

BCS EXIN Foundation Certificate in OpenStack Software

Specimen Paper A

Record your surname/last/family name and initials on the Answer Sheet.

Specimen paper only. 20 multiple-choice questions – 1 mark awarded to each question. Mark only one answer to each question. There are no trick questions.

A number of possible answers are given for each question, indicated by either A. B. C. or D. Your answers should be clearly indicated on the Answer Sheet.

Pass mark is 13/20

This is a specimen paper only. The full exam is 40 multiple choice questions with a pass mark of 26/40.

Note: This exam is Juno-based.

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- 1 Through which component is identity management served?
- A Neutron, for this module takes care of managing networks and IP addresses.
 - B Keystone, for this module provides a user directory mapped to services they can access.
 - C Trove, for this module is the home of the provisioning of database engines.
 - D N/A.
- 2 What is the role of the OpenStack Foundation?
- A The OpenStack Foundation wants to commercialise the OpenStack licensing model.
 - B The OpenStack Foundation wants to help achieve the OpenStack mission providing shared resources.
 - C The OpenStack Foundation wants to make sure IaaS is developed under local legislations.
 - D The OpenStack Foundation wants to promote private modular cloud and hybrid Cloud computing.
- 3 What Nova component receives http requests, converts commands and communicates with other components?
- A Nova-compute.
 - B Nova-consoleauth.
 - C Nova-api.
 - D Nova-novncproxy.
- 4 What command **SHOULD** be used in order to create an instance?
- A Glance image-list.
 - B Nova boot.
 - C Service nova start.
 - D Service nova status.
- 5 What is a function of the Nova service?
- A It provides creation of new flavors.
 - B It starts and manages instances.
 - C It supports creating boot storage volumes.
 - D It provides data reporting to a variety of consumers.

- 6** What functionality of Glance enables virtual machines to be backed up quickly?
- A** The distribution of bootable disk images.
 - B** The metadata definitions catalogue.
 - C** The storage and cataloguing of snapshots.
 - D** The storage of bootable disk images.
- 7** What element of the Swift architecture is responsible for managing the mapping of user created folders within the Object store service?
- A** Proxy server.
 - B** Container server.
 - C** Account server.
 - D** Object server.
- 8** What is a use case for Object storage?
- A** Workloads requiring long-term persistence of data.
 - B** File sharing of information and quick accessibility.
 - C** Situations where the data frequently changes.
 - D** To use as primary storage for a database or file system.
- 9** Which component of Cinder selects the optimal block storage provider node on which to create a volume?
- A** Cinder-api.
 - B** Cinder-backup.
 - C** Cinder-volume.
 - D** Cinder-scheduler.
- 10** What does Cinder use the volume type for?
- A** Configuring the block storage to use the message broker.
 - B** Creating the database tables for the block storage service.
 - C** Determining which type of backend to use.
 - D** Registering the block storage with the identity service.

- 11** What is a Ring?
- A** A set of physical storage devices that are isolated from storage devices in other zones.
 - B** A mapping of account, container and object names to the physical location on disk of those entities.
 - C** A part of the cluster that is usually located remotely from the data center.
- 12** Which component of Manila is responsible for the creation of file system shares?
- A** File Shares Service.
 - B** Filter Scheduler.
 - C** Reference Provider.
- 13** Keystone plays an important role in the authorisation of OpenStack service requests. Which data item is used between OpenStack components to authenticate and authorise these requests?
- A** Tenant token.
 - B** Temporary token.
 - C** Login and key.
 - D** Login and password.
- 14** What is the relationship between users and tenants?
- A** A tenant can be an operator for all users.
 - B** A user aggregates the number of resources in each service.
 - C** Tenants can be added to any role in a user.
 - D** Users are bound to a tenant by assigning them a role on that tenant.
- 15** Which types of private information can Barbican handle?
- A** Asymmetric keys only.
 - B** Symmetric keys only.
 - C** Symmetric keys and asymmetric keys.
 - D** Symmetric keys, asymmetric keys and raw secrets.

- 16 Neutron provides several networking functionalities. Which of these was already available as part of Nova Networking?
- A SDN.
 - B Tunneling.
 - C API extensions for OpenStack networking.
 - D IP Address Management (IPAM).
- 17 Which of the following Tenant Operations can be executed by a Tenant User?
- A Creating Instances.
 - B Managing tenant access and security.
 - C Managing compute and storage resources.
 - D Managing Network Resources.
- 18 Which command creates a new Heat stack?
- A `$ heat stack-create new_stack --template-file --parameters.`
 - B `$ heat stack-update mystack --template-file --parameters.`
 - C `$ heat stack-show new_stack.`
 - D `$ heat template-validate --template-file.`
- 19 What action is required to run Horizon?
- A Modify the `ceilometer.conf`.
 - B Specify the host for your OpenStack Identity Service endpoint.
 - C Configure kernel networking parameters.
 - D Ensure that the controller node has at least several gigabytes of space available in `/var/lib/glance/images/`.
- 20 What API provides Zaqr?
- A Amazon EC2 API.
 - B OpenStack Compute API.
 - C RESTful API.
 - D Special Admin API for privileged users to perform administrative actions.

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