  
    D. A minor crash
12. **What is the purpose of hazard analysis?**  
    A. To fix defects  
    B. To measure cost  
    C. To identify conditions for accidents ✅  
    D. To evaluate usability
13. **Which of the following is a dynamic analysis technique?**  
    A. Control flow analysis  
    B. Data flow analysis  
    C. Symbolic execution ✅  
    D. Formal specification
14. **Which QA phase deals with failure prevention?**  
    A. Defect Prevention  
    B. Defect Containment ✅  
    C. Defect Detection  
    D. Error Elimination
15. **Root cause analysis is primarily part of:**  
    A. Fault injection  
    B. Inspection  
    C. Defect Prevention ✅  
    D. Defect Containment
16. **Which one is a people-based solution to error source removal?**  
    A. Simulation  
    B. Training & Education ✅  
    C. Formal Methods  
    D. Tooling
17. **Which one is a tool-based solution to defect prevention?**  
    A. Education  
    B. Manual checking  
    C. Software tools ✅  
    D. Code walkthrough
18. **Defect containment deals with:**  
    A. Eliminating defects before testing  
    B. Fixing all bugs  
    C. Ensuring system reliability ✅  
    D. Writing test plans
19. **Which method is used to break the link between fault and failure?**  
    A. Fault Detection  
    B. Hazard Control  
    C. Fault Tolerance ✅  
    D. Test Automation
20. **Why can defect reduction not completely eliminate all faults?**  
    A. Cost is too high  
    B. It's time-consuming  
    C. Software systems are large and complex ✅  
    D. Tools are not available

**📘 SQT\_6: QA in Context — 20 MCQs**

1. **What is the main goal of QA activities in software processes?**  
   A. Increase code complexity  
   B. Reduce developer workload  
   C. Ensure software quality ✅  
   D. Speed up testing
2. **Which of the following is part of QA in early development stages?**  
   A. Hazard control  
   B. Defect containment  
   C. Defect prevention ✅  
   D. Beta testing
3. **Defect containment is mainly associated with:**  
   A. Initial coding phase  
   B. Release and support phase ✅  
   C. Design phase  
   D. Requirements gathering
4. **What does V&V stand for in QA?**  
   A. Validate and Verify  
   B. Value and Variation  
   C. Verification and Validation ✅  
   D. Versioning and Variation
5. **Validation is mostly associated with:**  
   A. Design correctness  
   B. Specification conformance  
   C. Fit for use and requirements ✅  
   D. Unit testing
6. **Verification answers the question:**  
   A. "Are we building the right product?"  
   B. "Did the user approve?"  
   C. "Are we building the product right?" ✅  
   D. "Did we test enough?"
7. **Beta testing is mostly associated with:**  
   A. Verification  
   B. Validation ✅  
   C. Containment  
   D. Prevention
8. **In the V-model, who is closest to the top?**  
   A. Developer  
   B. Customer/User ✅  
   C. Project Manager  
   D. Designer
9. **In DC view, which QA activity does unit testing belong to?**  
   A. Defect Prevention  
   B. Defect Containment  
   C. Defect Reduction ✅  
   D. Error Handling
10. **What connects DC and V&V views in QA?**  
    A. Bug tracking  
    B. Mapping between activities ✅  
    C. User feedback  
    D. System logs
11. **Which development model emphasizes test-driven development?**  
    A. Waterfall  
    B. Spiral  
    C. Agile (e.g., XP) ✅  
    D. V-Model
12. **What kind of process is the spiral model?**  
    A. Linear  
    B. Risk-driven iterative ✅  
    C. Ad-hoc  
    D. Debugging-focused
13. **Which QA phase involves quality reviews and inspections?**  
    A. Maintenance  
    B. Deployment  
    C. Phase transitions ✅  
    D. Testing
14. **What is the purpose of defect measurement?**  
    A. Remove defects  
    B. Track defect cost  
    C. Understand where, when, and why defects occurred ✅  
    D. Notify developers
15. **Which process focuses on breaking the cause-effect chain of defects?**  
    A. Development  
    B. Causal analysis ✅  
    C. Validation  
    D. Debugging
16. **Which of the following is *not* typically part of a QA software process?**  
    A. Termination  
    B. Inspection  
    C. Launch  
    D. Customer Feedback ✅
17. **Which V&V activity is related to Acceptance Testing?**  
    A. Validation ✅  
    B. Verification  
    C. Prevention  
    D. Review
18. **Which defect metric provides insight into severity and impact?**  
    A. Unit count  
    B. Fault level  
    C. Defect classification ✅  
    D. Cost ratio
19. **Which QA model is used in high-dependability systems for containment?**  
    A. Waterfall  
    B. Agile  
    C. Maintenance process ✅  
    D. XP
20. **What is the main outcome of mapping DC view to V&V view?**  
    A. Separation of testing  
    B. Code optimization  
    C. Integrated understanding of QA strategies ✅  
    D. Developer performance review

Let me know if you'd like these exported to PDF or formatted for quizzes/tests.

Here are **20 brand new MCQs** for each slide based on fresh concepts or differently framed questions from your lecture slides.

