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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)**B.Tech III Year II Semester Supplementary Examinations February-2022****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? | 2M |
| | b | Write short notes on ARP Package. | 2M |
| | c | What is meant by Routing Protocol? | 2M |
| | d | What are the UDP Applications? | 2M |
| | e | What is Informational Messages? | 2M |

PART-B

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

UNIT-I

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|---|----------|------------------------|-----------|
| 2 | | Write notes about | |
| | a | IPV4 Options | 5M |
| | b | Check sum calculation. | 5M |

OR

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|---|----------|--|-----------|
| 3 | a | Discuss the four levels of addresses used in an internet employing the TCP/IP protocols. | 5M |
| | b | Explain the fields related to fragmentation and reassembly of an IP datagram. | 5M |

UNIT-II

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|---|----------|---|-----------|
| 4 | a | With neat diagrams explain the four different cases in which the services of ARP can be used. | 5M |
| | b | Explain the various tools of links used in the internet for debugging. | 5M |

OR

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| 5 | | Write short notes on the following | |
| | a | ATMARP. | 5M |
| | b | ICMP Query messages. | 5M |

UNIT-III

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| 6 | a | Explain with an example the two-node loop problem. Also give the solutions to this problem. | 5M |
| | b | Describe the types of links defined in OSPF. | 5M |

OR

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|---|----------|--|-----------|
| 7 | a | Explain with an example the concept of link state routing. | 6M |
| | b | Describe the five different types of OSPF packets. | 4M |

UNIT-IV

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| 8 | | What is a TCP Connection? Explain in detail. | 10M |
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OR

- 9 a List the typical applications that can benefit more from services of UDP than from those of TCP. **5M**
b Discuss TCP features in detail. **5M**

UNIT-V

- 10 What is UDP? Explain UDP Packet in detail. **10M**

OR

- 11 a Give the format of UDP header and explain the significance of each field. **5M**
b Explain three-way handshaking for connection termination. **5M**

*****END*****