

**B. TECH. SEMESTER V (EC) ELECTRONICS & COMMUNICATION ENGINEERING  
REGULAR EXAMINATION, NOV / DEC-2011  
EC 504:- COMPUTER NETWORKS**

TIME: 3 HOURS

TOTAL MARKS: 70

**INSTRUCTION:-**

1. Attempt all questions.
2. Answers to the two sections must be written in separate answer books.
3. Figures to the right indicate full marks.
4. Assume suitable data, if necessary.

**SECTION-I**

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|----|---|---|
| 1  | (A) Explain the IP protocol with its header format and state purpose of each field.   | 6 |
|    | (B) Write short note on DNS.  | 6 |
| OR |   |   |
| 1  | (A) Explain the distance vector routing algorithm using suitable example.   | 6 |
|    | (B) Explain the RARP, ARP, ICMP and IGMP protocol.  | 6 |
| 2  | (A) Explain the flooding and reverse path forwarding in Network layer   | 4 |
|    | (B) Explain the Hierarchical algorithm with example.  | 4 |
|    | (C) Write short note on CRYPTOGRAPHY.   | 4 |
| OR |   |   |
| 2  | (A) What is silly window syndrome in TCP? Explain it in detail.   | 4 |
|    | (B) Write short note on URL.  | 4 |
|    | (C) Explain the HTTP and HTML in application layer.   | 4 |
| 3  | (A) Differentiate the UDP AND TCP. Also explain the congestion control in TCP using start, additive increase and multiplicative decrease. | 7 |
|    | (B) Explain the distance Link state routing algorithm.  | 4 |

## SECTION-II

- Que:-4** (A) What is the role of MAC sub layer? Compare pure ALOHA protocol and slotted ALOHA protocol. 6  
(B) Discuss: Bridge, Router, Hub, Switch, and Gateway. 6
- OR**
- Que:-4** (A) List various transmission media used in networking. Explain optical fiber cable. 6  
(B) Explain CSMA protocol. 6
- Que:-5** (A) Explain HDLC protocol with its three different kind of frame. 6  
(B) State the difference and similarities between circuit switching and packet switching. 5
- OR**
- Que:-5** (A) Explain Go back N ARQ sliding window protocol with suitable example. Compare Go back N ARQ with selective repeat ARQ. 7  
(B) List the various topologies. Compare ring and mesh topology. 4
- Que:-6** (A) State the difference between OSI and TCP/IP reference model standard. 4  
(B) Discuss various methods of framing in data link layer. 8

END OF PAPER

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END OF PAPER