

Specialist Certificate in OpenStack Software Neutron Answer Key and Rationale

Question	Answer	Explanation / Rationale	Syllabus Sections
1	C	<p>A. Incorrect. Glance provides a catalog and repository for virtual disk images.</p> <p>B. Incorrect. Keystone provides authentication and authorisation.</p> <p>C. Correct. Neutron provides network connectivity as a service. Item Reference: Module 1 Neutron Architecture (3 and 4 of 34)</p> <p>D. Incorrect. Nova provides virtual servers on demand.</p>	1
2	B	<p>A. Incorrect. The compute node is also involved.</p> <p>B. Correct. The instance, compute node, network node and external network are involved. (Neutron Learner Guide, Chapter 1, Page 16)</p> <p>C. Incorrect. In a north/south flow there is only one instance involved.</p> <p>D. Incorrect. In a north/south flow there is only one instance involved.</p>	1
3	B	<p>A. Incorrect. This agent manages the qrouter namespaces.</p> <p>B. Correct. Due to limitations with Openstack vSwitch and iptables, the Neutron networking service uses Linux bridge to manage security groups for instances. (Literature: Module 1 pag 15. Compute node components)</p> <p>C. Incorrect. this agent manage metadata operations for instances.</p> <p>D. Incorrect. Manage virtual switches, connectivity between them, and interaction via virtual ports with other network components such namespaces, Linux bridges etc, but has a limitations with iptables for this reason Neutron networking uses Linux Bridges.</p>	1
4	C	<p>A. Incorrect. HyperTextMarkup Language, commonly referred to as HTML, is the standard markup language used to create web pages (Literature: https://en.wikipedia.org/wiki/HTML)</p> <p>B. Incorrect. Python is a widely used general-purpose, high-level programming language. (Literature: https://en.wikipedia.org/wiki/Python_(programming_language))</p> <p>C. Correct. OpenStack APIs are defined strictly in two forms: a human-readable specification (usually in the form of a developer's guide) and a machine-processable Web Application Description Language (WADL). (Literature: Neutron Learner Guide, p.43 – Module 2-3)</p> <p>D. Incorrect. Extensible Markup Language (XML) is a markup language that defines a set of rules for encoding documents in</p>	2

		a format which is both human-readable and machine-readable. (Literature: https://en.wikipedia.org/wiki/XML)	
5	A	<p>A. Correct: The GRE type driver is supported by the ML2 plug-in. (Literature:Neutron Learner Guide, Module 2-6, p.46)</p> <p>B. Incorrect: HyperV L2 is a mechanism driver, not a type driver.</p> <p>C. Incorrect: L2 population is a mechanism driver, not a type driver.</p> <p>D. Incorrect: Mechanism drivers manage network mechanisms, such as OVS.</p>	2
6	B	<p>A. Incorrect: Neutron provides an API that lets users definenetwork connectivity and addressing in the cloud. (Literature: NeutronLearner Guide, p.10 – Module 1-4)</p> <p>B. Correct: Thisrouter SNATs all traffic by default and supports floating IPs, which creates astatic one-to-one mapping from a public IP on the external network to a privateIP on one of the other subnets attached to the router (Literature: NeutronLearner Guide, p.59 –Module 2-19)</p>	2
7	C	<p>A. Incorrect: A10 Networks is a LBaaS driver in Neutron (Literature: https://wiki.openstack.org/wiki/Neutron_Plugins_and_Drivers)</p> <p>B. Incorrect: Embrane is a LBaaS driver in Neutron (Literature: https://wiki.openstack.org/wiki/Neutron_Plugins_and_Drivers)</p> <p>C. Correct: The MidoNet plug-in one of theseplug-ins that has already built-in L3 capabilities. (Literature: http://docs.openstack.org/admin-guide-cloud/networking_config-agents.html#configure-l3-agent)</p> <p>D. Incorrect: Radware is a LBaaS driver in Neutron (Literature: https://wiki.openstack.org/wiki/Neutron_Plugins_and_Drivers)</p>	2
8	C	<p>A. Incorrect:BigSwitch is an OVS-based plug-in for LBaaS. (Literature:http://docs.openstack.org/admin-guide-cloud/content/install_neutron-lbaas-agent.html)</p> <p>B. Incorrect:Floodlight is an OVS-based plug-in for LBaaS. (Literature:http://docs.openstack.org/admin-guide-cloud/content/install_neutron-lbaas-agent.html)</p> <p>C. Correct:LBaaSprovisions and configures load balancers. The Havana release offered areference implementation that is based on the HAProxy software load balancer.(Literature: Neutron Learner Guide, Module 2 p.37)</p> <p>D. Incorrect:NSX is an OVS-based plug-in for LBaaS. (Literature:http://docs.openstack.org/admin-guide-cloud/content/install_neutron-lbaas-agent.html)</p>	2
9	C	<p>A. Incorrect: This is a feature of security groups. (Literature: Neutron Learner Guide, p.84 – Module 2-44)</p> <p>B. Incorrect: The FWaaS plug-in adds perimeter firewallmanagement to Networking. (Literature: NeutronLearner Guide, p.79 –Module 2-39)</p> <p>C. Correct: The use of a namespace ensures that all the L3processes that relate to each tenant network are in a unique memory space thatcan only be accessed through either the GRE tunnel or a routed connection fromanother network that is external to the tenant network. (Literature: NeutronLearner Guide, p.83 –Module 2-43)</p>	2

