ANSIBLE

----

1. Which command runs an Ansible ad hoc task against all hosts in inventory using ping module?

   A. ansible all -m ping

   B. ansible-playbook ping.yml

   C. ansible-ping all

   D. ansible all --ping

Answer: A

Explanation: The 'ansible' ad hoc CLI targets the host group ('all') and executes a
module ('-m ping'), which sends basic connectivity tests to every host in the inventory.

2. What is the default inventory file path used by Ansible CLI when no inventory is specified?

   A. /etc/ansible/hosts

   B. ~/.ansible/hosts

   C. /usr/local/ansible/inventory

   D. inventory.ini

Answer: A

Explanation: Ansible falls back to '/etc/ansible/hosts' when an inventory isn't provided
via '-i', so populating that file allows commands to run without extra arguments.

3. Which Ansible module manages packages using the system's package manager on Debian-base systems?

   A. yum

   B. apt

   C. package

   D. rpm

Answer: B

Explanation: The 'apt' module interfaces directly with Debian/Ubuntu's Advanced Packaging
 Tool, offering idempotent install/update/remove operations, unlike 'yum' or 'rpm'.

4. In an Ansible playbook, which keyword defines the remote hosts targeted by the play?

   A. target

   B. hosts

   C. remote

   D. destination

Answer: B

Explanation: The 'hosts' field in a play lists inventory groups or patterns, determining

which machines receive the tasks defined in that play.

5. What is the purpose of Ansible facts?
   A. Provide role defaults
   B. Store host-specific variables gathered during play execution
   C. Define vault passwords
   D. Control task handlers
   Answer: B
   Explanation: Facts are key-value data discovered by the setup module at run time, giving
   tasks information such as OS version, IP addresses, or memory.

6. How do you execute a specific tag during an Ansible playbook run?
   A. ansible-playbook site.yml -t web
   B. ansible-playbook site.yml --tag web-only
   C. ansible-playbook site.yml run-tag web
   D. ansible-playbook site.yml --only web
   Answer: A
   Explanation: Passing '-t' (or '--tags') filters task execution to those tagged with the
   given value, letting you run targeted portions of a playbook.

7. Which file defines role dependencies in Ansible?
   A. tasks/main.yml
   B. defaults/main.yml
   C. meta/main.yml
   D. handlers/main.yml
   Answer: C
   Explanation: Role metadata stored in 'meta/main.yml' can declare dependencies on other
   roles, ensuring they run first before the current role executes.

8. What is the default privilege escalation method used by Ansible when 'become: true' is set?
   A. su
   B. sudo
   C. doas
   D. pbrun
   Answer: B
   Explanation: Ansible's default escalator is 'sudo', and unless overridden, 'become: true'
    elevates commands via sudo to gain higher privileges.

9. How can you prevent Ansible from gathering facts at the beginning of a play?
   A. gather_facts: false
   B. skip_facts: true

C. facts: off

D. no_fact: yes

Answer: A

Explanation: Setting 'gather_facts: false' in the play header skips the automatic fact-gathering step, saving time when facts are unnecessary.

10. Which Ansible module copies files from control node to managed hosts?

A. copy

B. fetch

C. template

D. file

Answer: A

Explanation: The 'copy' module pushes a local file or inline content to managed hosts, whereas 'fetch' pulls files back to the controller.

11. What is the purpose of 'ansible-config dump' command?

A. Validate inventory syntax

B. Display current Ansible configuration settings

C. List installed Ansible modules

D. Export playbook

Answer: B

Explanation: 'ansible-config dump' prints the effective configuration by merging defaults, environment variables, and config files so you know which settings are active.

12. Which directive ensures a handler runs only once after all notified tasks complete?

A. run_once: true

B. notify: handler_name

C. when: notified

D. single_run: yes

Answer: B

Explanation: Tasks use the 'notify' directive to signal handlers, which run once at the end of the play (or when flushed) regardless of how many notifications they receive.

13. What is a valid Ansible variable precedence level highest among the list?

A. Inventory variables

B. Role defaults

C. Extra vars (-e)

D. Play vars

Answer: C

Explanation: Extra vars provided on the CLI override all other variable sources, making them the highest priority in Ansible's precedence chain.

