

CHEF

1. What is the fundamental configuration unit in Chef that describes desired state?

- A. Cookbook
- B. Recipe
- C. Role
- D. Attribute

Answer: B

Explanation: Recipes are Ruby files that describe resources and their desired state, forming the primary executable unit within cookbooks.

2. Which command uploads a cookbook to the Chef server?

- A. knife cookbook upload <name>
- B. chef upload cookbook <name>
- C. knife upload cookbook <name>
- D. chef-client upload <name>

Answer: A

Explanation: 'knife cookbook upload' packages and pushes a cookbook from the workstation to the Chef server so nodes can download it.

3. Where are node object attributes stored after a Chef client run?

- A. Run-list
- B. Node object on Chef server
- C. Policyfile lock
- D. Cookbook metadata

Answer: B

Explanation: After convergence, the node uploads its attributes to the Chef server, forming the node object used for searches and future runs.

4. What is the purpose of a run-list in Chef?

- A. Define user permissions
- B. Specify the order of recipes/roles applied to a node
- C. Manage data bags
- D. Configure environment variables

Answer: B

Explanation: A run-list dictates which recipes or roles execute and in what order, guiding the node's convergence process.

5. Which resource is used to manage packages in Chef across platforms?

- A. execute

- B. package
- C. yum_package
- D. apt_package

Answer: B

Explanation: The 'package' resource abstracts package managers, delegating to platform-specific providers like 'apt' or 'yum' automatically.

6. What command tests a cookbook locally using Chef Workstation?

- A. kitchen test
- B. chef-client --local-mode --runlist
- C. Both A and B can be used for local tests
- D. chef verify

Answer: C

Explanation: Test Kitchen runs integration tests via drivers, while 'chef-client -z' (local mode) applies cookbooks without a server; both validate locally.

7. Which tool provides infrastructure testing for Chef cookbooks using test suites?

- A. Test Kitchen
- B. InSpec only
- C. Chef Automate
- D. Habitat

Answer: A

Explanation: Test Kitchen orchestrates instance creation, convergence, and verification (often via InSpec), forming a standard workflow for cookbook testing.

8. What is the default location for cookbook metadata file?

- A. metadata.yml
- B. metadata.rb
- C. cookbook.json
- D. config.rb

Answer: B

Explanation: 'metadata.rb' captures cookbook name, version, dependencies, and supported platforms, enabling dependency resolution.

9. How do you override attributes for a node using environments?

- A. Set override_attributes in environment file
- B. Use default_attributes in roles
- C. Use normal attributes on node
- D. Use policyfile

Answer: A

Explanation: Environment files can declare 'override_attributes', impacting nodes assigned to that environment with highest precedence short of force overrides.

10. Which Chef component stores key-value data accessible to recipes?

- A. Data bags
- B. Environments
- C. Roles
- D. Policies

Answer: A

Explanation: Data bags provide JSON-based storage that recipes can load at run time for configuration or secrets (often encrypted).

11. What does the 'chef-client' command do on a node?

- A. Upload cookbooks
- B. Apply recipes from run-list to converge system
- C. Delete node
- D. Manage roles

Answer: B

Explanation: 'chef-client' pulls policies, compiles the run-list into a resource collection, and applies resources to reach desired state.

12. Which Chef server component authenticates API requests?

- A. Bookshelf
- B. RabbitMQ
- C. Erchef (API server)
- D. WebUI

Answer: C

Explanation: Erchef handles REST API requests, authenticating clients using signed headers before handing off to other services.

13. What is the purpose of 'knife bootstrap'?

- A. Upload data bag
- B. Install and configure chef-client on a new node
- C. Create cookbook skeleton
- D. Manage organizations

Answer: B

Explanation: 'knife bootstrap' SSHs into a machine, installs Chef client, registers it with the server, and sets the desired run-list.

14. Which attribute precedence level is highest during a Chef run?

- A. default
- B. override
- C. automatic
- D. normal

Answer: C

Explanation: Automatic attributes are collected by Ohai and cannot be overridden by other levels, representing live system data.

15. What does a Policyfile lock file contain?

- A. Node credentials
- B. Locked list of cookbooks and versions to apply
- C. Environment assignments
- D. Data bag keys

Answer: B

Explanation: 'Policyfile.lock.json' records resolved cookbook versions ensuring deterministic builds when the policy is applied.

