TED (15/19) - 5151 (REVISION-2015/19)

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Reg.No..... Signature.....

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER - 2023

COMPUTER NETWORKS

(Maximum Marks:100)

(Time: 3 Hours)

PART - A

(Maximum Mark: 10)

Marks

 $(5 \times 2 = 10)$

- I. Answer **all** the questions in one or two sentences. Each question carries 2 marks.
 - 1. List any two connecting devices in Networking.
 - 2. What is congestion in computer networks.
 - 3. What is socket?
 - 4. Write the structure of URL.
 - 5. Define TELNET.

PART - B

(Maximum Mark: 30)

- II Answer *any five* questions from the following. Each question carries 6 marks.
 - 1. Describe VLAN configuration methods.
 - 2. Illustrate the frame format of standard Ethernet.
 - 3. A classless IP address is given as 192.168.10.82/27. Find first address , last address and number of addresses in the block.
 - 4. Differentiate unicasting, multicasting and broadcasting.
 - 5. Explain push and pulling services in transport layer.
 - 6. Differentiate connection-oriented and connectionsless protocols.
 - 7. Explain DDNS. $(5 \times 6 = 30)$

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PART – C

(Maximum Mark: 60) (Answer *one full* question from each unit. Each full question carries 15 marks.)

UNIT - I

III	(a) Explain TCP / IP protocol suit.	(8)
	(b) Describe any four WLAN characteristics. OR	(7)
IV	(a) Explain any three Ethernet implementations.(b) Explain the sub-layers of data link layer.	(8) (7)
	UNIT – II	
V	(a) Explain distance vector routing protocol.(b) Explain DHCP	(8) (7)
	OR	
VI	(a) Explain IPV ₄ addressing.	(8)
	(b) State any four network performance evaluating methods. UNIT – III	(7)
VII	(a) Explain selective repeat protocol with neat diagram.(b) Explain SCTP.	(8) (7)
	OR	
VIII	(a) Discuss connection establishment in TCP.	(8)
	(b) Explain any four services of transport layer UNIT – IV	(7)
IX	(a) Explain the architecture of WWW.	(8)
	(b) Explain recursive address resolution of DNS.	(7)
	OR	
Х	(a) Explain e-mail architecture.	(8)
	(b) Illustrate the request message format of HTTP message.	(7)

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