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

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

DATA COMMUNICATION AND NETWORKING

(Electronics and Communication Engineering)

Time: 3 hours

Max. Marks: 60

PART-A

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

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| 1 | <p>a List the different network criteria.</p> <p>b Define hidden node problem.</p> <p>c How would you design Class A, Class B and Class C of IP?</p> <p>d What is the purpose of Domain Name System?</p> <p>e How the internet can be accessed by using cable?</p> | <p>L1</p> <p>L1</p> <p>L1</p> <p>L1</p> <p>L1</p> | <p>2M</p> <p>2M</p> <p>2M</p> <p>2M</p> <p>2M</p> |
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PART-B

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

UNIT-I

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| 2 | <p>a Explain different types of Networks.</p> <p>b Write about Protocol and Standards.</p> | <p>L2</p> <p>L1</p> | <p>5M</p> <p>5M</p> |
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| 3 | <p>a Discuss the features of Data link layer.</p> <p>b Write brief note on the error control techniques.</p> | <p>L3</p> <p>L2</p> | <p>5M</p> <p>5M</p> |
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UNIT-II

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| 4 | <p>a Define Ethernet in wired LANs. Write down the name of Different generations of Ethernet.</p> <p>b Sketch a diagram of Ethernet frame & explain all the parts.</p> | <p>L1</p> <p>L2</p> | <p>5M</p> <p>5M</p> |
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| 5 | <p>a Illustrate the working of CSMA/CD protocol with necessary diagrams.</p> <p>b Discuss about the working of Token Ring.</p> | <p>L4</p> <p>L3</p> | <p>6M</p> <p>4M</p> |
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UNIT-III

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| 6 | <p>Explain IP Datagram format with proper diagram.</p> | <p>L2</p> | <p>10M</p> |
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| 7 | <p>a Discuss the features of TCP.</p> <p>b Explain the segment format for TCP.</p> | <p>L2</p> <p>L2</p> | <p>5M</p> <p>5M</p> |
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UNIT-IV

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| 8 | <p>Explain the architecture and service of e-mailing system.</p> | <p>L2</p> | <p>10M</p> |
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| 9 | <p>a Describe the characteristics of ATM.</p> <p>b Explain about ports and sockets in communication protocol.</p> | <p>L2</p> <p>L2</p> | <p>5M</p> <p>5M</p> |
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UNIT-V

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| 10 | <p>a What are SLIP and PPP?</p> <p>b Compare SLIP and PPP.</p> | <p>L1</p> <p>L4</p> | <p>5M</p> <p>5M</p> |
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| 11 | <p>a Discuss the two DSL standards.</p> <p>b Discuss the different ways of accessing the internet.</p> | <p>L5</p> <p>L6</p> | <p>5M</p> <p>5M</p> |
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END