16. How can you generate a new cookbook skeleton?

- A. chef generate cookbook <name>
- B. knife cookbook create <name>
- C. Both commands above
- D. chef create cookbook <name>

Answer: C

Explanation: 'chef generate' (Chef Workstation) and 'knife cookbook create' both scaffold cookbooks with standard directories.

17. Which Chef feature allows grouping cookbooks with pinned versions for compliance?

- A. Policyfile
- B. Role
- C. Environment
- D. Data bag

Answer: A

Explanation: Policyfiles define a complete run-list and locked cookbook versions, providing predictable, repeatable deployments.

18. When writing a recipe, how do you notify another resource to run if change occurs?

- A. notifies :run, 'resource[name]', :immediately
- B. notify resource
- C. after resource
- D. on_change resource

Answer: A

Explanation: Using 'notifies' attaches a notification to another resource so it runs immediately or at end of run when changes happen.

19. Which testing framework validates infrastructure state defined by Chef?

- A. InSpec
- B. Serverspec
- C. RSpec only

D. ChefSpec only

Answer: A

Explanation: InSpec provides compliance and integration tests verifying actual system state after convergence, complementing ChefSpec unit tests.

20. What does 'chef-client -z' enable?

- A. Daemon mode
- B. Local mode (Zero) without Chef server
- C. Debug logging
- D. Zero downtime updates

Answer: B

Explanation: Local mode allows running Chef against local cookbooks and policy without contacting a server, ideal for development.

21. Which file defines dependencies for a cookbook?

- A. metadata.rb
- B. Berksfile
- C. Policyfile.rb
- D. All of the above can define dependencies

Answer: D

Explanation: 'metadata.rb' lists cookbook dependencies, 'Berksfile' manages dependency resolution with Berkshelf, and 'Policyfile.rb' specifies included cookbooks.

22. What is Berkshelf used for?

- A. Managing cookbook dependencies and uploading to Chef server
- B. Writing recipes
- C. Creating organizations
- D. Configuring nodes

Answer: A

Explanation: Berkshelf resolves cookbook dependencies, downloads them locally, and can upload them to the Chef server or package them.

23. Which resource is best for managing services in Chef?

- A. execute
- B. service
- C. chef_service
- D. command

Answer: B

Explanation: The 'service' resource controls service state (start, stop, enable) and chooses the appropriate provider per platform.

24. What does 'ohai' tool do?

- A. Configures cookbooks

- B. Collects system information (facts) for Chef
- C. Uploads cookbooks
- D. Runs tests

Answer: B

Explanation: Ohai gathers automatic attributes about the node, such as OS, network, and hardware, which Chef uses during recipes.

25. What is the default attribute precedence order from lowest to highest?

- A. default, override, normal, automatic
- B. default, normal, override, automatic
- C. normal, default, override, automatic
- D. automatic, override, normal, default

Answer: B

Explanation: Defaults are lowest, normal attributes are set by recipes or nodes, overrides take precedence, and automatic are highest.

26. How are cookbook files distributed from Chef server?

- A. Through Bookshelf component
- B. Through PostgreSQL database
- C. Through RabbitMQ
- D. Through Apache only

Answer: A

Explanation: Bookshelf stores cookbook artifacts (files, templates, etc.) and serves them to nodes when requested during convergence.

27. Which CLI command tests a Chef recipe using ChefSpec?

- A. chef exec rspec
- B. kitchen verify
- C. chef verify spec
- D. rspec spec/

Answer: A

Explanation: 'chef exec rspec' runs RSpec-based ChefSpec unit tests within the ChefDK/Workstation environment ensuring proper dependencies.

28. How do you run a single recipe when using Policyfiles?

- A. Set run_list in Policyfile.rb
- B. Use kitchen converge recipe
- C. Use chef-client -o 'recipe[cookbook::recipe]'
- D. Use knife run recipe

Answer: C

Explanation: The '-o' (override run-list) flag lets you execute specific recipes such as 'recipe[apache::default]' without altering the node's stored run-list.

29. Which component orchestrates Chef Automate compliance and workflow?

- A. Workflow
- B. Visibility
- C. Compliance
- D. All components integrated

Answer: D

Explanation: Chef Automate bundles workflow (pipeline), visibility (analytics), and compliance (InSpec) into one platform to manage delivery and governance.

