

Code No.: R22CS58201PC

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**CMR ENGINEERING COLLEGE: : HYDERABAD**  
**UGC AUTONOMOUS**  
**I-M.TECH-II-Semester End Examinations (Supply) – March- 2024**  
**ADVANCED COMPUTER NETWORKS**  
**(CSE)**

[Time: 3 Hours]

[Max. Marks: 60]

**Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 10 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

**PART-A**

**(10 Marks)**

1. a) What is Hub and Switch? [1M]
- b) What device connects a LAN to a WAN? [1M]
- c) What are the functions of Ethernet? [1M]
- d) What is the IEEE standard of Wireless Ethernet? [1M]
- e) Define Multicasting? [1M]
- f) What do you mean by Autonomous system? [1M]
- g) Which of the TCP/IP model layers is responsible for breaking down the message into packets? [1M]
- h) Why is a client reliant on a server? [1M]
- i) Define HTTP ? [1M]
- j) What is P2P File sharing? [1M]

**PART-B**

**(50 Marks)**

2. Explain the Cyclic redundancy check with an example. [10M]
- OR**
3. Explain the Multiplexing concept in detail. [10M]
4. Explain Network-Layer Routing with an example. [10M]
- OR**
5. Explain Non-Least-Cost-Path algorithms with an example. [10M]
6. Give features of IPv6 in the context of advanced communication networks. [10M]
- OR**
7. Explain Node level multicast algorithm. [10M]
8. What are the merits and demerits of Client-Server and peer-to-peer paradigms. [10M]
- OR**
9. Explain about flow control and error control with respect to TCP. [10M]
10. With a neat sketch explain the UDP header format. [10M]
- OR**
11. Explain detail about the Domain Name System. [10M]

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