

**BACHELOR OF COMPUTER APPLICATIONS
(BCA) (Pre-Revised)**

Term-End Examination

December, 2015

00854

CS-68 : COMPUTER NETWORKS

Time : 2 hours

Maximum Marks : 60

Note : *Question number 1 is compulsory. Attempt any three questions from the rest.*

1. (a) Explain the strategies/mechanisms of TCP used to avoid congestion. 5
- (b) Differentiate between optical fiber and coaxial cables. 5
- (c) Compare real time and non-real time services of ATM networks. 5
- (d) What are the different types of multiplexing techniques possible for analog signals ? Explain. 5
- (e) What is channel capacity ? How is it related with bandwidth ? Explain. 5
- (f) Compare and contrast between packet switching and circuit switching. 5

2. (a) Explain the advantages and disadvantages of FDM and TDM. Also, give an example for each. 5
- (b) Write three differences and two similarities between OSI and TCP/IP model. 5
3. (a) How does a token ring network work ? In what ways is it different from Ethernet ? 5
- (b) What is flow control ? How is Selective Repeat better than Go Back N ? 5
4. (a) What is ISDN ? Discuss the services of ISDN. 4
- (b) Discuss the use of Hub, Bridges, Switches and Gateways in computer networking. 6
5. Write short notes on the following : $4 \times 2 \frac{1}{2} = 10$
- (a) OSPF
- (b) CSMA/CD
- (c) Virtual Circuits
- (d) Sliding Window Protocol
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