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Question Paper Code: 35402

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2022

Fifth Semester

Electronics and Communication Engineering

01UEC502 – DATA COMMUNICATION AND NETWORKS

(Regulation 2013)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - $(10 \times 2 = 20 \text{ Marks})$

- 1. What are the functions of Physical Layers?
- 2. Distinguish between ADSL and SDSL.
- 3. Tell the mechanism of stop and wait flow control.
- 4. Mention the advantage and disadvantage of stop and wait flow control.
- 5. Compare IPV4 and IPV.
- 6. Draw the general format of ICMP messages.
- 7. List the objectives of frame relay congestion.
- 8. Compare UDP and TCP.
- 9. What is the purpose of domain name system?
- 10. Distinguish between symmetric encryption and public key encryption.

| PART - B | (5 x) | 16 = 80 | Marks) |) |
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| 11. | (a) | Discuss in detail about the various types of switching networks | (16) | | | |
|-----|-----|---|------|--|--|--|
| | | Or | | | | |
| | (b) | Discuss briefly about cable TV networks and cable TV for data transfer. | (16) | | | |
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| 12. | (a) | Explain in detail about IEEE 802.11Bluetooth and its layers. | (16) | | | |
| | | Or | | | | |
| | (b) | Write short note on architecture and layers of Frame relay and ATM. | (16) | | | |
| 13. | (a) | Discuss about IGMP in detail. | (16) | | | |
| | Or | | | | | |
| | (b) | What are ARP and RARP? Describe ARP, RARP in detail. | (16) | | | |
| 14. | (a) | Explain the segment formats for TCP and UDP. | (16) | | | |
| | | Or | | | | |
| | (b) | Define QOS. Elaborate the characteristics of QOS. | (16) | | | |
| 15. | (a) | Explain in detail about digital signal line. | (16) | | | |
| | | Or | | | | |
| | (b) | Explain briefly on the following network securities | | | | |
| | | (i) Digital signature | (8) | | | |
| | | (ii) Entity authentication. | (8) | | | |