

**BCA 4<sup>th</sup> semester Examination**  
**Subject: COMPUTER NETWORK      Paper: BCA-2205**

**Answer any one question from the following**

- 1.      a. What are the layers in OSI Reference Models? Describe each layer briefly**  
**b. What is the difference between Hub, Switch, and Router?**  
**c. What is DNS?**
  
- 2.      a. What is the difference between a Domain and a Workgroup?**  
**b. What is a Proxy Server and how do they protect the computer network?**  
**c. What are the functions of MAC?**
  
- 3.      a. Mention the function of go-back N-ARQ.**  
**b. What are the different communication modes in HDLC?**  
**c. Give the usage of I, S, U frames.**
  
- 4.      a. What are firewalls?**  
**b. Describe star topology**  
**c. What are gateways?**  
**d. What is Ping?**
  
- 5.      a. What is the difference between CSMA/CD and CSMA/CA?**  
**b. Explain Mesh Topology.**  
**c. What are the benefits of the Hamming code?**  
**d. What is Modem?**
  
- 6.      a. Differentiate between 'attenuation', 'distortion', and 'noise'.**  
**b. Differentiate between static IP addressing and dynamic IP addressing.**  
**c. Mention the maximum number of networks and hosts used in class A, B, and C network?**  
**d. What are the different types of transmission media?**