Prefect Knowledge Check - Multiple Choice Questions

1. What is Prefect primarily used for?

* A. Data visualization
* B. Machine learning model training
* C. Workflow orchestration
* D. Cloud infrastructure provisioning

Answer: C. Workflow orchestration

2. In Prefect, what is a 'Flow'?

* A. A type of data storage
* B. A container for tasks that defines the execution graph
* C. A logging configuration
* D. A data stream from an API

Answer: B. A container for tasks that defines the execution graph

3. What decorator is used to define a task in Prefect 2.x?

* A. @flow
* B. @task
* C. @pipeline
* D. @process

Answer: B. @task

4. Which Prefect feature allows retrying a task upon failure?

* A. Caching
* B. Timeout
* C. Retry policy
* D. Scheduling

Answer: C. Retry policy

5. Where can you monitor flow runs in the Prefect UI?

* A. Storage tab
* B. Flow Run tab
* C. Parameters tab
* D. Blocks tab

Answer: B. Flow Run tab

6. What command is used to start an agent in Prefect?

* A. prefect agent start
* B. prefect start agent
* C. prefect run-agent
* D. prefect agent start --pool 'default'

Answer: D. prefect agent start --pool 'default'

7. What is a deployment in Prefect 2.x?

* A. A configuration of a flow for orchestration
* B. A cloud VM instance
* C. A database snapshot
* D. A container image

Answer: A. A configuration of a flow for orchestration

8. What Python library must be imported to use Prefect features?

* A. import airflow
* B. import prefect
* C. import dagster
* D. import pandas

Answer: B. import prefect

9. What function is used to define parameters in a Prefect flow?

* A. Parameter()
* B. define\_param()
* C. FlowParam()
* D. get\_parameters()

Answer: A. Parameter()

10. How do you run a flow locally?

* A. With `python script.py`
* B. With `prefect run flow`
* C. With `flow.execute()`
* D. With `prefect cloud run`

Answer: A. With `python script.py`

11. What is the purpose of Prefect blocks?

* A. Visualize flow runs
* B. Store and reuse configurations and credentials
* C. Cache data between tasks
* D. Execute flows in parallel

Answer: B. Store and reuse configurations and credentials

12. How are dependencies defined between tasks in Prefect?

* A. Using `flow.order()`
* B. By specifying task outputs as inputs to other tasks
* C. Using `dag.set\_downstream()`
* D. Using YAML config files

Answer: B. By specifying task outputs as inputs to other tasks

13. Which storage option is NOT supported directly in Prefect?

* A. GitHub
* B. S3
* C. Google Sheets
* D. Azure Blob Storage

Answer: C. Google Sheets

14. What command creates a deployment from a flow script?

* A. prefect create deployment
* B. prefect deployment build
* C. prefect flow deploy
* D. prefect deployment init

Answer: B. prefect deployment build

15. What is the default logging level for Prefect?

* A. DEBUG
* B. INFO
* C. WARNING
* D. ERROR

Answer: B. INFO

16. What is required to connect your local environment to Prefect Cloud?

* A. API Key and workspace setup
* B. SSH keys
* C. Docker container
* D. Kubernetes setup

Answer: A. API Key and workspace setup

17. Which method is used to cache task outputs in Prefect?

* A. @task(cache\_result=True)
* B. enable\_cache=True
* C. cache\_key\_fn and cache\_expiration
* D. output\_cache=True

Answer: C. cache\_key\_fn and cache\_expiration

18. What happens if a task fails in Prefect?

* A. Flow immediately stops
* B. Retry logic (if defined) is applied
* C. The task is skipped
* D. It triggers a new flow run

Answer: B. Retry logic (if defined) is applied

19. Can you nest flows within other flows in Prefect 2.x?

* A. No, nesting is not supported
* B. Yes, using `@flow` inside other `@flow`
* C. Only with Prefect Cloud
* D. Only using YAML config

Answer: B. Yes, using `@flow` inside other `@flow`

20. What is the purpose of the Prefect Orion engine?

* A. Data scraping
* B. Deployment to cloud providers
* C. Running and observing flows
* D. Building dashboards

Answer: C. Running and observing flows