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

B.Tech III Year II Semester Regular Examinations July-2021

INTERNETWORKING WITH TCP/IP

(Computer Science & Information Technology)

Time: 3 hours

Max. Marks: 60

PART-A

(Answer all the Questions 5 x 2 = 10 Marks)

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|-----|--|----|----|
| 1 a | What is IP address? | L1 | 2M |
| b | Write short notes on ARP Package. | L1 | 2M |
| c | Write short notes about: Static versus Dynamic Routing Tables. | L1 | 2M |
| d | What is UDP? | L1 | 2M |
| e | Write short notes about: Error Messages. | L1 | 2M |

PART-B

(Answer all Five Units 5 x 10 = 50 Marks)

UNIT-I

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|-----|--|----|----|
| 2 a | Discuss the purpose of each layer in the TCP/IP protocol suite | L6 | 5M |
| b | Explain the various types of options in IPV4 header | L2 | 5M |

OR

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|-----|---|----|----|
| 3 a | Illustrate the significance of sub-network mask. | L2 | 5M |
| b | Explain how classless addressing address the problem of address depletion | L2 | 5M |

UNIT-II

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| 4 a | Write short notes on the ATMARF. | L1 | 5M |
| b | Write short notes on ICMP Query messages. | L1 | 5M |

OR

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|-----|--|----|----|
| 5 a | With a neat diagram explain the significance of ATMARF packet | L1 | 5M |
| b | List and describe the five types of error reporting messages in ICMPv4 | L1 | 5M |

UNIT-III

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|-----|--|----|----|
| 6 a | Explain with an example the concept of link state routing. | L2 | 5M |
| b | Describe the five different types of OSPF packets | L2 | 5M |

OR

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|-----|---|----|----|
| 7 a | Describe the types of links defined in OSPF. | L2 | 6M |
| b | Explain with an example the two-node loop problem. Also give the solutions to this problem. | L2 | 4M |

UNIT-IV

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|---|-------------------------------------|----|-----|
| 8 | Draw and explain about TCP segment. | L2 | 10M |
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| 9 a | List the typical applications that can benefit more from services of UDP than from those of TCP. | L1 | 5M |
| b | Discuss TCP features in detail. | L6 | 5M |

UNIT-V

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|------|--|----|----|
| 10 a | Make a comparison between IPV4 and IPV6 headers. | L2 | 5M |
| b | Explain ICMPV6 error-reporting messages. | L2 | 5M |

OR

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|------|------------------------------------|----|----|
| 11 a | Explain congestion control in TCP. | L2 | 5M |
| b | Describe the four TCP timers. | L6 | 5M |

END