

## Foundation Certificate in OpenStack Software Answer Key and Rationale

Question	Answer	Explanation / Rationale	Syllabus Sections
1	B	A. Incorrect. Identity management is served through Keystone. B. Correct. See h6c68s.b.01_stu page 2-29. C. Incorrect. Identity management is served through Keystone.	1
2	B	A. Incorrect. OpenStack has nothing to do with commercialisation of the model B. Correct. This is the only correct answer. See slide deck 2015_01_06_M02: Introduction to Open Stack, Slide 10. C. Incorrect. There is no link between local legislations and the development of IaaS as part of the role of the OpenStack Foundation D. Incorrect. Cloud computing is the model used for OpenStack. It is not the role of the foundation itself	1
3	C	A. Incorrect. Nova-Compute manages the communications with the Hypervisor and Virtual Machines. B. Incorrect. Nova-consoleauth authorizes console access based on user/project/role. C. Correct. Nova-AP receives http requests, converts commands and communicates with other components via the queue or http (in the case of object store). It Accepts and responds to end user compute API calls. See h6c68s.b.01_stu page 128 Nova Architecture Section 4-8. D. Incorrect. Nova-novncproxy provides a proxy for accessing instances through vnc connections.	2
4	B	A. Incorrect. This command is used to list available images to boot. B. Correct. Nova OpenStack Compute Service. Module 4. Page 4-21. The nova boot command is used to create the instance. The whole command sentence is the following: nova boot <ServerName> -- image "<image id>" --flavor <flavor value>. The two primary parameters in the command can be determined through the use of the glance image-list and nova flavor-list C. Incorrect. This command is used to bring up the service. D. Incorrect. This command is used to check if the service is started.	2
5	B	A. Incorrect. This is a function of Horizon.	2

Question	Answer	Explanation / Rationale	Syllabus Sections
		B. Correct. This is a function of Nova. See h6c68s.b.01_stu chapter4, page 4.4. C. Incorrect. This is a function of Cinder. D. Incorrect. This is a function of Ceilometer.	
6	C	A. Incorrect. This functionality is not specific for backing up virtual machines B. Incorrect. This functionality is not specific for backing up virtual machines C. Correct. See lit h6c68s.c.00_stu 5-4 D. Incorrect. This functionality is not specific for backing up virtual machines	3
7	B	A. Incorrect. Proxy server accepts incoming requests via the OpenStack Object API or just raw HTTP. B. Correct. Container servers manage a mapping of containers (i.e folders) within the object store service. See h6c68s.b.01_stu page 343. C. Incorrect. Account servers manage accounts defined with the object storage service. D. Incorrect. Object servers manage actual objects (i.e. files) on the storage nodes.	3
8	B	A. Incorrect. This is a use case for block storage. B. Correct. This is a use case for object storage. See h6c68s.b.01_stu page 338. C. Incorrect. This is a use case for block storage. D. Incorrect. This is a use case for block storage.	3
9	D	A. Incorrect. This component accepts API requests and routes them to cinder-volume for action B. Incorrect. This component routes information between the block storage service process and the database that stores the volume states C. Incorrect. This component responds to R/W requests to the object storage database. D. Correct. See lit h6c68s.c.00_stu 8-9	3
10	C	A. Incorrect. This is a step in the installation process of Cinder. B. Incorrect. This is a step in the installation process of Cinder. C. Correct. See lit h6c68s.c.00_stu 8-16 . D. Incorrect. This is a step in the installation process of Cinder.	3