14. Which module manages services across different init systems?

A. service

B. systemd

C. init

D. svc

Answer: A

Explanation: The 'service' module abstracts service control and delegates to systemd, Upstart, or SysV as appropriate, simplifying start/stop/reload tasks.

15. How can you run tasks sequentially on hosts even when using forks?

A. serial: 1 in play definition

B. set forks = 1 in ansible.cfg

C. run_once: true on all tasks

D. strategy: free

Answer: A

Explanation: Setting 'serial: 1' processes hosts in batches of one, creating a rolling update pattern while still allowing parallelism within each host.

16. Which strategy runs tasks on hosts as soon as they are ready, without waiting?

A. linear

B. free

C. host_pinned

D. async

Answer: B

Explanation: The 'free' strategy allows hosts to execute tasks independently rather than synchronizing at each step, accelerating long-running operations.

17. What is the function of Ansible Vault?

A. Manage remote file transfers

B. Encrypt sensitive data such as passwords in playbooks

C. Create dynamic inventory

D. Execute Docker containers

Answer: B

Explanation: Ansible Vault secures secrets by encrypting YAML files so they can be versioned safely and decrypted at run time with a vault password.

18. Which command encrypts an existing file with Ansible Vault?

A. ansible-vault encrypt file.yml

B. ansible encrypt file.yml

C. ansible-playbook --vault file.yml

D. ansible vault lock file.yml

Answer: A

Explanation: 'ansible-vault encrypt' transforms plaintext files into vault-encrypted

files that require the vault password to read or use.

19. How do you run only tasks marked with 'tags: database'?

A. ansible-playbook site.yml -T database

B. ansible-playbook site.yml --limit database

C. ansible-playbook site.yml -t database

D. ansible-playbook site.yml --tags-only database

Answer: C

Explanation: '-t database' ensures only tasks tagged as 'database' execute, while untagged tasks are skipped.

20. In an inventory file, which group includes all defined hosts?

A. [global]

B. [all]

C. [world]

D. [hosts]

Answer: B

Explanation: Ansible automatically creates an 'all' group containing every host loaded from the inventory, enabling broad targeting.

21. What is the purpose of the 'with_items' keyword in Ansible 2.9 and earlier?

A. Define loop variable names

B. Provide a list to iterate tasks over

C. Register task outputs

D. Include roles dynamically

Answer: B

Explanation: 'with_items' iterates a task over a list, executing the module once per item; in newer versions, 'loop' is the preferred syntax.

22. Which module executes a shell command through a shell interpreter?

A. command

B. shell

C. raw

D. script

Answer: B

Explanation: The 'shell' module runs commands via '/bin/sh' (or configured shell), allowing shell features like pipes or redirection; 'command' executes without a shell.

23. How do you ensure a task runs only when a variable equals a value?

A. when: variable == "value"

B. only_if: variable == "value"

C. condition: variable = "value"

D. equals: variable: value

Answer: A

Explanation: 'when' applies Jinja2 expressions to conditionally execute tasks, so comparing 'variable' to a value gates the task.

24. How can you include variables from a YAML file in a playbook?

A. vars_files:

  - vars.yml

B. include_vars: vars.yml

C. Both options above

D. var_from: vars.yml

Answer: C

Explanation: 'vars_files' loads during play definition, while 'include_vars' can load dynamically during a task, both pulling in external variable data.

25. Which file sets default values for variables within a role?

A. defaults/main.yml

B. vars/main.yml

C. meta/defaults.yml

D. group_vars/defaults.yml

Answer: A

Explanation: Role defaults defined in 'defaults/main.yml' have the lowest precedence, providing baseline values that other sources can override.

26. What does setting 'changed_when: false' on a task accomplish?

A. Marks task as failed on change

B. Logs a warning

C. Forces Ansible to report no change even if module indicates change

D. Skips task execution

Answer: C

Explanation: 'changed_when: false' is used when idempotent tasks report changes incorrectly; it tells Ansible to treat the task as unchanged.

27. When using 'register', where is task output stored?

A. In remote host file

B. In an Ansible fact

C. In a variable accessible later in the play

D. In ansible.cfg

Answer: C

Explanation: 'register: result' saves the module's return data into a variable so subsequent tasks can reference 'result.stdout', 'result.rc', etc.

