

# 43 Lecture - CS504

## Important Mcqs

**1. What is a syntax error in software development?**

- a) An error that occurs during runtime
- b) An error in the code structure or grammar
- c) An error caused by logical flaws in the code
- d) An error that occurs due to invalid input

**Solution: b) An error in the code structure or grammar**

**2. Which bug class is related to incorrect implementation or sequencing of code statements?**

- a) Syntax errors
- b) Runtime errors
- c) Logic errors
- d) Boundary errors

**Solution: c) Logic errors**

**3. What is a runtime error?**

- a) An error that occurs during code compilation
- b) An error caused by logical flaws in the code
- c) An error that occurs during code execution
- d) An error that occurs due to invalid input

**Solution: c) An error that occurs during code execution**

**4. Which bug class is associated with input values exceeding acceptable ranges?**

- a) Syntax errors
- b) Runtime errors

- c) Logic errors
- d) Boundary errors

**Solution: d) Boundary errors**

**5. What is the primary cause of a logic error in software code?**

- a) Incorrect code structure
- b) Invalid input data
- c) Incorrect implementation of algorithms or conditions
- d) Memory-related issues

**Solution: c) Incorrect implementation of algorithms or conditions**

**6. What is a type mismatch error in programming languages?**

- a) A syntax error caused by incorrect use of brackets or parentheses
- b) A runtime error resulting from invalid input data
- c) An error that occurs when a variable is assigned an incompatible data type
- d) An error caused by exceeding the system's memory limit

**Solution: c) An error that occurs when a variable is assigned an incompatible data type**

**7. Which bug class is related to unexpected program termination or crashes?**

- a) Syntax errors
- b) Runtime errors
- c) Logic errors
- d) Boundary errors

**Solution: b) Runtime errors**

**8. What is a null pointer exception in programming?**

- a) A syntax error caused by using an undefined variable
- b) A runtime error that occurs due to an infinite loop
- c) A runtime error caused by accessing memory location with a null pointer

d) A logic error resulting from incorrect implementation of conditions

**Solution: c) A runtime error caused by accessing memory location with a null pointer**

**9. Which bug class is most likely to be detected during code reviews or static analysis?**

a) Syntax errors

b) Runtime errors

c) Logic errors

d) Boundary errors

**Solution: a) Syntax errors**

**10. What is the primary goal of categorizing bug classes in software development?**

a) Identifying the root cause of defects

b) Aiding in effective debugging and prevention strategies

c) Prioritizing bug fixes based on their severity

d) Enhancing code performance and optimization

**Solution: b) Aiding in effective debugging and prevention strategies**