30. What is stored in a data bag item?

- A. JSON data containing configuration or secrets
- B. Ruby code for recipes
- C. Node run-list
- D. Cookbook dependencies

Answer: A

Explanation: Each data bag item is a JSON object stored server-side, accessible by recipes to fetch configuration values or encrypted secrets.

31. Which command lists nodes registered with Chef server?

- A. knife node list
- B. chef node list
- C. knife list nodes
- D. chef-client --nodes

Answer: A

Explanation: 'knife node list' queries the Chef server for all registered nodes, useful for auditing environment membership.

32. What is the command to view current run-list of a node?

- A. knife node show NODE -a run_list
- B. chef node run_list NODE
- C. knife show run NODE
- D. chef-client run-list NODE

Answer: A

Explanation: 'knife node show' with '-a run_list' fetches just the run-list attribute, revealing roles and recipes assigned to the node.

33. Which driver allows Test Kitchen to create instances on AWS?

- A. kitchen-ec2 driver
- B. kitchen-aws driver
- C. kitchen-cloud driver
- D. kitchen-vagrant driver

Answer: A

Explanation: The 'kitchen-ec2' driver provisions EC2 instances for testing, letting you converge cookbooks against real AWS infrastructure.

34. What is the function of 'use_inline_resources' in custom resources (Chef 12 legacy)?

- A. Enable notifications and resource tracking within custom LWRPs
- B. Inline run-list definition
- C. Run resources concurrently
- D. Disable notifications

Answer: A

Explanation: In older Lightweight Resources, 'use_inline_resources' allowed notifications to propagate and resources to behave like built-in ones.

35. How can you enforce specific cookbook versions on nodes?

- A. Pin versions in environment or Policyfile
- B. Use node attributes
- C. Use data bag
- D. Use role defaults

Answer: A

Explanation: Setting cookbook version constraints in environments or Policyfiles prevents accidental upgrades and ensures consistent deployments.

36. Which command shows cookbook versions on Chef server?

- A. knife cookbook list
- B. chef cookbook show
- C. knife list cookbook versions
- D. chef-client --cookbooks

Answer: A

Explanation: 'knife cookbook list' displays available cookbooks and highest versions stored on the server.

37. What is the purpose of 'include_recipe'?

- A. Include another recipe within a recipe
- B. Include environment
- C. Add data bag
- D. Add role

Answer: A

Explanation: 'include_recipe 'cookbook::recipe'' loads another recipe's resources into the run context so they execute as part of the current run.

38. Which Chef resource manages files from ERB templates?

- A. template
- B. cookbook_file
- C. file

D. remote_file

Answer: A

Explanation: The 'template' resource renders ERB templates, substituting variables and placing the result on the node.

39. What does 'knife node run_list add' do?

- A. Adds recipe or role to node run-list
- B. Adds node to environment
- C. Adds node to organization
- D. Adds data bag item

Answer: A

Explanation: This command appends items to a node's run-list, altering what Chef applies on the next run.

40. Which resource ensures a directory exists with specific permissions?

- A. directory
- B. file
- C. cookbook_file
- D. execute

Answer: A

Explanation: The 'directory' resource creates directories and sets owner, group, and mode, managing recursive creation if specified.

41. What is 'chef-vault' used for?

- A. Encrypt data bag items per node/client
- B. Manage cookbook versions
- C. Control node run-lists
- D. Configure Policyfiles

Answer: A

Explanation: Chef Vault encrypts secrets per client, ensuring only authorized nodes can decrypt the data bag item.

42. How do you specify environment for a node?

- A. knife node environment set NODE ENV
- B. chef-client --environment
- C. environment assign NODE ENV
- D. node set environment

Answer: A

Explanation: The 'knife node environment set' command updates the node's environment, which influences attribute overrides and run-lists.

43. What is the difference between 'remote_file' and 'cookbook_file' resources?

- A. remote_file downloads from URL; cookbook_file distributes files bundled in cookbook

- B. remote_file uploads to server; cookbook_file downloads from server
- C. remote_file handles templates; cookbook_file handles static files
- D. No difference

Answer: A

Explanation: 'remote_file' fetches content from remote sources, whereas 'cookbook_file' ships files stored within the cookbook's 'files' directory.

44. Which run mode allows a node to execute cookbooks stored locally without Chef server?

- A. Local mode (chef-client -z)
- B. Client mode only
- C. Solo mode only for Chef Solo
- D. Offline mode

Answer: A

Explanation: Local mode uses the Chef Zero server embedded inside the client, enabling cookbook execution without a remote server.

