



C14-EC-602

**4738**

**BOARD DIPLOMA EXAMINATION, (C-14)**

MARCH / APRIL - 2019

**DECE - VI SEMESTER EXAMINATION**

**DATA COMMUNICATIONS & COMPUTER NETWORKING**

Time : 3 Hours]

[Total Marks : 80

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**PART - A**

**3×10=30**

**Instructions :**

- (1) Answer **ALL** questions.
- (2) Each question carries **THREE** marks.
- (3) Answer should be brief and straight to the point and shall not exceed five simple sentences.

- 1 State the need for data communication networking.
- 2 List the 3 types of switching techniques.
- 3 Define Local Area Network and write its uses.
- 4 Write the applications of WAP.
- 5 Define the terms internet and intranet.
- 6 Distinguish between virtual circuit and datagram services.
- 7 List the commonly used WAN Technologies.
- 8 List the features of TCP.
- 9 List HTTP commands.
- 10 State the need for network security.

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[ Contd...

**PART - B****10×5=50**

- Instructions :**
- (1) Answer any **FIVE** questions.
  - (2) Each question carries **TEN** marks.
  - (3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

- 11 Draw the OSI 7 layer architecture and explain the function of each layer.
- 12 (a) Define Simplex, half-duplex, full-duplex communication. **5**  
(b) Differentiate between repeater, switch and bridges. **5**
- 13 Explain different network topologies (Bus, Star, Ring).
- 14 (a) Explain the Ethernet frame format (IEEE 802.3). **6**  
(b) Explain the uses of routers in networking. **4**
- 15 Explain the Internal architecture of ISP.
- 16 Explain different layers of TCP/IP with a neat diagram.
- 17 (a) Explain the connectivity of system using TCP & UDP. **5**  
(b) Explain file transfer operation using FTP. **5**
- 18 Explain the web browser architecture.
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