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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech IV Year I Semester Supplementary Examinations August-2022

INTERNETWORKING WITH TCP/IP

(Computer Science & Information Technology)

Time: 3 hours

Max. Marks: 60

(Answer all Five Units **5 x 12 = 60** Marks)

UNIT-I

- 1 **a** Explain the purpose of each layer in the OSI Model. **6M**
 b Discuss about Classful addressing in detail.. **6M**

OR

- 2 **a** What are the four levels of addresses used in an internet employing the TCP/IP protocols? **6M**
 b Write short notes on the following **6M**
 (i) Check sum calculation (ii) NAT

UNIT-II

- 3 **a** With a neat diagram explain the significance of ATMARP packet. **7M**
 b List and describe the five types of error reporting messages in ICMPv4. **5M**

OR

- 4 **a** How do you identify Physical address from Logical Address? Illustrate details. **8M**
 b Explain in detail about Debugging tools. **4M**

UNIT-III

- 5 **a** Explain with an example the two-node loop problem and also give the solutions to this problem. **8M**
 b Distinguish between Intra- and Inter- domain Routing. **4M**

OR

- 6 **a** Write Pseudo code for Bellman-Ford Algorithm. **7M**
 b Describe briefly about Path vector routing. **5M**

UNIT-IV

- 7 **a** What is UDP? Explain UDP Packet in detail. **6M**
 b Give the format of TCP segment header and explain the significance of each field. **6M**

OR

- 8 **a** Explain three-way handshaking for connection termination. **6M**
 b Discuss about applications of UDP. **6M**

UNIT-V

- 9 **a** How do you perform congestion control in TCP? **6M**
 b Explain ICMPV6 error-reporting messages. **6M**

OR

- 10 **a** What is Silly window syndrome? Give the two solutions to prevent it. **6M**
 b Discuss the five components of TCP Package and their interactions. **6M**

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