45. What is Chef Solo?

- A. Legacy tool running cookbooks without Chef server using local JSON
- B. SaaS version of Chef
- C. Test framework
- D. Chef Automate module

Answer: A

Explanation: Chef Solo was an early way to run cookbooks locally based on node JSON files; it's largely replaced by local mode and Policyfiles.

46. Which command packages cookbooks for distribution?

- A. berks package
- B. chef package
- C. knife cookbook pack
- D. chef-client package

Answer: A

Explanation: 'berks package' creates a tarball containing resolved cookbook dependencies, useful for air-gapped deployments.

47. How do you test Chef resources using unit tests?

- A. ChefSpec tests run via RSpec
- B. InSpec tests run via 'inspec exec'
- C. Serverspec tests run via Ruby
- D. Kitchen verify only

Answer: A

Explanation: ChefSpec uses RSpec syntax to simulate chef-client runs, validating resource declarations without affecting systems.

48. What is a role in Chef?

- A. JSON or Ruby object defining run-list and default/override attributes for function
- B. Collection of cookbooks
- C. Node-specific attribute file
- D. Environment

Answer: A

Explanation: Roles encapsulate run-lists and attribute sets for common server functions (e.g., webserver), applied to nodes to share configurations.

49. Which command downloads cookbooks from Chef server to local repo?

- A. knife cookbook download <name>
- B. chef get cookbook <name>
- C. knife download cookbook <name>
- D. chef-client download <name>

Answer: A

Explanation: 'knife cookbook download' retrieves cookbooks (optionally specific versions) from the server for inspection or editing.

50. What does 'knife environment from file' do?

- A. Upload environment definition from file to server
- B. Create environment file locally
- C. Download environment
- D. View environment

Answer: A

Explanation: This command reads an environment JSON/Ruby file and uploads it, allowing version-controlled environment definitions.

51. Which Chef client configuration file sets node-specific options?

- A. client.rb
- B. knife.rb
- C. config.rb
- D. workstation.rb

Answer: A

Explanation: Each node uses '/etc/chef/client.rb' (or similar path) to define server URL, validation client, and other node-specific settings for chef-client.

52. What is the default port for Chef server API?

- A. 4000
- B. 443
- C. 8443
- D. 8889

Answer: C

Explanation: The Chef server front-end typically listens on 8443 for HTTPS API requests from knife and chef-client.

53. Which Chef Automate feature provides visibility dashboards?

- A. Automate Visibility service
- B. Workflow
- C. Compliance
- D. Builder

Answer: A

Explanation: The Visibility component aggregates data and offers dashboards for node status, runs, and compliance information within Chef Automate.

54. How do you ensure a resource runs only on specific platform?

- A. Use 'only_if { node['platform'] == 'ubuntu' }'
- B. Use 'platform_only'
- C. Use environment
- D. Use run-list filter

Answer: A

Explanation: Guard clauses like 'only_if' and 'not_if' check conditions (such as platform) before executing resources, controlling platform-specific behavior.

55. What is the function of 'lazy' attribute evaluation?

- A. Delay evaluation until converge phase for dynamic values
- B. Slow down Chef run intentionally
- C. Evaluate attributes asynchronously
- D. Reduce memory usage

Answer: A

Explanation: Wrapping values with 'lazy { ... }' defers evaluation until the resource converges, helpful when values depend on previous resource outcomes.

56. Which command lists available cookbooks in the current repository?

- A. knife cookbook list --local
- B. ls cookbooks/
- C. berks list
- D. chef cookbook list local

Answer: C

Explanation: 'berks list' reads the Berkshelf and displays the cookbooks and versions managed by Berkshelf in the repository.

57. What is Chef Habitat primarily for?

- A. Building and deploying applications in immutable packages
- B. Managing Chef server
- C. Writing cookbooks

D. Monitoring nodes

Answer: A

Explanation: Habitat packages applications with dependencies and a supervisor, enabling consistent deployments across environments without relying on Chef client.

58. How do you disable a resource from running but keep it defined?

- A. action :nothing
- B. run_action :skip
- C. action :disable
- D. disable true

Answer: A

Explanation: 'action :nothing' prevents automatic execution; the resource will only run if another resource notifies it, making it useful for conditional execution.

