

2016

Time : 3 hours

Full Marks : 80

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

*Answer **five** questions in which*

Q. No. 1 is compulsory.

1. Choose the correct option of the following :

(a) There are _____ Internet Service providers.

(i) Regional

(ii) Local

(iii) National and international

(iv) All of the above

(b) _____ refers to the physical or logical arrangement of a network.

(i) Topology

(ii) Mode of operation

OC – 116/2

(Turn over)

- (iii) Data flow
- (iv) None of the above
- (c) A _____ is a data communication system spanning states, countries or the whole world.
 - (i) MAN
 - (ii) WAN
 - (iii) LAN
 - (iv) None of the above
- (d) A _____ connection provides a dedicated link between two devices.
 - (i) Primary
 - (ii) Multipoint
 - (iii) Point-to-point
 - (iv) Secondary
- (e) Which topology requires a multipoint connection?
 - (i) Bus
 - (ii) Star
 - (iii) Mesh
 - (iv) Ring

OC - 116/2

(2)

Contd.

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- (f) A _____ is a set of rules that governs data communication.
 - (i) Protocol
 - (ii) Forum
 - (iii) Standard
 - (iv) None of the above
- (g) In a _____ connection, two and only two devices are connected by a dedicated link.
 - (i) Multipoint
 - (ii) Point-to-point
 - (iii) Both (i) and (ii)
 - (iv) None of the above
- (h) The information to be communicated in a data communications system is the _____.
 - (i) Medium
 - (ii) Protocol
 - (iii) Message
 - (iv) Transmission

OC - 116/2

(3)

(Turn over)

2. (a) What is Multiplexing ? Explain the different types of Multiplexing ?
(b) Write about Frequency Division Multiplexing.
3. Write about Line Coding and its characteristics. Write about different Line Coding Techniques.
4. Write about the different transmission modes. Explain the different types of errors in data transmission.
5. (a) What is framing ? Explain the different framing algorithms ?
(b) Write about Flow Control and Error Control.
6. Write about the different connecting devices. Explain about loop problem in Transparent Bridges.
7. What is Switching and what are the different types of Switching Techniques ? Write about Circuit Switched Network.
8. What is Network and explain characteristics of Networks ? Write about the different types of connection.
9. Explain the various types of networking and internetworking devices. Also, explain Glossary.



OC – 116/2 (400)

(4)

BCA(VI) — 601

Single Bit
Multiple Bit

Burst Error

$$\frac{n(n-1)}{2} = \frac{4(3)}{2} = 6$$