📘 MCQs: Exception Handling in Agentic AI

**1. What is the main purpose of exception handling in Agentic AI?**

A) To improve token efficiency  
B) To gracefully manage failures during execution  
C) To replace tool calls  
D) To simplify prompts

**Answer:** B  
**Explanation:** Exception handling ensures **runs don’t break unexpectedly** and errors are handled safely.

**2. What does the MaxTurnsExceeded exception represent?**

A) The agent exceeded API rate limits  
B) The agent loop exceeded the maximum allowed steps/turns  
C) The model produced invalid tokens  
D) The agent took too long to respond

**Answer:** B  
**Explanation:** **MaxTurnsExceeded** is raised when an agent goes beyond the configured **turn limit**.

**3. Which parameter often prevents MaxTurnsExceeded errors?**

A) max\_tokens  
B) temperature  
C) max\_turns  
D) top\_p

**Answer:** C  
**Explanation:** Setting a **max\_turns** limit stops infinite reasoning loops.

**4. What is the purpose of ModelBehaviorError?**

A) Captures when the model output is nonsensical or violates expectations  
B) Indicates rate limiting  
C) Represents API timeout  
D) Tracks retry attempts

**Answer:** A  
**Explanation:** **ModelBehaviorError** means the model’s output was **invalid or misaligned with instructions**.

**5. Which of the following could trigger a ModelBehaviorError?**

A) Model outputs malformed JSON  
B) Model refuses a safe request  
C) Model fails to follow schema rules  
D) All of the above

**Answer:** D  
**Explanation:** Any **unexpected or invalid behavior** may trigger this exception.

**6. What should developers typically do when catching MaxTurnsExceeded?**

A) Ignore the error  
B) Provide a fallback response or exit gracefully  
C) Retry indefinitely  
D) Increase temperature

**Answer:** B  
**Explanation:** Safe fallback prevents **infinite loops** and preserves user trust.

**7. What is the difference between ModelBehaviorError and ValidationError?**

A) ModelBehaviorError comes from model misbehavior; ValidationError comes from schema mismatches  
B) ModelBehaviorError is runtime only; ValidationError is static  
C) ValidationError applies only to Python code  
D) They are identical

**Answer:** A  
**Explanation:** **ValidationError** is schema-related, while **ModelBehaviorError** is about unexpected model output.

**8. Which of these is NOT a typical exception in Agentic AI execution?**

A) MaxTurnsExceeded  
B) ModelBehaviorError  
C) ToolExecutionError  
D) SystemRebootError

**Answer:** D  
**Explanation:** **SystemRebootError** is not part of the Agentic AI exception set.

**9. Why is exception handling critical in production agents?**

A) It reduces token usage  
B) It prevents crashes and ensures resilience  
C) It increases creativity  
D) It disables retries

**Answer:** B  
**Explanation:** Exception handling ensures **robust, predictable agent behavior**.

**10. Which exception occurs if an agent calls a tool with bad parameters?**

A) MaxTurnsExceeded  
B) ToolExecutionError  
C) ModelBehaviorError  
D) TimeoutError

**Answer:** B  
**Explanation:** **ToolExecutionError** is raised when a **tool call fails**.

**11. How does Agentic AI recommend handling exceptions?**

A) With try/except blocks and fallback strategies  
B) By ignoring errors  
C) By disabling agents  
D) By logging only

**Answer:** A  
**Explanation:** Proper handling uses **try/except with graceful fallbacks**.

**12. Which exception best matches the case: *“Agent produces unparseable JSON while schema is required”*?**

A) MaxTurnsExceeded  
B) ModelBehaviorError  
C) ValidationError  
D) ToolExecutionError

**Answer:** C  
**Explanation:** **ValidationError** arises from **schema parsing failure**.

**13. Which exception occurs if an agent keeps looping without resolving?**

A) TimeoutError  
B) MaxTurnsExceeded  
C) RetryError  
D) ModelBehaviorError

**Answer:** B  
**Explanation:** **MaxTurnsExceeded** prevents **infinite loops**.

**14. Which exception type is most relevant for guardrail enforcement failures?**

A) GuardrailError  
B) ModelBehaviorError  
C) ValidationError  
D) MaxTurnsExceeded

**Answer:** A  
**Explanation:** **GuardrailError** occurs if content violates **safety policies/tripwires**.

**15. If a tool API returns a 500 server error, which exception is raised?**

A) ToolExecutionError  
B) ModelBehaviorError  
C) ValidationError  
D) MaxTurnsExceeded

**Answer:** A  
**Explanation:** Tool call failures are wrapped into **ToolExecutionError**.

**16. Which exception is most likely when the agent produces unsafe content despite restrictions?**

A) ModelBehaviorError  
B) GuardrailError  
C) ValidationError  
D) MaxTurnsExceeded

**Answer:** B  
**Explanation:** Guardrails catch **unsafe or sensitive output violations**.

**17. Which of the following should be logged for debugging ModelBehaviorError?**

A) Raw model response  
B) Expected schema or format  
C) Context prompt  
D) All of the above

**Answer:** D  
**Explanation:** Debugging requires **full visibility** of prompt, schema, and output.

**18. Which exception helps avoid resource exhaustion from endless execution?**

A) TimeoutError  
B) MaxTurnsExceeded  
C) ValidationError  
D) ToolExecutionError

**Answer:** B  
**Explanation:** MaxTurnsExceeded prevents **runaway loops**.

**19. Which strategy helps mitigate ModelBehaviorError?**

A) Use stricter output schemas  
B) Apply retries with repair prompts  
C) Validate outputs before use  
D) All of the above

**Answer:** D  
**Explanation:** Combining **schema validation, retries, and repair prompts** improves reliability.

**20. Why should exceptions be differentiated instead of using a generic error?**

A) Easier debugging and targeted recovery strategies  
B) Reduces token usage  
C) Increases randomness  
D) Improves creativity

**Answer:** A  
**Explanation:** Different exception types allow **precise, meaningful recovery actions**.