

Total No. of printed pages = 3

Co-504/CCN/5th Sem/2015/M

## COMPUTER COMMUNICATION AND NETWORKING

Full Marks – 70

Pass Marks – 28

Time – Three hours

The figures in the margin indicate full marks for the questions.

Answer question No.1 and any six from the rest.

1. (a) What is a protocol ? 5×2=10  
(b) What is SMTP ?  
(c) What is routing ?  
(d) What is ISDN ?  
(e) What is RPC ?
  
2. Explain different layers of the ISO-OSI Reference model. 10

[Turn over

3. Differentiate between :  $5 \times 2 = 10$
- (a) Pure ALOHA and slotted ALOHA
  - (b) TCP and UDP.
4. (a) What is framing ? Explain different framing technique in brief. 5
- (b) What is sliding window protocol ? Explain any one sliding window protocol. 5
5. (a) What are the different classes of IP address ? Explain them. 8
- (b) What is subnetting ? 2
6. Explain different types of guided and unguided media. 10
7. (a) Explain CSMA / CD protocol. 6
- (b) Differentiate between virtual circuit and datagram services. 4
8. (a) What are the functions of transport layer ? 2
- (b) Explain any one congestion control algorithm. 8

9. (a) Explain how error is detected and corrected using hamming code with example. 8

(b) What is cryptography ? 2

10. Write short notes on any *two* : 5×2=10

(a) Switching

(b) TCP / IP model

(c) ARPANET.