59. Which resource manages cron jobs?

- A. cron
- B. schedule
- C. job
- D. timer

Answer: A

Explanation: The 'cron' resource declares cron entries, ensuring specific commands run at scheduled times or are removed if no longer needed.

60. What is the default log level for chef-client?

- A. info
- B. debug
- C. warn
- D. error

Answer: A

Explanation: Chef client logs at the 'info' level unless overridden, providing sufficient detail on resource updates without excessive noise.

61. Which file stores client key used for authentication?

- A. /etc/chef/client.pem
- B. /etc/chef/validator.pem
- C. ~/.chef/client.pem
- D. /etc/chef/knife.pem

Answer: A

Explanation: The node's private key resides in 'client.pem', used to sign requests to the Chef server so the node can authenticate securely.

62. How do you override resource properties within a wrapper cookbook?

- A. Use resource cloning with 'resources' block in Chef 11

- B. Use custom resources or edit derived recipe attributes
- C. Modify core resource
- D. Override in metadata directly

Answer: B

Explanation: Wrapper cookbooks set attributes, call custom resources, or override resource properties inside recipes to adjust behavior without touching upstream cookbooks.

63. Which tool integrates pipeline features with Chef?

- A. Chef Automate Workflow
- B. InSpec
- C. Test Kitchen
- D. Knife

Answer: A

Explanation: Chef Automate Workflow provides build and deployment pipelines linked to Chef server, enabling automated promotion through environments.

64. What is the difference between ‘notifies’ and ‘subscribes’?

- A. notifies defined on resource sending notification; subscribes defined on resource receiving
- B. notifies is immediate; subscribes is delayed only
- C. no difference
- D. subscribes requires synchronous execution

Answer: A

Explanation: ‘notifies’ is called on the notifying resource, while ‘subscribes’ is declared on the resource responding to changes, giving alternative syntax for linking resources.

65. How do you ensure a node uses Policyfile instead of run-list from server?

- A. Run chef-client with policy_name and policy_group
- B. Set node attribute
- C. Use environment override
- D. Use data bag flag

Answer: A

Explanation: Policyfile mode relies on specifying ‘policy_name’ and ‘policy_group’ in client.rb or CLI so the node fetches policy archives rather than environments and roles.

66. Which command removes a node and client from Chef server?

- A. knife node delete NODE; knife client delete NODE
- B. chef delete node NODE
- C. knife remove NODE
- D. chef-client delete NODE

Answer: A

Explanation: Both the node object and the corresponding API client must be removed to fully decommission a node and prevent further authentication.

67. What does 'chef-run' command from Chef Workstation do?

- A. Apply ad hoc recipe to target nodes over SSH/WinRM
- B. Upload cookbooks
- C. Run policy updates
- D. Execute Test Kitchen

Answer: A

Explanation: 'chef-run' lets you execute short recipes against remote nodes quickly, useful for one-off tasks without building full cookbooks or modifying run-lists.

68. Which process ensures cookbooks are safe from accidental modifications in Policyfile?

- A. Policyfile.lock.json capturing exact versions
- B. Environments locking
- C. Data bag encryption
- D. Role locking

Answer: A

Explanation: The lock file records the precise cookbook revisions resolved, so subsequent runs use the same versions unless the lock is regenerated.

69. How can you reference attributes within template?

- A. Use '<%= node['attribute'] %>'
- B. Use '{{ attribute }}'
- C. Use '%node.attribute%'
- D. Use '\$node.attribute'

Answer: A

Explanation: Chef templates leverage ERB, so 'node['attr']' embedded in '<%= %>' outputs attribute values into rendered configuration files.

70. Which command generates an InSpec profile skeleton?

- A. inspec init profile profile_name
- B. inspec new profile profile_name
- C. chef generate inspec profile_name
- D. kitchen init inspec profile_name

Answer: A

Explanation: 'inspec init profile' scaffolds controls, attributes, and metadata to start writing compliance tests quickly.

71. What is the function of 'knife ssl fetch'?

- A. Download SSL certificates from Chef server for trust
- B. Generate SSL certs for nodes

- C. Verify SSL handshake
- D. Install SSL module

Answer: A

Explanation: Fetching certificates stores the Chef server's certs locally, preventing SSL verification failures when using knife or chef-client.

72. Which resource manages system users?

- A. user
- B. account
- C. login
- D. passwd

Answer: A

Explanation: The 'user' resource handles creation, modification, and removal of operating system user accounts across supported platforms.

