



Broadband and High Speed Network (CEN 449)

Section Number:

Allowed Time: 30 Minutes

Date: (11/2/1437)(23/11/2015)

Student Name:

Student Number:

QUIZ 4

Choose the correct answers:

1. The SONET and SDH was developed to replace thesystem for transporting large amounts of telephone calls and data traffic over the same fiber without synchronization problems.

- (a) Plesiochronous Digital Hierarchy (b) SDH (c) SONET

2. For both SONET and SDH, this is often represented by displaying the frame graphically: as a block of 90 columns and nine rows for STS-1, and 270 columns and rows for STS-3.

- (a) Three (b) Five (c) Nine

3. Three STS-1 signals can be multiplexed together to create STS-3 signal (.....) which represent the electrical signal of OC-3.

- (a) 155.52 Mbps (b) 51.84 Mbps (c) 622.08 Mbps

4. In SONET layers, The layer Converts to optical signals and back to electromagnetic

- (a) Section (b) Line (c) Path

5. refers to a collection of performance parameters whose values have to do with the speed and accuracy/reliability of ATM connection.

- (a) QoS (b) Private UNI (c) Public NNI

6. When a virtual circuit is established, both *the transport layer in the host machine* and *the network* must agree on a defining the service.

- (a) Traffic contract (b) Traffic shaping (c) Traffic policing

7. the number of cells/sec that are delivered to the wrong destination because of an undetected error in the header.

- (a) Cell Miss-insertion Rate (CMR) (b) Cell Loss Ratio (c) Cell Error Ratio (CER)

8. The converts application data into ATM data units in order to provide support for user applications.

- (a) Physical Layer (b) ATM Layer (c) AAL Layer

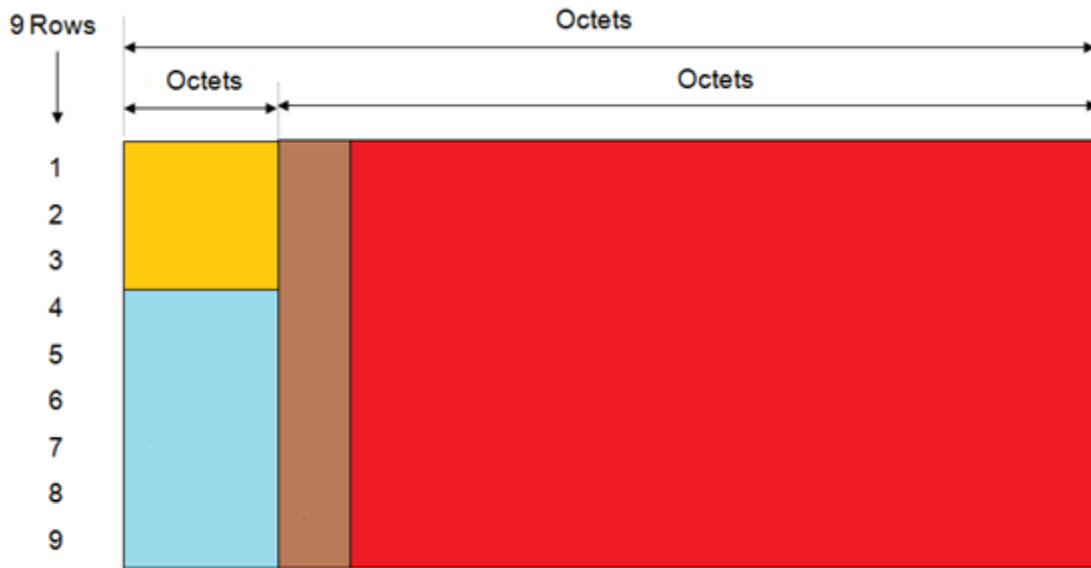
9. Theis responsible for the simultaneous sharing of virtual circuits over a physical link (*cell multiplexing*)

- (a) Physical Layer (b) ATM Layer (c) AAL Layer

10. Theis split into *A segmentation and Reassembly sublayer (SAR)* and a convergence sublayer

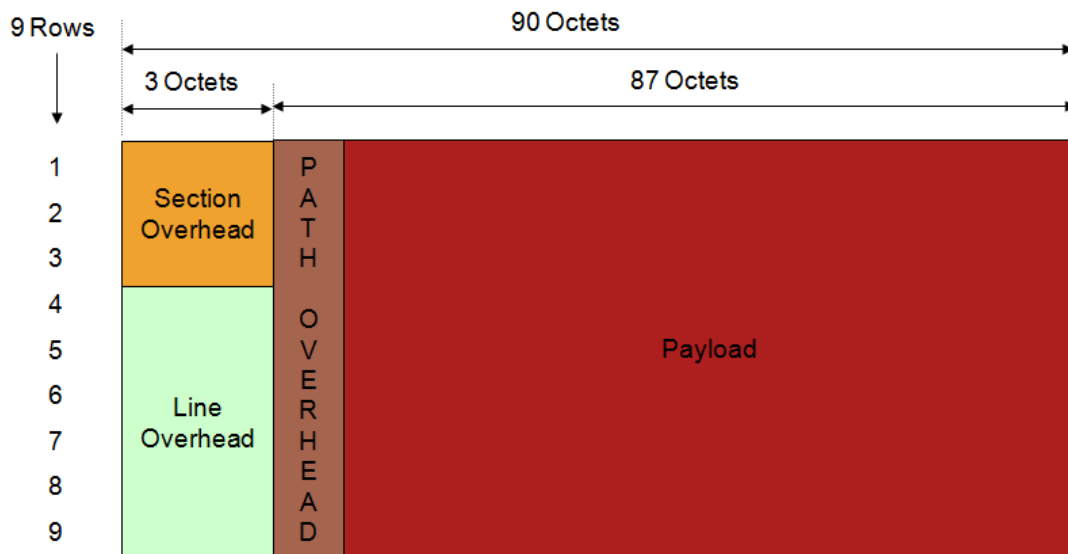
- (a) Physical Layer (b) ATM Layer (c) AAL Layer

3. Fill the name of each overhead parts and the number of octets for the all STS-1 Envelope structure.



STS-1 Envelope

Solution



STS-1 Envelope