28. What is the default location for Ansible configuration file if not specified?

A. ansible.cfg in current directory

B. ~/.ansible.cfg

C. /etc/ansible/ansible.cfg

D. All of the above in precedence order

Answer: D

Explanation: Ansible searches configuration in the current directory first, then the user's home, then '/etc/ansible/ansible.cfg', applying the first file found.

29. Which module ensures a file has specific permissions, owner, and group?

A. lineinfile

B. file

C. stat

D. ansible.builtin.path

Answer: B

Explanation: The 'file' module sets attributes such as owner, group, and mode, and can create or remove files/directories as needed.

30. How can you dynamically include tasks during runtime based on condition?

A. include_tasks with when clause

B. import_tasks with when clause

C. include_tasks only

D. Not possible

Answer: A

Explanation: 'include_tasks' is evaluated at run time, so combining it with 'when' ensures the task file is included only when the condition holds; 'import_tasks' is static.

31. What is the difference between 'import_playbook' and 'include_tasks'?

A. import_playbook is static at parse time; include_tasks is dynamic at runtime

B. import_playbook runs after include_tasks

C. include_tasks supports roles; import_playbook doesn't

D. No difference

Answer: A

Explanation: 'import_playbook' is processed before execution, effectively merging files, while 'include_tasks' decides at runtime whether to include the tasks.

32. Which variable contains the hostname of the current host in play?

A. inventory_hostname

B. current_host

C. ansible_host

D. host_name

Answer: A

Explanation: 'inventory_hostname' reflects the name as defined in the inventory file,

commonly used for logging or conditional logic.

33. What does the 'delegate_to' keyword do?
A. Run task on specified host instead of target host
B. Assign handler to variable
C. Create new play
D. Set default gateway
Answer: A
Explanation: 'delegate_to' temporarily redirects task execution to another host (often localhost) while still using variables and facts from the original host.

34. When using 'ansible-galaxy init', what is created?
A. New virtual environment
B. Role skeleton with standard directory structure
C. Inventory template
D. Playbook snippet
Answer: B
Explanation: 'ansible-galaxy init role_name' scaffolds a role with expected directories like tasks, handlers, templates, and defaults.

35. How can you override role variables for a specific play?
A. Place values in defaults/main.yml
B. Use vars: block in play
C. Modify meta/main.yml
D. Add to handlers
Answer: B
Explanation: Variables defined in the play's 'vars' section override role defaults and even vars, giving control for that specific play invocation.

36. Which module retrieves information without changing remote state?
A. gather_facts
B. stat
C. copy
D. template
Answer: B
Explanation: The 'stat' module inspects file metadata without modifying anything, making it safe for checks prior to conditional tasks.

37. What is an Ansible callback plugin used for?
A. Extending output or logging behavior during play execution
B. Encrypting variables
C. Creating dynamic inventory
D. Managing roles

Answer: A

Explanation: Callback plugins hook into events like task start or result to customize output, integrate with chat systems, or collect analytics.

38. How do you limit playbook execution to a subset of hosts?

A. ansible-playbook site.yml --hosts web

B. ansible-playbook site.yml --limit web

C. ansible-playbook site.yml --group web

D. ansible-playbook site.yml --subset web

Answer: B

Explanation: The '--limit' flag restricts execution to matching hosts or groups, offering quick host selection without modifying inventories.

39. Which lookup plugin reads values from environment variables?

A. lookup('env', 'VAR')

B. lookup('file', 'VAR')

C. lookup('vars', 'VAR')

D. lookup('ini', 'VAR')

Answer: A

Explanation: The 'env' lookup fetches environment variable values, which is helpful for injecting secrets or dynamic configuration.

40. How can you run a task asynchronously and poll for completion?

A. async: 300 poll: 10

B. run_async: true

C. wait_for: async

D. strategy: async

Answer: A

Explanation: Setting 'async' defines the timeout, and 'poll' sets the polling interval; Ansible runs the task in the background while continuing.

41. What does 'ansible-galaxy install' do?

A. Installs Ansible engine

B. Installs roles or collections from Galaxy or other sources

C. Installs Python dependencies

D. Installs inventory plugins

Answer: B

Explanation: 'ansible-galaxy install' pulls published roles or collections into your roles path so they can be used in playbooks.