11	B	A. Incorrect. This is a zone. B. Correct. This is a ring. See h6c68s.b.01_stu page 350. C. Incorrect. This is a region.	3
12	A	A. Correct. See <a href="https://wiki.openstack.org/wiki/Manila/design">https://wiki.openstack.org/wiki/Manila/design</a> B. Incorrect. The filter scheduler is used for filtering backends based on predefined parameters C. Incorrect. The reference provider is a driver for shared file systems	3
13	A	A. Correct. The tenant token is created by Keystone and checked when service requests are made with it. See h6c68s.b.01_stu pag 3-12. B. Incorrect. The temporary token is only used to fetch the tenant list for a user. C. Incorrect. Login and key may only be used for initial authentication to Keystone. D. Incorrect. Login and password may only be used for initial authentication to Keystone.	4
14	D	A. Incorrect. A user can be an operator for all tenants. B. Incorrect. Incorrect. A tenant aggregates the number of resources in each service C. Incorrect. Users can be added to any role either globally or in a tenant. D. Correct. See lit. h6c68s.c.00_stu 3-17	4
15	D	A. Incorrect. Barbican also handles symmetric keys and raw secrets B. Incorrect. Barbican also handles asymmetric keys and raw secrets C. Incorrect. Barbican also handles raw secrets D. Correct. See Lit. A 14-18 and Barbican getting started guide: <a href="https://github.com/cloudkeep/barbican/wiki/Barbican-Getting-Started-Guide">https://github.com/cloudkeep/barbican/wiki/Barbican-Getting-Started-Guide</a>	4
16	D	A. Incorrect. SDN functionality was added in Neutron. B. Incorrect. Tunneling functionality was added in Neutron. C. Incorrect. API extensions were added in Neutron. D. Correct. IPAM was available before Neutron as it was part of Nova Networking. See h6c68s.b.01_stu, page 7-11/12.	5

17	A	<p>A. Correct. See h6c68s.b.01_stu, page 228 (6-18).</p> <p>B. Incorrect. Only for Tenant Admins.</p> <p>C. Incorrect. Only for Tenant Admins.</p> <p>D. Incorrect. Only for Tenant Admins.</p>	6
18	A	<p>A. Correct: To create a new stack from the CLI, you can use the stack-create command h6c68s.c.00_stu.part2 11-20</p> <p>B. Incorrect: updates an existing stack from a modified template file. <a href="http://docs.openstack.org/user-guide/content/heat-stack-create.html">http://docs.openstack.org/user-guide/content/heat-stack-create.html</a></p> <p>C. Incorrect: displays the stack status and details through the CLI. h6c68s.c.00_stu.part2 11-21</p> <p>D. Incorrect: You can use the template-validate command to validate a template file without creating a stack from it. <a href="http://docs.openstack.org/user-guide/content/heat-stack-create.html">http://docs.openstack.org/user-guide/content/heat-stack-create.html</a></p>	6
19	B	<p>A. Incorrect. That is necessary for Ceilometer. See: <a href="http://docs.openstack.org/juno/config-reference/content/section_ceilometer.conf.html">http://docs.openstack.org/juno/config-reference/content/section_ceilometer.conf.html</a></p> <p>B. Correct. See h6c68s.b.01_stu module 6 and <a href="http://docs.openstack.org/developer/horizon/topics/deployment.html">http://docs.openstack.org/developer/horizon/topics/deployment.html</a></p> <p>C. Incorrect. That's for preconfiguring Neutron. See: <a href="http://docs.openstack.org/juno/install-guide/install/apt/content/neutron-compute-node.html">http://docs.openstack.org/juno/install-guide/install/apt/content/neutron-compute-node.html</a></p> <p>D. Incorrect. Incorrect. That's for adding the Image Service. See: <a href="http://docs.openstack.org/juno/install-guide/install/apt/content/ch_glance.html">http://docs.openstack.org/juno/install-guide/install/apt/content/ch_glance.html</a></p>	6
20	C	<p>A. Incorrect: That is nova-api (It supports the OpenStack Compute API, Amazon EC2 API, and a special Admin API for privileged users to perform administrative actions)</p> <p>B. Incorrect: That is nova-api (It supports the OpenStack Compute API, Amazon EC2 API, and a special Admin API for privileged users to perform administrative actions)</p> <p>C. Correct: The service features a fully RESTful API that developers can use to send messages between various components of their Software-as-a-Service (SaaS) and mobile applications h6c68s.c.00_stu.part2 14-12.</p> <p>D. Incorrect: That is nova-api (It supports the OpenStack Compute API, Amazon EC2 API, and a special Admin API for privileged users to perform administrative actions)</p>	6