**📘 SQT\_4: Maturity Models – 20 New MCQs**

1. **What is the purpose of maturity models in software engineering?**  
   A. Reduce hardware cost  
   B. Track customer feedback  
   C. Evaluate and improve software processes ✅  
   D. Design user interfaces
2. **Which CMM level introduces basic project management?**  
   A. Defined  
   B. Initial  
   C. Repeatable ✅  
   D. Managed
3. **Which maturity model was developed for improving *testing* activities specifically?**  
   A. CMMI  
   B. ISO 9001  
   C. TMM ✅  
   D. Six Sigma
4. **What is the key concept behind process maturity?**  
   A. Cost cutting  
   B. Repeatability and predictability ✅  
   C. Code reuse  
   D. Adding new features
5. **What aspect of a company is evaluated by CMM?**  
   A. Product quality only  
   B. Hardware efficiency  
   C. Process capability ✅  
   D. Marketing strategy
6. **In the CMM, which level comes directly before ‘Managed’?**  
   A. Defined ✅  
   B. Repeatable  
   C. Initial  
   D. Optimizing
7. **Which level in CMM is associated with proactive defect prevention?**  
   A. Repeatable  
   B. Defined  
   C. Optimizing ✅  
   D. Managed
8. **CMMI Level 2 is referred to as:**  
   A. Initial  
   B. Defined  
   C. Managed ✅  
   D. Optimizing
9. **What does TPI primarily aim to improve?**  
   A. Software development process  
   B. Hardware installation  
   C. Test process maturity ✅  
   D. User interface
10. **Which level in TMM does *not* contain maturity goals?**  
    A. Phase Definition  
    B. Initial ✅  
    C. Management  
    D. Optimization
11. **How many key areas are used in TPI to evaluate testing?**  
    A. 5  
    B. 10  
    C. 15  
    D. 20 ✅
12. **What does the Test Maturity Matrix help identify?**  
    A. Types of bugs  
    B. Test case tools  
    C. Maturity scale of test process ✅  
    D. Requirements mismatches
13. **Who is the creator of the Testing Maturity Model (TMM)?**  
    A. Barry Boehm  
    B. Ilene Burnstein ✅  
    C. Watts Humphrey  
    D. Glenford Myers
14. **TPI maturity levels are categorized as:**  
    A. A–D ✅  
    B. I–V  
    C. Alpha–Omega  
    D. 0–100
15. **Which maturity model supports incremental improvements in testing?**  
    A. ISO 9126  
    B. TMM  
    C. TPI ✅  
    D. SPICE
16. **Which TMM level includes the creation of a formal software test group?**  
    A. Initial  
    B. Phase Definition  
    C. Integration ✅  
    D. Optimization
17. **CMM can also be applied beyond software development to:**  
    A. Business operations ✅  
    B. Hardware manufacturing  
    C. Entertainment industry  
    D. Network security only
18. **The focus of CMMI Level 3 is:**  
    A. Project management  
    B. Quantitative analysis  
    C. Process standardization ✅  
    D. Automated testing
19. **Why is Level 1 in most maturity models considered chaotic?**  
    A. It lacks any structure or documented processes ✅  
    B. It has too many meetings  
    C. It is fully automated  
    D. It follows Agile practices
20. **Which is a key benefit of using maturity models?**  
    A. Avoid user testing  
    B. Reduce internet usage  
    C. Identify process gaps for improvement ✅  
    D. Increase marketing budgets