42. Which command lists the hosts in inventory that match a pattern?

A. ansible-inventory --list pattern

B. ansible all --hosts pattern

C. ansible-inventory --graph

D. ansible-inventory --list | grep pattern

Answer: C

Explanation: 'ansible-inventory --graph' shows inventory groups as a tree, making it easy to see which hosts belong where; combined with '--host', it can expand details.

43. What is the function of 'become_user'?

A. Set default SSH user

B. Define user to switch to when privilege escalation is used

C. Set environment user variable

D. Manage remote user creation

Answer: B

Explanation: 'become_user' identifies which account Ansible should escalate to (e.g., root), overriding the default target user.

44. Which module is best for managing line entries in configuration files?

A. lineinfile

B. blockinfile

C. copy

D. template

Answer: A

Explanation: 'lineinfile' ensures specific lines exist or are absent in a file, making it ideal for editing config entries without replacing the whole file.

45. What is 'ansible-pull' primarily used for?

A. Running playbooks from Git on remote nodes in pull mode

B. Fetching logs from hosts

C. Pulling modules from Galaxy

D. Pulling inventory

Answer: A

Explanation: 'ansible-pull' inverts the control model by having nodes fetch playbooks from a repo and apply them locally, useful for decentralized automation.

46. To ensure idempotence, modules should:

A. Always run commands forcefully

B. Report change only when state differs

C. Avoid returning JSON

D. Require manual rollback

Answer: B

Explanation: Idempotent modules detect the current state and only report changes when a modification was necessary, allowing safe re-runs.

47. Which directive allows you to set retry attempts for failed tasks?

A. retries: 3 with delay: 5

B. max_failures: 3

C. repeat: 3

D. attempts: 3

Answer: A

Explanation: Using 'retries' combined with 'delay' tells Ansible to re-run a task
multiple times with pauses, which is handy for transient issues.

48. What is the effect of 'serial: 3' in a play?

A. Limit concurrency to 3 hosts per batch

B. Run first 3 tasks

C. Retry tasks 3 times

D. Use 3 forks

Answer: A

Explanation: 'serial: 3' processes hosts in groups of three, useful for rolling updates
or canary deployments where you don't want to touch every host at once.

49. Which module manages Docker containers in Ansible?

A. docker_container

B. container

C. docker

D. compose

Answer: A

Explanation: The 'docker_container' module (from 'community.docker' collection) provides
 idempotent container management, supporting creation, state changes, and removal.

50. How do you include a role in a playbook?

A. roles:
   - role_name

B. include_role: role_name

C. Both above methods

D. import_role: role_name

Answer: C

Explanation: Roles can be added at the play level using the 'roles' list or included
dynamically with 'include_role', giving flexibility in how role tasks are loaded.

51. What does 'vars_prompt' allow you to do?

A. Prompt user for variable values during play execution

B. Load vars from file

C. Prompt remote hosts

D. Delay variable assignment

Answer: A

Explanation: 'vars_prompt' prompts for values (optionally hidden) before play execution, letting operators supply secrets or choices interactively.

52. Which collection namespace contains built-in modules in Ansible 2.10+?

A. ansible.core

B. ansible.base

C. ansible.builtin

D. ansible.main

Answer: C

Explanation: Core modules moved into the 'ansible.builtin' collection, so fully qualified names like 'ansible.builtin.copy' refer to built-in content.

53. How do you skip tags when running a playbook?

A. ansible-playbook site.yml --skip-tags "debug"

B. ansible-playbook site.yml --omit-tags "debug"

C. ansible-playbook site.yml --ignore-tags "debug"

D. ansible-playbook site.yml -S debug

Answer: A

Explanation: '--skip-tags' excludes tasks with those tags, enabling you to avoid optional or disruptive tasks during a run.

54. Which plugin provides dynamic inventory from cloud providers?

A. Inventory plugins such as aws_ec2

B. Callback plugins

C. Lookup plugins

D. Filter plugins

Answer: A

Explanation: Inventory plugins integrate with providers to discover hosts dynamically, replacing static inventory files for cloud environments.

55. What do filter plugins do in Ansible?

A. Transform data within templates or expressions

B. Control task flow

C. Fetch remote content

D. Manage inventory

Answer: A

Explanation: Filters augment Jinja2 by transforming variables (e.g., '|lower', custom filters), making data presentation and manipulation easier in templates.