73. What does setting 'why-run' mode do?

- A. Simulate chef-client run showing potential changes
- B. Improve performance
- C. Enables debug logging
- D. Disables converge

Answer: A

Explanation: Why-run mode (dry run) evaluates resources and reports what actions would be taken without actually modifying the system.

74. Which tool integrates security scanning with Chef Automate?

- A. InSpec compliance profiles
- B. ChefSpec
- C. Test Kitchen
- D. Habitat

Answer: A

Explanation: Automate's Compliance service applies InSpec profiles to nodes, producing continuous security and compliance assessments.

75. How do you convert a node to use a new Policyfile group?

- A. Update policy_group via 'chef-client -P' or 'knife node policy set'
- B. Change environment
- C. Update role
- D. Modify data bag

Answer: A

Explanation: Policy groups act like deployment rings; switching the group changes which policy archive the node downloads on its next run.

76. Which Chef component handles search queries?

- A. Solr (via Elasticsearch in newer versions)
- B. PostgreSQL
- C. Bookshelf
- D. Nginx

Answer: A

Explanation: Search functionality is backed by Solr/Elasticsearch, indexing node, role, and data bag data so recipes and knife can query it.

77. What is 'knife search' used for?

- A. Query objects (nodes, roles, data bags) using search syntax
- B. Search cookbooks locally
- C. Search logs
- D. Search pipelines

Answer: A

Explanation: 'knife search' taps into Chef Server search indexes, enabling dynamic discovery of nodes or data bag contents at run time.

78. What does 'policy_group' represent?

- A. Deployment grouping for Policyfiles allowing phased rollout
- B. Set of environments
- C. Node cluster
- D. Role category

Answer: A

Explanation: Policy groups allow different cohorts of nodes (such as dev/prod) to use distinct locked policy revisions without maintaining separate Policyfiles.

79. How can you ensure sensitive data in attributes is not logged?

- A. Set 'sensitive true' on resource or 'sensitive' attribute
- B. Use environment
- C. Use run_list filter
- D. Use data bag

Answer: A

Explanation: Marking resources or individual properties as 'sensitive' suppresses them from log output and diffs, helping protect secrets.

80. Which resource manages Windows services?

- A. windows_service
- B. service with provider windows_service
- C. Both of the above
- D. win_service

Answer: C

Explanation: Chef provides a Windows-specific resource and a generic 'service' provider

capable of managing Windows services, offering flexibility in recipes.

81. How do you trigger a handler at end of run regardless of changes?

- A. Use 'ruby_block' with 'notifies' to handler executed unconditionally
- B. Handlers only run on change; use execute resource to notify always
- C. Use 'delayed_action :always'
- D. Not possible

Answer: B

Explanation: Since handlers fire only when notified, you can use a resource configured to always report updated (e.g., 'ruby_block' with 'action :nothing' triggered manually) to force handler execution.

82. What is Chef Infra Client's default configuration directory on Linux?

- A. /etc/chef/
- B. /opt/chef/
- C. /var/chef/
- D. /usr/chef/

Answer: A

Explanation: Chef client installations place configuration, keys, and trusted certificates under '/etc/chef' by default on Linux systems.

83. Which command verifies cookbook style and best practices?

- A. cookstyle
- B. foodcritic
- C. both (depending on Chef version)
- D. chefstyle

Answer: C

Explanation: Older workflows used Foodcritic; modern Chef Workstation bundles Cookstyle (a RuboCop variant) for linting cookbooks against style rules.

84. What is 'ChefSpec' primarily used for?

- A. Unit testing Chef cookbooks by simulating chef-client run
- B. Compliance scanning
- C. Integration testing
- D. Policy locking

Answer: A

Explanation: ChefSpec focuses on unit-level testing of resources declared in recipes, ensuring they are added to the resource collection as expected.

85. Which resource downloads and extracts remote archives?

- A. remote_file + execute
- B. archive_file
- C. both depending on Chef version

D. package

Answer: C

Explanation: Newer Chef versions include 'archive_file' for direct extraction, while older approaches combined 'remote_file' with 'execute' or 'bash' resources to unzip/tar.

