## Practice Exam Questions for: Nokia Optical Network Management with WaveSuite NOC (exam number: 4A0-210)

The following questions will test your knowledge and prepare you for the Nokia Optical Network Management with WaveSuite NOC Exam. Compare your responses with the Answer Key at the end of the document.

- 1. What is a container?
  - a. It is a standalone, lightweight, executable package of software that includes all what is needed to run a service.
  - b. It is the hypervisor of a set of VMs.
  - c. It is the docker engine that distributes binaries and libraries between VMs.
  - d. It is the tool that can stop/start the processes running on the NMS server.
- 2. How is it possible to access the WS-NOC web application?
  - a. The operator gets access to WS-NOC by buying a license.
  - b. WS-NOC requires the installation of a web-app on the local PC.
  - c. WS-NOC does not require any extra software, a qualified web browser is enough.
  - d. The operator gets access to WS-NOC through WaveSuite ecosystem.
- 3. What is the possible structure of an ODUCn?
  - a. ODUCn is structured into ODUFlex containers of 5Gb/s.
  - b. ODUCn is structured into containers multiple of 100Gb/s.
  - c. ODUCn is structured into OTSiG tunnels.
  - d. ODUCn can be structured into ODUFlex containers of 5Gb/s or any ODUk.
- 4. Which of the following statements about CDC-F 2.0 is TRUE?
  - a. CDC-F 2.0 foresees the usage of IROADM 20/32 boards.
  - b. CDC-F 2.0 requires dedicated Optical Transport boards, different from the one used in CDC-F 1.0.
  - c. CDC-F 2.0 requires dedicated MCS boards, different from the one used in CDC-F 1.0.
  - d. CDC-F 2.0 is hosted in a rack specifically designed to support the new boards.



- 5. Which of the following statements about the Matrix card is TRUE?
  - a. Matrix can be distributed over D5X500 and S13X100 boards on a PSS-x node.
  - b. The matrix is characterized by the switching capacity, and it is typically equipped in PSS-x switched nodes.
  - c. The matrix is characterized by the number of Line ports, and it is typically equipped in PSS-x switched nodes.
  - d. The matrix does not support Low Order ODUk protection.
- 6. What happens during CPB Power Adjustment?
  - a. Optical power levels are set on the NEs based on the parameters defined on the CPB provisioning page.
  - b. Optical power levels are adjusted to match the target levels defined in the EPT Commissioning file.
  - c. NE optical power parameters are uploaded to WS-NOC and OTN DB gets populated with all NE attributes.
  - d. Optical power levels of the amplifiers are set according to the length of the physical connections defined on WS-NOC.
- 7. What are the main tasks supported by the CPB tool?
  - a. Configure unequipped cards, create physical topology, set optical power settings, perform link commissioning, configure GMRE feasibility profiles, and perform the power balancing.
  - b. Create and supervise the nodes present in the commissioning file, then equip the nodes with cards and internal OS topology.
  - c. Configure the nodes with unequipped cards and deploy trails and services according to the EPT design exported through the commissioning file.
  - d. Activate GMRE on nodes part of the ASON network, configure unequipped cards, create physical topology, and perform the power balancing.
- 8. Which of the following statements best describes the set up of an OPSFlex Protection Schema?
  - a. OPSFlex requires the activation of the "OPSFlex" modality on the OPSA board.
  - b. A new protection template "OPSFlex" has to be created to set up the schema.
  - c. The OT line port is connected to the SIG port of the OPSFlex, and A and B ports are connected in two different directions through MCS ports.
  - d. The OT client port is connected to the SIG port of the OPSFlex, and A and B ports are connected in two different directions through MCS ports.
- 9. Which of the following statements about overlay is TRUE?
  - a. Overlay is supported only on SWDM nodes, because it requires the simultaneous activation of both LO and L1 GMPLS layers.
  - b. From a traffic perspective, the overlay configuration allows the coordination between the two Control Planes through the WSR parameter.
  - c. Overlay requires L0 activation on pure WDM nodes and L1 activation on pure PSS-x nodes; the SWDM node configuration is not supported.
  - d. From a traffic perspective, the overlay configuration means having optical channels restored by L0 GMPLS and OTN services restored by L1 GMPLS without any coordination between the two Control Planes.
- 10. Which of the following statements about 3R regeneration is TRUE?
  - a. 3R operates at an optical and electrical level by equalizing chromatic dispersion and suppressing noise.
  - b. 3R operates at an optical and electrical level by reshaping the signal, suppressing noise, and performing the retiming of the data pulse.
  - c. 3R operates at an optical level by equalizing chromatic dispersion and suppressing noise.
  - d. 3R operates at an optical level by equalizing chromatic dispersion, suppressing noise, and performing the retiming of the data pulse.