56. How can you ensure a handler runs immediately after being notified?

A. notify: handler_name immediate

B. meta: flush_handlers

C. run_once: handler

D. When clause on handler

Answer: B

Explanation: 'meta: flush_handlers' forces handlers queued so far to execute immediately, useful before continuing with tasks that depend on the change.

57. Which module downloads content from an HTTP endpoint?

A. uri

B. get_url

C. url_fetch

D. web

Answer: B

Explanation: 'get_url' retrieves files via HTTP/HTTPS and can validate checksums, while 'uri' is geared toward API interactions.

58. What does the 'delegate_facts: true' setting do?

A. Save registered facts to delegated host instead of original host

B. Duplicate facts to all hosts

C. Remove old facts

D. Share facts across roles

Answer: A

Explanation: When delegating a task, 'delegate_facts: true' ensures gathered facts apply to the delegated host, which is important when capturing data about that host.

59. Which command tests syntax errors without executing tasks?

A. ansible-playbook play.yml --syntax-check

B. ansible-playbook play.yml --dry-run

C. ansible-playbook play.yml --check

D. ansible-playbook play.yml --lint

Answer: A

Explanation: '--syntax-check' parses playbooks for YAML and Ansible syntax issues, while '--check' performs a dry run that still contacts hosts.

60. What is the effect of 'check_mode: yes'?

A. Skips tasks

B. Simulates changes without modifying remote systems

C. Performs syntax check

D. Enables asynchronous operations

Answer: B

Explanation: Check mode (dry run) shows what changes would happen by querying state but avoids executing altering actions, aiding validation.

61. Which module ensures an SSH key is present for a user?

A. authorized_key

B. user_key

C. ssh_key

D. key_manage

Answer: A

Explanation: 'authorized_key' manages entries in a user's authorized_keys file, enforcing presence or absence of specific public keys.

62. How can you include a Jinja2 template file in a play?

A. Use template module pointing to src and dest

B. Use copy with jinja flag

C. Use var_files

D. Use include_template

Answer: A

Explanation: The 'template' module processes Jinja2 templates, rendering them with current variables and placing the rendered file on the remote host.

63. What is the default directory for group variables?

A. group_vars/

B. vars/group/

C. inventory/group/

D. defaults/group/

Answer: A

Explanation: Group variable files reside under 'group_vars/<group>.yml', automatically loaded for hosts in that group.

64. Which plugin architecture handles custom connection methods?

A. Connection plugins

B. Callback plugins

C. Strategy plugins

D. Action plugins

Answer: A

Explanation: Connection plugins define how Ansible talks to hosts (SSH, WinRM, local), allowing third-party extensions for specialized transports.

65. How can you re-run a playbook only on hosts that failed previously?

A. Use --limit @/path/to/last_playbook.retry

B. Use --retry-only

C. Use --failed-only

D. Use --partial

Answer: A

Explanation: When a run fails, Ansible writes a '.retry' file listing failed hosts; passing it to '--limit' replays just those hosts.

66. Which module manages users on Linux systems?

A. account

B. user

C. passwd

D. adduser

Answer: B

Explanation: The 'user' module is cross-platform (Linux, BSD, macOS) for managing user accounts, passwords, and groups.

67. How do you debug variable content during a play?

A. Use debug module with var parameter

B. Use print statement

C. Use log module

D. Use output module

Answer: A

Explanation: 'debug: var=variable_name' prints the variable's value to stdout, aiding troubleshooting without altering remote systems.

68. Which directive allows nested loops?

A. with_nested

B. loop_nested

C. nested_list

D. multi_loop

Answer: A

Explanation: 'with_nested' iterates over Cartesian products of multiple lists, executing tasks for every combination.

69. What does 'force_handlers: true' enforce?

A. Handlers run even if play fails before completion

B. Handlers execute only on failure

C. Handlers skip duplicates

D. Handlers log output

Answer: A

Explanation: With 'force_handlers', Ansible runs notified handlers even when the play aborted due to errors, ensuring clean-up or required tasks still happen.

70. How can you create custom module logic in Python?

A. Place module in library/ directory and call via Ansible

B. Modify ansible.cfg

C. Create new role

D. Use filter plugin

Answer: A

Explanation: Custom modules stored in 'library/' alongside playbooks are automatically discoverable, letting you encapsulate bespoke automation logic.

