6M

O.P. Code: 16IT614

Reg. No:

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

B.Tech IV Year I Semester Supplementary Examinations August-2021 INTERNETWORKING WITH TCP/IP

(Computer Science & Information Technology)

Time: 3 hours Max. Marks: 60 (Answer all Five Units $5 \times 12 = 60$ Marks) UNIT-I a Compare between OSI and TCP/IP protocol suite. **6M** b Discuss the four levels of addresses used in an internet employing the TCP/IP **6M** protocols. OR a List and explain the various types of options in IPV4 header. **6M b** What are the Addressing types? Explain with an example **6M** UNIT-II a With neat diagrams explain the four different cases in which the services of ARP 8Mcan be used. **b** Illustrate the message types in ICMPv4. **4M** OR a Discuss the Internet Control Message Protocol. 7M**b** Explain in detail about Debugging tools. 5M UNIT-III a What are the types of BGP messages? Explain. **6M b** List the considerations used by RIP while directly implementing distance vector routing. **6M** a With an example explain distance vector routing algorithm. **5M b** Describe the types of links defined in OSPF. 7MUNIT-IV a Explain connection establishment in TCP using three-way handshaking. 7 **6M b** Sketch and explain about TCP segment. **6M** OR a Give the format of UDP header and explain the significance of each field. **6M b** What is a TCP Connection? Explain in detail. **6M UNIT-V** a Explain Silly window syndrome. Give the two solutions to prevent it. **6M b** Make a comparison between IPV4 and IPV6 headers. **6M** OR 10 a Discuss about the options. Explain with format. **6M b** List and discuss the five components of TCP Package and their interactions.