

**Model Paper – 1**  
**Hi-Tech Institute of Engineering & Technology**  
**B.C.A. Examination**  
**(Semester- 5<sup>th</sup>) Odd Semester**  
**Computer Network**  
**(BCA-503)**

Roll No.:.....

**Time: 3 Hours**

**Maximum Marks: 75**

**Faculty Name:** Ms. Tanu Garg

**Note:** Attempt questions from all sections as per instructions.

**Section – A**

**Attempt all five questions. Each question carries equal marks .Very short answer is required not exceeding 75 words. 5x3=15**

Q1. What is Communication channel?

Q2. Explain the following terms:

a. LAN

b. MAN

c. WAN

Q3. What do you understand by multiplexing?

Q4. Explain Switching?

Q5. Explain the term framing?

**SECTION-B**

**Attempt any two out of following 3 questions. Each question carries equal marks. Answer is required not exceeding 200 words. 2x7.5=15**

Q6. Explain the Guided and Unguided transmission medium?

Q7. Explain IPv4 gives its datagram format and also explain its fields?

Q8. Compare OSI and TCP/IP reference models?

**SECTION-C**

**Attempt any three out of following 5 questions. Each question carries equal marks. Answer is required in details. 3x15=45**

Q9. Write a Short note on:

a. PPP

b. Authentication

c. LCP

Q10. Explain the Error detection and correction methods?

Q11. Compare N-ISDN and B-ISDN?

Q12. Explain the Dijkstra's Algorithm with example?

Q13. What are elementary data link protocols?