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## BCA-15

June – Examination 2020

### BCA (Part III) Examination

Fundamental of Computer Networks

Paper : BCA-15

*Time : 3 Hours ]*

*[ Maximum Marks : 70*

*Note :-* The question paper is divided into three sections A, B and C. Write answers as per given instructions.

#### Section-A

7×2=14

#### (Very Short Answer Type Questions)

*Note :-* Answer all questions. As per the nature of the question delimit your answer in one word, one sentence or maximum up to **30** words. Each question carries 2 marks.

1. (i) What do you mean by Firewall ?
- (ii) Define the role of TCP/IP in networking.
- (iii) Define frame in computer network.

- (iv) Define propagation delay.
- (v) What is the role of CSMA/CD ?
- (vi) Define protocol hierarchies.
- (vii) Write the function of data link layer.

**Section-B** **4×7=28**

**(Short Answer Type Questions)**

**Note** :- Answer any *four* questions. Each answer should not exceed **200** words. Each question carries 7 marks.

2. Explain networking strategies with neat sketch diagram.
3. Explain delay distortion and noise in transmission impairments.
4. Describe FDM and WDM in multiplexing.
5. Discuss the advantages and disadvantages of Radio and Infrared.
6. Explain the different types of LAN.
7. Briefly explain how network hardware are helpful for internet.
8. What is Real-life data communication ? Define with a neat sketch diagram.
9. Explain different layers of ISO-OSI Reference Model.

**Section-C** **2×14=28**

**(Long Answer Type Questions)**

**Note** :- Answer any *two* questions. You have to delimit your each answer maximum up to **500** words. Each question carries 14 marks.

10. Explain the advantages of computer networking.
11. Explain the different modes of data transmissions.
12. Discuss with an example :
  - (a) Baud Rate for 2 and 4 level modulation
  - (b) Time Division Multiplexing (TDM)
13. Explain OFDM with characteristics and working with neat sketch diagram.