

Course : III-B.Tech , I-SEM, Mid -I Branch : Information Technology( A&B)

**Subject: DCCN Duaration : 2 hr**

**Date: 30/09/2024 Max Marks:30**

**SET-2**

**Part –A**

**I. Answer all the below questions each question carry two marks 5\*2=10**

**BTL CO**

1. What is ATM Model? 4 1

2.List the different types of topologies? 2 1

3. Describe Error control and flow control in data link layer? 2 2

4.What is LRC? 5 2

5.why is IPV4 to IPV6 transition required? 2 3

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| **Part –B** |
| **II. Answer any three questions from the following** 4**\*5=20**  BTL CO  6. Explain about TCP/IP Reference Model with neat diagram? 2 1  7. Describe the components of data communication and various types of  Networks? 2 1  8. Discuss about the working of ALOHA system and CSMA/CD protocol. 3 2  9. Write algorithm for computing the CRC checksum and given the 4 2  data bits 1000111,computing hamming bits assuming even parity.  10.a)What is class ful addressing? 2 3  b)Draw and explain the format of IPV4 header in detail. 2 3  11.a)How internet is working? 2 3  b)Briefly explain about the ARP? 2 3 |

**SCHEME OF EVALUATION**

**Part –A**

| **SNO** | **THEORY** | **MARKS** | **TOTAL** |
| --- | --- | --- | --- |
| **1** | ATM Model | **2** | **2** |
| **2** | Types of Topologies | **2** | **2** |
| **3** | Error control and flow control | **2** | **2** |
| **4** | LRC | **2** | **2** |
| **5** | IPV4 to IPV6 transition | **2** | **2** |

**Part –B**

| **SNO** | **THEORY** | **MARKS** | **TOTAL** |
| --- | --- | --- | --- |
| **6** | TCP/IP Reference Model | **5** | **5** |
| **7** | components of data communication and various types of  Networks | **5** | **5** |
| **8** | working of ALOHA system and CSMA/CD protocol | **5** | **5** |
| **9** | CRC checksum | **5** | **5** |
| **10** | classful addressing, IPV4 header | **5** | **5** |
| **11** | internet is working, ARP | **5** | **5** |