📘 MCQs: Runner Methods (run, run\_sync, run\_streamed) – Fundamentals of Agentic AI

### 1. What is the main purpose of the ****Runner**** in Agentic AI?

A) To design prompts  
B) To execute agents and manage their lifecycle  
C) To validate schemas  
D) To monitor GPU usage

**Answer:** B  
**Explanation:** The **Runner** is the execution manager for agents, handling runs and output collection.

### 2. What does the run method return?

A) Nothing  
B) A coroutine (async execution of the agent run)  
C) Always a dictionary  
D) Only tool results

**Answer:** B  
**Explanation:** run is **asynchronous** and returns a coroutine, suitable for await usage.

### 3. Which method should be used when writing ****synchronous/blocking code****?

A) run  
B) run\_sync  
C) run\_streamed  
D) async\_run

**Answer:** B  
**Explanation:** run\_sync executes an agent **in blocking mode**, useful for scripts.

### 4. Which method enables ****real-time streaming of outputs****?

A) run  
B) run\_sync  
C) run\_streamed  
D) run\_async

**Answer:** C  
**Explanation:** run\_streamed supports **partial output streaming** for live updates.

### 5. Which Runner method is best for a ****web API backend (FastAPI/Flask)****?

A) run  
B) run\_sync  
C) run\_streamed  
D) tool\_call

**Answer:** A  
**Explanation:** Web APIs are **async-based**, so await runner.run(...) is ideal.

### 6. Which Runner method is best for a ****command-line script****?

A) run  
B) run\_sync  
C) run\_streamed  
D) async\_run

**Answer:** B  
**Explanation:** CLI scripts benefit from **blocking execution** via run\_sync.

### 7. Which Runner method is best for ****chatbots with live responses****?

A) run  
B) run\_sync  
C) run\_streamed  
D) none of the above

**Answer:** C  
**Explanation:** run\_streamed delivers **partial tokens/output progressively**.

### 8. What happens if you call runner.run() without await?

A) It executes immediately  
B) It returns a coroutine object, not the result  
C) It raises MaxTurnsExceeded  
D) It blocks execution

**Answer:** B  
**Explanation:** run is async — without await, it only returns a coroutine placeholder.

### 9. Which method is most efficient for ****batch processing multiple runs concurrently****?

A) run  
B) run\_sync  
C) run\_streamed  
D) none

**Answer:** A  
**Explanation:** run supports **async concurrency**, making it optimal for batch jobs.

### 10. Which method provides ****the earliest possible feedback to users****?

A) run  
B) run\_sync  
C) run\_streamed  
D) run\_async

**Answer:** C  
**Explanation:** run\_streamed streams partial responses **before run completion**.

### 11. Which method is ****blocking****?

A) run  
B) run\_sync  
C) run\_streamed  
D) run + await

**Answer:** B  
**Explanation:** run\_sync waits for the **entire run to finish** before continuing.

### 12. Which method would you use for ****server-side logging without partial outputs****?

A) run  
B) run\_sync  
C) run\_streamed  
D) none

**Answer:** A  
**Explanation:** run (async) is best when **full outputs only** are needed.

### 13. Which Runner method supports ****iterating over output tokens**** in real time?

A) run  
B) run\_sync  
C) run\_streamed  
D) run\_parallel

**Answer:** C  
**Explanation:** run\_streamed lets developers **yield tokens or steps** progressively.

### 14. Which method fits best in ****Jupyter Notebooks**** for blocking calls?

A) run  
B) run\_sync  
C) run\_streamed  
D) async\_run

**Answer:** B  
**Explanation:** run\_sync works well in environments that don’t natively support async.

### 15. Which method is most compatible with ****async/await event loops**** like asyncio?

A) run  
B) run\_sync  
C) run\_streamed  
D) run\_blocking

**Answer:** A  
**Explanation:** run integrates seamlessly with Python’s **asyncio** event loop.

### 16. Which Runner method is best if you want to ****display partial responses to users (like typing effect)****?

A) run  
B) run\_sync  
C) run\_streamed  
D) run\_blocking

**Answer:** C  
**Explanation:** run\_streamed is designed for **incremental UI feedback**.

### 17. What happens if you call run\_sync inside an async event loop?

A) It works normally  
B) It may cause blocking or runtime errors  
C) It streams outputs  
D) It retries automatically

**Answer:** B  
**Explanation:** run\_sync is blocking and can conflict with async loops.

### 18. Which Runner method can ****reduce perceived latency**** for end-users?

A) run  
B) run\_sync  
C) run\_streamed  
D) none

**Answer:** C  
**Explanation:** run\_streamed provides **early partial outputs**, reducing wait time.

### 19. Which method is the most ****flexible across environments (async + sync)****?

A) run  
B) run\_sync  
C) run\_streamed  
D) combination of run + run\_streamed

**Answer:** D  
**Explanation:** Combining **run for async tasks** and **run\_streamed for live UIs** covers most cases.

### 20. What is the ****default assumption**** if not specified: runs are expected to be?

A) Sync  
B) Async (run)  
C) Streamed (run\_streamed)  
D) Tool-driven

**Answer:** B  
**Explanation:** By default, Agentic AI assumes **async execution** (run).