71. Which process ensures modules run on controller rather than target host?

A. Using local_action

B. Using delegate_to: localhost

C. Setting connection: local

D. All of the above

Answer: D

Explanation: Each method targets the controller machine, allowing tasks like API calls or file manipulation on the control node instead of remote hosts.

72. Which module ensures a Git repository is checked out on a host?

A. git

B. vcs

C. repo

D. checkout

Answer: A

Explanation: The 'git' module clones or updates repositories idempotently, supporting branch, version, and SSH-based access options.

73. How do you include host-specific variables using directory hierarchy?

A. host_vars/hostname.yml

B. vars/host/hostname.yml

C. hosts.d/hostname.cfg

D. inventory/host.ini

Answer: A

Explanation: 'host_vars/<hostname>.yml' files store per-host variables automatically loaded for matching inventory hosts.

74. Which command displays information about an Ansible collection?

A. ansible-galaxy collection info namespace.collection

B. ansible collection show namespace.collection

C. ansible info collection namespace.collection

D. ansible collection describe namespace.collection

Answer: A

Explanation: 'ansible-galaxy collection info' queries metadata such as version, dependencies, and documentation of a given collection.

75. What does 'loop_control' allow you to customize?

A. Loop variable name, pause, label formatting

B. Handler order

C. Fork count

D. Inventory precedence

Answer: A

Explanation: 'loop_control' sets options like 'loop_var', human-readable 'label', or 'pause', enhancing readability and pacing of loops.

76. Which filter converts strings to uppercase in Jinja2 templates?

A. |upper

B. |uppercase

C. |capitalize

D. |upcase

Answer: A

Explanation: Applying '|upper' transforms a string to uppercase in templates; other filters adjust capitalization differently.

77. How can you retry a failed task after correcting issue without rerunning entire play?

A. Use --start-at-task "Task Name"

B. Use --continue-task

C. Use --retry

D. Use --task-from

Answer: A

Explanation: '--start-at-task' resumes execution from the named task, skipping earlier tasks that already succeeded.

78. What is the extension for Ansible playbooks typically?

A. .yaml or .yml

B. .json

C. .ini

D. .cfg

Answer: A

Explanation: Playbooks are structured YAML files, so '.yaml' or '.yml' extensions are standard to indicate the format.

79. Which module manages SELinux boolean values?

A. seboolean

B. selinux_manage

C. selinux_boolean

D. security_boolean

Answer: A

Explanation: The 'seboolean' module flips SELinux booleans idempotently, aligning security policy with desired state.

80. How can you ensure a task fails with custom message when condition not met?

A. fail module with msg parameter

B. debug module

C. assert module

D. Both fail and assert modules

Answer: D

Explanation: 'fail' explicitly aborts with a message, while 'assert' checks expressions and fails when assertions aren't met, both offering controlled failure.

81. What does the 'include_role' module do?

A. Dynamically includes role tasks at runtime

B. Statically includes role tasks

C. Installs roles

D. Executes role handlers only

Answer: A

Explanation: 'include_role' loads a role dynamically, allowing you to pass variables and conditionally execute role logic within a play.

82. Which module waits for a port to become available?

A. wait_for

B. wait_port

C. port_check

D. socket_wait

Answer: A

Explanation: 'wait_for' can poll for open ports, timeouts, or file existence, making it ideal for service readiness checks.

83. How do you execute a playbook in check mode globally?

A. ansible-playbook site.yml --check

B. ansible-playbook site.yml --dry-run

C. ansible-playbook site.yml --simulate

D. ansible-playbook site.yml --no-change

Answer: A

Explanation: '--check' activates dry-run mode for the whole playbook, showing pending changes while avoiding modification.

84. Which strategy continues running tasks on remaining hosts even if some fail?

A. free

B. linear

C. host_pinned

D. Strategy is always resilient

Answer: B

Explanation: The default 'linear' strategy moves hosts through tasks step-by-step, skipping failed hosts but continuing with the rest.

85. What does 'any_errors_fatal: true' do?

A. Aborts play for all hosts if any host fails

B. Retries failed tasks

C. Skips failed hosts

D. Sends notifications

Answer: A

Explanation: Setting 'any_errors_fatal' stops further execution once any host fails, ensuring consistent rollbacks or manual intervention.