86. How can you configure multiple Chef organizations?

- A. Use 'knife.rb' with multiple profiles or 'knife' config use-profile
- B. Single organization only
- C. Use Policyfile
- D. Use environment mapping

Answer: A

Explanation: Knife configuration supports multiple profiles, letting you switch between organizations or Chef servers via 'knife config use-profile PROFILE'.

87. What does 'knife status' display?

- A. Nodes that have checked in recently
- B. Cookbook status
- C. Server health
- D. Policy groups

Answer: A

Explanation: 'knife status' shows node last check-in times and names, useful for monitoring stale systems or verifying run frequency.

88. In Policyfile, what does 'default_source :supermarket' mean?

- A. Pull cookbooks from Chef Supermarket by default
- B. Use local path
- C. Use git source
- D. Use Chef server only

Answer: A

Explanation: 'default_source :supermarket' tells Policyfile resolution to fetch cookbooks from the public Supermarket unless alternative sources are defined.

89. How do you share a cookbook on Chef Supermarket?

- A. 'knife supermarket share COOKBOOK CATEGORY'
- B. 'chef share cookbook'
- C. 'berks share'
- D. 'chef-client share'

Answer: A

Explanation: The 'knife supermarket share' command uploads a packaged cookbook to the Supermarket, categorizing it for community discovery.

90. Which Chef resource executes arbitrary Ruby code during convergence?

- A. ruby_block

- B. execute
- C. script
- D. erb

Answer: A

Explanation: 'ruby_block' resources run Ruby code during convergence, useful for custom logic not covered by existing resources.

91. What is the role of 'knife client create'?

- A. Create API client with key pair on Chef server
- B. Create new node
- C. Create cookbook client
- D. Create environment

Answer: A

Explanation: 'knife client create' registers a new API client (user or node) and generates a private key for authenticating to the Chef server.

92. Which resource handles git operations?

- A. git
- B. scm
- C. repository
- D. version_control

Answer: A

Explanation: The 'git' resource clones repositories, synchronizes revisions, and enables Chef-driven deployment of code stored in Git.

93. How do you specify default attributes in role file?

- A.

```
default_attributes(
  "attribute" => "value"
)
```
- B. `attributes default`
- C. `defaults { attribute: value }`
- D. Set in metadata

Answer: A

Explanation: The Ruby DSL for roles uses 'default_attributes' and 'override_attributes' blocks to declare attribute hashes applied to nodes.

94. What does 'knife user create' do?

- A. Create Chef server user with RSA key
- B. Add system user
- C. Create node user
- D. Create data bag user

Answer: A

Explanation: Chef server users created with 'knife user create' receive private keys allowing them to use knife or access the server API.

95. How do you prevent a resource from running on windows platform?

- A. `not_if { platform?('windows') }`
- B. `only_if { !platform?('windows') }`
- C. Use guards as above
- D. All of the above approaches

Answer: D

Explanation: Guard clauses with 'platform?' let you skip resources based on platform, and multiple equivalent expressions achieve the same effect.

96. What is the default '.kitchen.yml' driver when using Test Kitchen with Vagrant installed?

- A. vagrant
- B. docker
- C. ec2
- D. azurerm

Answer: A

Explanation: Test Kitchen detects Vagrant and defaults to the 'vagrant' driver, making it easy to create local VMs for cookbook testing.

97. Which resource ensures environment variables are set for future sessions?

- A. environment resource (Windows) or template profile file
- B. `env_file`
- C. `config`
- D. `profile`

Answer: A

Explanation: On Windows the 'environment' resource manages persistent environment variables, while on Unix-like systems you'd manage shell profiles via templates or files.

98. How do you list available Policyfile policies on Chef server?

- A. `knife list policies`
- B. `chef show policies`
- C. `knife list policyfiles`
- D. `knife list policy groups`

Answer: A

Explanation: 'knife list policies' enumerates policy names and revisions stored on the Chef server, helping track available versions.

99. Which Chef DK/Workstation command verifies environment readiness?

- A. chef verify
- B. chef status
- C. chef check
- D. chef doctor

Answer: A

Explanation: 'chef verify' runs a suite of checks against workstation components (knife, Test Kitchen, etc.) ensuring they are installed and functional.

100. What does 'knife deps' do?

- A. Show dependencies for the specified object (cookbook, role, etc.)
- B. Install dependencies
- C. Delete dependencies
- D. Upload dependencies

Answer: A

Explanation: 'knife deps' inspects objects and prints their dependent cookbooks or roles, aiding in packaging and upload planning.