		D. Incorrect:(Literature:Neutron Learner Guide, p.88 – Module 2-48)	
10	A	A. Correct. This command will retrieve a list of instances for tenant ID 71443535962392. Item Reference: Neutron Plug-ins and Extensions (22 of 33) B. Incorrect. This command will not retrieve a list of instances for tenant ID 71443535962392. C. Incorrect. This command will not retrieve a list of instances for tenant ID 71443535962392. D. Incorrect. This command will not retrieve a list of instances for tenant ID 71443535962392.	3
11	B	A. Incorrect. cURL is a command line tool to transfer data to or from a server using a supported protocol. B. Correct. OpenStack REST API uses HTTP to perform CRUD operations. Item Reference: Neutron Plug-ins and Extensions (4 of 33) C. Incorrect. Point-to-Point Protocol (PPP) is used to establish a direct connection between two nodes. D. Incorrect. SSH provides high multi-level security access to a remote shell.	3
12	C	A. Incorrect. This action does not allow the Firefox REST client to troubleshoot a customer network. B. Incorrect. This action does not allow the Firefox REST client to troubleshoot a customer network. C. Correct. Creating a custom header and adding an X-Auth-Token will authorise the Firefox REST client to troubleshoot a customer network. Item Reference: Neutron Plug-ins and Extensions (8 of 33) D. Incorrect. This action does not allow the Firefox REST client to troubleshoot a customer network.	3
13	B	A. Incorrect. The service catalog that is returned by the Keystone service does not contain the authorisation token. B. Correct. The service catalog that is returned by the Keystone service contains the endpoint for all services that the user/tenant has access to. Item Reference: Neutron Plug-ins and Extensions (15 of 33) C. Incorrect. The service catalog that is returned by the Keystone service does not contain the networks, subnets, and ports the user/tenant has access to. D. Incorrect. The service catalog that is returned by the Keystone service does not contain the username and password of the requesting user.	3
14	B	A. Incorrect: This command does not show the subnet ID, MAC, and IP address for a particular router port. B. Correct. This command shows the subnet ID, MAC, and IP address for a particular router port. Item Reference: Neutron Plug-ins and Extensions (18 of 33) C. Incorrect. This command does not show the subnet ID, MAC, and IP address for a particular router port. D. Incorrect. This command does not show the subnet ID, MAC, and IP address for a particular router port.	3
15	A	A. Correct. Editing the /etc/neutron/neutron.conf file enables you to set the neutron logging level to DEBUG. Item Reference:	4

		<p>Module 4 Managing logging level and examining log files (13 of 48)</p> <p>B. Incorrect. The nova/neutron.conf file does not exist by default.</p> <p>C. Incorrect. The nova.conf file does not enable you to set the Neutron logging level to DEBUG.</p> <p>D. Incorrect: The /var/log directory does not contain the config file you need to set the Neutron logging level to DEBUG.</p>	
16	D	<p>A. Incorrect. This command does not enable you to use ssh to log in to a compute instance.</p> <p>B. Incorrect. This command does not enable you to use SSH to log in to a compute instance.</p> <p>C. Incorrect. This command does not enable you to use SSH to log in to a compute instance.</p> <p>D. Correct. This command enables you to use SSH to log in to a compute instance. Item Reference: Troubleshooting methodology (22 of 48)</p>	4
17	A	<p>A. Correct. The grep command can be used to list all lines in a file with a specific piece of text. (Neutron Learner Guide, Chapter 4, Page 13)</p> <p>B. Incorrect. The more command shows the whole log file one page at a time.</p> <p>C. Incorrect. The tail command shows the last part of a log file.</p> <p>D. Incorrect. The vi command can be used to edit the log file.</p>	4
18	B	<p>A. Incorrect. This message is sent by the host that you want to reach.</p> <p>B. Correct. When the TTL value reaches 0, an intermediate gateway sends the ICMP time exceeded message. (Neutron Learner Guide, Chapter 4, Page 23)</p> <p>C. Incorrect. The traceoute command does not use TCP.</p> <p>D. Incorrect. Intermediate gateways do not send UDP messages.</p>	4
19	B	<p>A. Incorrect. The bind program is a DNS server.</p> <p>B. Correct. Feedback. (Neutron Learner Guide, Chapter 4, Page 24)</p> <p>C. Incorrect. The dnsmasq program contains a DNS server.</p> <p>D. Incorrect. The ping command can be used for very basic DNS testing, but dig is much more versatile.</p>	4
20	B	<p>A. Incorrect. The capture filter is limited in its functionality because it runs in kernel space and does not allow filtering based on values of fields.</p> <p>B. Correct. Only the display filter allows filtering based on the value of fields. (Neutron Learner Guide, Chapter 4, Page 40)</p>	4