86. Which module ensures a ZIP archive is extracted?

A. unarchive

B. unzip

C. archive_extract

D. compressed

Answer: A

Explanation: 'unarchive' handles extracting tar or zip archives (optionally from remote sources), managing idempotence and owner/mode.

87. How can you define environment variables for tasks?

A. environment:

   VAR: value

B. env_vars:

   VAR: value

C. vars:

   env_VAR: value

D. options.env:

   VAR: value

Answer: A

Explanation: The 'environment' key supplies shell environment variables for modules executed within that task or block.

88. What is the path to configure connection defaults per group?

A. group_vars/groupname.yml

B. host_vars/groupname.yml

C. vars/group.yml

D. defaults/group.yml

Answer: A

Explanation: Connection settings like 'ansible_user' or 'ansible_port' can live in group variable files, affecting all hosts in the group.

89. Which module ensures cron job presence?

A. cron

B. schedule

C. crontab

D. job

Answer: A

Explanation: The 'cron' module manages crontab entries idempotently, adding, updating, or removing scheduled jobs.

90. How do you prevent tasks from running on certain hosts?

A. when: inventory_hostname not in groups['excluded']

B. skip_hosts:

C. avoid:

D. limit exclude

Answer: A

Explanation: Using a 'when' condition referencing inventory groups filters execution by excluding specific hosts.

91. What does 'ansible-console' provide?

A. Interactive REPL for running ad hoc commands

B. Web dashboard

C. Log viewer

D. Vault editor

Answer: A

Explanation: 'ansible-console' offers a command-line shell to run modules interactively against selected hosts, speeding experimentation.

92. Which module ensures file content matches exact string?

A. copy with content parameter

B. lineinfile

C. blockinfile

D. template

Answer: A

Explanation: Using 'copy' with the 'content' parameter overwrites the file with the provided string, guaranteeing exact content.

93. How can you control parallelism from the command line?

A. ansible-playbook site.yml -f 5

B. ansible-playbook site.yml --forks 5

C. Both A and B

D. Not configurable

Answer: C

Explanation: The '-f/--forks' flag sets how many hosts Ansible manages in parallel, overriding the default in configuration.

94. Which inventory plugin reads hosts from YAML file?

A. yaml

B. ini

C. script

D. constructed

Answer: A

Explanation: The YAML inventory plugin interprets YAML files describing hosts, groups, and variables, offering a structured alternative to INI.

95. How do you ensure handlers run even in check mode?

A. check_mode: no on handler

B. run_once: true

C. meta: flush_handlers in check mode

D. add ignore_check_mode: true

Answer: D

Explanation: Setting 'ignore_check_mode: true' on tasks or handlers forces them to execute even during check mode, which is often needed for notifications.

96. Which command updates all installed collections to latest versions?

A. ansible-galaxy collection install -r requirements.yml --force

B. ansible-galaxy collection upgrade -r requirements.yml

C. ansible-galaxy collection install --upgrade-all

D. ansible-galaxy collection update

Answer: B

Explanation: 'collection upgrade' reads requirements and pulls newer versions, refreshing existing installations per constraints.

97. What does 'verbosity' control when running Ansible?

A. Logging output detail with -v/-vvv flags

B. Task order

C. Role errors

D. Module caching

Answer: A

Explanation: Adding more '-v' flags increases verbosity, revealing details like module arguments, SSH debugging, or diff output.

98. How can you include a task file multiple times with different variables?

A. include_tasks with vars parameter

B. import_tasks with vars parameter

C. copy module

D. loop on include

Answer: A

Explanation: 'include_tasks' accepts a 'vars' dictionary, letting you reuse task files with different inputs within the same play.

99. Which filter checks if variable is defined?

A. is defined
B. defined()
C. exists()
D. present()

Answer: A

Explanation: Jinja's 'is defined' test ensures a variable exists before referencing it, preventing undefined-variable errors.

100. How do you run ansible-lint on a playbook?

A. ansible-lint playbook.yml
B. ansible playbook lint playbook.yml
C. ansible-lint --playbook playbook.yml
D. ansible-lint -f playbook.yml

Answer: A

Explanation: 'ansible-lint' analyzes playbooks for best practices and potential issues, helping maintain consistent quality.