- 11. Which of the following statements best describes the MVAC or SVAC card?
  - a. It is used to implement Optical Protection Schemas for an alien wavelength.
  - b. It enables optical performance monitoring and wavelength tracing of a colored signal generated by an Optical Transponder installed into the same shelf of S/MVAC card.
  - c. It enables the wavelength optical monitoring of the power levels.
  - d. It enables optical performance monitoring and wavelength tracing of an alien wavelength.
- 12. If you are creating a 10GbE service in the L1 Control Plane scenario, when is the ASON Logical Link created?
  - a. At the time the ODUk Logical Link between the Line ports of the Uplinks cards is created.
  - b. At the time the service is created.
  - c. At the time the ASON NPA is implemented or when a new Logical Link is added to an implemented NPA ASON.
  - d. At the time the ASON NPA is defined.
- 13. Which of the following statements best describes flexible rate ODU, or ODUFlex?
  - a. ODUFlex splits ODU-k frames in a half.
  - b. ODUFlex groups multiple ODU-k frames.
  - c. ODUFlex creates a container whose size is based on the data rate of the client.
  - d. ODUFlex provides adaptive ODU-k frames that can vary continuously to meet non-constant flows.
- 14. Which of the following statements best describes alien services?
  - a. It is an Ethernet optical signal that originates from transponders located in equipment outside the 1830 PSS domain.
  - b. It is a "colored" optical signal that originates from 1830 PSS equipment not under the direct control of the transmission network operator, or from transponders originated by external equipment.
  - c. It is a "colored" optical signal that originates from boards not plugged in the main 1830 shelf (that is, slave shelves, other vendor's equipment, or non-1830 PSS equipment).
  - d. It is an Ethernet optical signal which only transits through the 1830 network without being terminated there. An alien service, therefore, cannot leverage the Wavelength Tracker feature.
- 15. Which of the following conditions produces a GMPLS-enabled node?
  - a. When ASON and GMPLS are running together on the node.
  - b. When ASON NPA is implemented on WS-NOC, as the implementation triggers GMPLS protocol activation.
  - c. When Transport Plane and GMPLS are running together on the node.
  - d. When NPA and GMPLS are running together on the node.
- 16. What are the steps for setting up and populating an ASON NPA?
  - a. 1) SRG creation. 2) NPA creation. 3) Link association. 4) NPA implementation.
  - b. 1) Unlock ASON links. 2) SRG creation. 3) Link association. 4) NPA creation. 5) NPA implementation.
  - c. 1) NPA creation. 2) Link association. 3) Unlock ASON links.
  - d. 1) SRG creation. 2) NPA creation. 3) Link association. 4) NPA implementation. 5) Unlock ASON links.
- 17. As a result of the successful deployment of the ODUk ASON routed infrastructure over a PSS-24x, what are the expected entries on WS-NOC?
  - a. 1) An ODU4 Logical Link. 2) An OTU4 ASON SNC.
  - b. 1) An ODU4 Logical Link. 2) An OTU4 ASON Implicit Server Infrastructure. 3) An OTU4 ASON SNC.
  - c. 1) An ODU4 Logical Link. 2) An ODU4 ASON SNC.
  - d. 1) An ODU4 Logical Link. 2) An OTU4 ASON Implicit Server Infrastructure. 3) An ODU4 ASON SNC.



- 18. Which service level assurance is offered by GMRE?
  - a. GMRE does not provide any service level assurance.
  - b. SBR, PRC and GR.
  - c. SBR, SNCP, PRC and GR.
  - d. SBR, SNCP and GR.
- 19. Which of the following steps must be followed to deploy a PRC service, that specifies the path, in an ASON network?
  - a. 1) Select "Protected" and "ASON" option. 2) Assign two routes. 3) Assign the working and protection role to the routes.
  - b. 1) Select "Protected" option. 2) Assign two routes. 3) Enable ASON on the working and protection routes.
  - c. 1) Select "ASON" option. 2) Assign two routes. 3) Enable E-SNCP on the working and protection routes.
  - d. 1) Select "PRC" option. 2) Assign two routes. 3) Assign the working and protection role to the routes.
- 20. In what case is the nominal route equal to the current route in an ASON network?
  - a. Nominal and Current routes are the same after having executed the action "Unlocked" on the Nominal route.
  - b. Nominal and Current routes are the same after an ASON restoration.
  - c. Nominal and Current routes are the same if no faults ever impacted the path defined at deployment time.
  - d. Nominal and Current routes are the same if the Current route has been deployed giving the instruction "routing constraint" to include the Nominal in the route computation.



## Answer Key

1. A	11. D
2. C	12. A
3. D	13. C
4. A	14. B
5. B	15. C
6. B	16. D
7. A	17. D
8. C	18. B
9. D	19. A
10. B	20. C

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