**📘 SQT\_5: Quality Assurance – 20 New MCQs**

1. **What is the main goal of defect prevention?**  
   A. Speed up deployment  
   B. Eliminate the causes of faults ✅  
   C. Save money  
   D. Automate testing
2. **Which QA activity involves tracing failures back to faults?**  
   A. Inspection  
   B. Testing ✅  
   C. Simulation  
   D. Validation
3. **Inspections are mainly performed on:**  
   A. Running code  
   B. UI designs only  
   C. Software artifacts like code and design ✅  
   D. Customer reports
4. **Defect containment deals primarily with:**  
   A. Fault prevention  
   B. Limiting failure impact ✅  
   C. User interaction  
   D. Design updates
5. **Which is an example of an error blocking technique?**  
   A. User acceptance testing  
   B. Formal method to prevent human mistakes ✅  
   C. Manual debugging  
   D. Regression testing
6. **When is the cost of fixing defects usually lowest?**  
   A. After deployment  
   B. At final testing  
   C. During early development ✅  
   D. During training
7. **What is root cause analysis used for?**  
   A. Prioritizing bugs  
   B. Finding cost estimates  
   C. Identifying error sources ✅  
   D. Scheduling resources
8. **Defect reduction techniques are considered:**  
   A. Preventive  
   B. Reactive ✅  
   C. Containment  
   D. Optional
9. **What does safety assurance primarily address?**  
   A. Deployment risk  
   B. Code coverage  
   C. Failures with severe consequences ✅  
   D. UI responsiveness
10. **Symbolic execution is an example of:**  
    A. Static analysis  
    B. Dynamic execution-based technique ✅  
    C. Manual review  
    D. Test documentation
11. **What does FT stand for in QA?**  
    A. Fault Testing  
    B. Fault Tolerance ✅  
    C. Full Testing  
    D. Formal Testing
12. **Which of the following is a direct fault detection method?**  
    A. Beta testing  
    B. Walkthrough  
    C. Inspection ✅  
    D. Prototyping
13. **Testing based on dynamic execution falls under:**  
    A. Defect containment  
    B. Defect reduction ✅  
    C. Defect prevention  
    D. Fault injection
14. **Walkthroughs are typically conducted by:**  
    A. Customers  
    B. Developers only  
    C. Multiple reviewers with less formality ✅  
    D. QA automation tools
15. **Safety assurance includes:**  
    A. Root cause detection  
    B. Hazard analysis and elimination ✅  
    C. Marketing feedback  
    D. Test automation
16. **Failure containment is important for:**  
    A. Bug logging  
    B. Minimizing defect tracking  
    C. Reducing impact of unavoidable faults ✅  
    D. Waterfall development
17. **Formal methods can help in:**  
    A. Educating users  
    B. Verifying the absence of specific faults ✅  
    C. Rewriting code  
    D. Collecting user data
18. **Which technique helps simulate possible failures before they happen?**  
    A. Walkthroughs  
    B. Simulation ✅  
    C. Inspections  
    D. Acceptance testing
19. **Defect prevention is best achieved by:**  
    A. Testing after coding  
    B. Fixing bugs quickly  
    C. Eliminating error sources early ✅  
    D. Using a debugger
20. **A key reason to use software tools in QA is to:**  
    A. Replace developers  
    B. Block defect injections ✅  
    C. Perform marketing  
    D. Track user data

**📘 SQT\_6: QA in Context – 20 New MCQs**

1. **What is meant by “QA in context”?**  
   A. QA used only in production  
   B. QA activities tied to specific project phases ✅  
   C. QA in marketing processes  
   D. QA for only Agile
2. **Which QA activity should be emphasized in Agile methodologies?**  
   A. Late-phase defect containment  
   B. Formal testing  
   C. Continuous validation and verification ✅  
   D. Documentation
3. **Which software process relies on fixed sequential phases?**  
   A. Agile  
   B. Spiral  
   C. Waterfall ✅  
   D. XP
4. **Which model combines risk management with QA?**  
   A. V-model  
   B. Spiral ✅  
   C. Waterfall  
   D. XP
5. **Which phase in waterfall typically deals with containment?**  
   A. Requirement gathering  
   B. Coding  
   C. Testing  
   D. Release & Support ✅
6. **Which activity focuses on aligning development with requirements?**  
   A. Verification  
   B. Validation ✅  
   C. Containment  
   D. Debugging
7. **Defect handling involves:**  
   A. Skipping errors  
   B. Hiding issues from users  
   C. Tracking, resolving, and analyzing defects ✅  
   D. Enhancing features
8. **Which V&V activity checks if the system meets design specs?**  
   A. Validation  
   B. Debugging  
   C. Verification ✅  
   D. Code review
9. **Which QA activity is prominent during operation phase?**  
   A. Defect prevention  
   B. Validation ✅  
   C. Inspection  
   D. Modeling
10. **Which model emphasizes customer feedback through beta testing?**  
    A. Agile ✅  
    B. Waterfall  
    C. V-model  
    D. Spiral
11. **QA in maintenance primarily focuses on:**  
    A. Adding features  
    B. Retesting design  
    C. Handling existing defects ✅  
    D. Building new models
12. **In defect analysis, a severity rating helps determine:**  
    A. Developer salary  
    B. Customer complaints  
    C. Impact level of defect ✅  
    D. Process documentation
13. **Which QA view is most focused on process improvement through errors?**  
    A. V&V  
    B. DC view ✅  
    C. Agile  
    D. Operational
14. **The V-model maps development phases to:**  
    A. User feedback  
    B. Design diagrams  
    C. Testing activities ✅  
    D. Marketing
15. **Which testing is closest to the user environment?**  
    A. Unit testing  
    B. Beta testing ✅  
    C. Integration testing  
    D. Regression
16. **Which view is more internal and structure-focused?**  
    A. Validation  
    B. Verification ✅  
    C. Debugging  
    D. Monitoring
17. **Causal analysis aims to:**  
    A. Assign blame  
    B. Track user behavior  
    C. Find the origin of defects ✅  
    D. Review documentation
18. **A QA activity done *before* defect injection is called:**  
    A. Containment  
    B. Verification  
    C. Prevention ✅  
    D. Simulation
19. **Defect status tracking helps with:**  
    A. Building UI  
    B. Prioritizing resolution ✅  
    C. Logging time  
    D. Deployment
20. **What is the benefit of mapping V&V with DC views?**  
    A. Reduced testing  
    B. Higher customer involvement  
    C. Better QA strategy alignment ✅  
    D. Faster marketing

Let me know if you’d like all 120 questions (60 original + 60 new) in a downloadable format (e.g., PDF or Word).