Practice Exam Questions



4A0-255

Nokia Advanced Optical Network Design



Nokia

Exam 4A0-255

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Version: 6.0

[Total Questions: 40]

Question No:1

Which of the following best describes Four Wave Mixing (FWM)?

- **A.** FWM is a linear impairment that produces crosstalk four adjacent wavelengths are used.
- **B.** FWM is a non-linear impairment that produces crosstalk at the sum and difference of two wavelengths.
- **C.** FWM is a non-linear impairment resulting from varying velocities at different frequencies.
- **D.** FWM is a linear impairment resulting from pulses broadening over ultra-longdistances

Answer: A

Question No: 2

Which of the following statements about the recovery time for protection and restoration combined (PRC) is correct?

- A. PRC can be as fact as sub-network connection protection (SNCP)
- **B.** PRC is as fast as restoration mechanisms.
- **C.** PRC has a recovery time that depends on the broken links.
- **D.** PRC has a typical recovery time greater than 50 ms.

Answer: B

Question No: 3

Which of the following best describes Flexgrid?

- A. Flexgrid is based on flexible amplification stages
- **B.** Flexgrid uses flexible guardband that can take any spacing.
- **C.** Flexgrid is defined on a frequency grid spacing based on ,multiples of 12.5 GHz.
- **D.** Flexgrid allows channel bandwidth central frequencies and guardband to take any value in the spectrum range.

Answer: A

Question No: 4

Consider the exhibit that shows the OTN frame structure. Which of the following sets of

label is correct?



A. OUT: B: ODU: C: OPU: D: OPUB. OUT: B: ODU: C: OPU: D: OCHC. OPU: B: OTU: C: ODU: D: OPUD. ODU: B: OYU: C: OPU: D: OPU

Answer: C

Question No:5

What is precision Time Protocol (PTP) designed for?

- A. Precise time measurements
- **B.** Synchronization of encryption entities
- **C.** Shortest path discovery
- **D.** Packet-based timing distribution

Answer: B

Question No: 6

Suppose there is a 40 Gbit/s signal which has a symbol rate of Gbaud/s. Which modulation format is being used?

- A. QPSK
- B. BPSK
- C. 4QAM
- D. DP-QPSK

Answer: C

Question No:7

Which of the following can be detected through power monitoring with an Optical Time Domain Reflect meter?

- A. Intrusions on fibers
- **B.** Power injection one channel
- C. Hacking of L1 encryption
- **D.** Intrusions in the cryptographic keys

Answer: B

Question No:8

Which of the following is recommended to reduce the latency of a 30km long link?

- A. DCM-free amplifiers
- B. Soft-decision FEC
- C. Low-noise amplifiers
- D. L1 encryption

Answer: C

Question No:9

Which of the following statements about GMPLS features is FALSE?

- **A.** GMPLS is able to manage the optical network through the DCN.
- B. GMPLS is able to control OTN networks.
- **C.** GMPLS is able to compute the routing of the optical channels.
- **D.** GMPLS is able to automatically provision the optical channels.

Answer: C

Question No: 10

Which if the following statements about Recovery Time Objective (RTO) and Recovery Point Object Point Objective (PRO) is FALSE?

- **A.** RTO/PRO define business continually requirements for data center.
- **B.** RTO/PRO defined the acceptable amount of data (in bits) that can be lost after a failure.
- C. Data center mirroring has the most critical level of RTO.RPO among DC applications.
- **D.** Tier ½ data centers have stricter RTO/PRO requirements than Tire ¾.

Answer: B

Question No: 11

Which of the following statements about power commissioning system is most accurate?

Α.

A system must be either linear or a ring.

A system can stop if there is a through communication in a node.

B.

A system must be a ring only

A system can stop if there is a through connection in a node.

C.

A system must be a ring only

A system cannot stop if there is a through connection in a node.

D.

A system must be either linear or a ring

A system cannot stop if there is a through connection in a node

Answer: D

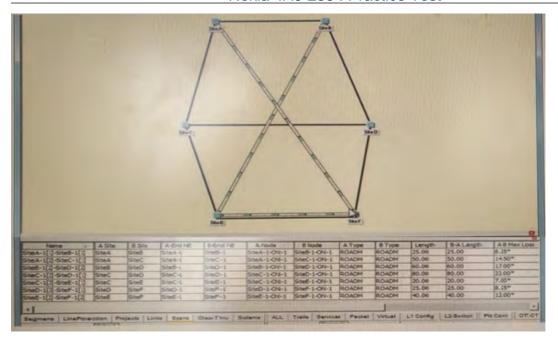
Question No: 12

Consider the exhibit that shows a network design in EPT.

Seven segments are defined segment lengths are shown in the list below the network map.

3 services are defined each service carries a 10G signal, is protected by diverse path and is router by shorted distance.

Which of the following links is the heavily loaded?



- A. Site A- SiteB
- B. SiteC-SiteD
- C. SiteE-SiteF
- D. All three links have the same load

Answer: D

Question No: 13

Which of the following statements about an alien wavelength at 10G is correct?

- **A.** It is an optical signal generated by FWM impairment.
- **B.** It has similar optical performance across multiple vendors equipment at 10G.
- C. It can be measured by a VAC card.
- **D.** It does not support Wavelengthtracker.

Answer: B

Question No: 14

Consider a signal at 100G PDM-QSK. Which of the following statements is true?

- A. It supports more bits per symbol per polarization than 8QAM
- B. It has the same Gbaud rate as 100G 8QAM.
- **C.** Each symbol supported 2 bits per polarization.