Code No: R32041 **R10** **Set No: 1**

III B.Tech. II Semester Regular Examinations, April/May -2013

COMPUTER NETWORKS

(Comm to Electronics and Communication Engineering & Electronics and Computer Engineering)

Time: 3 Hours **Max Marks: 75**

Answer any FIVE Questions
All Questions carry equal marks
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1. a) Differentiate between OSI and TCP\IP reference models.
   b) Explain about the design of ARPANET.

2. What is guided media? Explain about various types of guided media available.

3. a) What is framing? Explain its purpose in data link layer.
   b) What is sliding window protocol? Explain.

4. a) What are the different collision-free protocols? Explain.
   b) How is Manchester encoding implemented? Explain.

5. a) How do you implement hierarchical routing ?
   b) What are the advantages and disadvantages of flooding?

6. a) How do you implement broadcast routing? Explain.
   b) How is congestion prevented in different layers? Explain

7. a) What are the different transport primitives? Explain.
   b) Explain about AAL layer protocol.

8. a) Define WWW. Explain about dynamic web documents.
   b) How do you provide network security in application layer?

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Code No: R32041 **R10** **Set No: 2**

III B.Tech. II Semester Regular Examinations, April/May -2013

COMPUTER NETWORKS

(Comm to Electronics and Communication Engineering & Electronics and Computer Engineering)

Time: 3 Hours **Max Marks: 75**

Answer any FIVE Questions
All Questions carry equal marks
*****

1. a) What is WAN? Explain.
   b) Explain the architecture of internet.

2. What is wireless transmission? Explain about various types of wireless transmission including their merits and drawbacks.

3. a) Discuss about error correcting and error detecting codes in detail.
   b) What is selective- repeat protocol? Explain.

4. a) Define CSMA and discuss about Persistent CSMA, Non-Persistent CSMA and CSMA with collision detection.
   b) How do you implement wireless LAN protocols in hidden station and exposed stations? Explain.

5. a) Compare the virtual circuit and datagram subnets.
   b) What is distance vector routing? Explain its drawbacks.

6. a) Explain about tunneling.
   b) Define IP protocol and explain about IPV4 protocol.

7. a) Explain about ATM reference model.
   b) What is the need to implement TCP protocol in transport layer? Explain

8. Write a short note on the following
   (a) E-mail (b) DNS (c) Congestion control (d) HTTP.

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Code No: R32041 **R10** **Set No: 3**

III B.Tech. II Semester Regular Examinations, April/May -2013

COMPUTER NETWORKS

(Comm to Electronics and Communication Engineering & Electronics and Computer Engineering)

Time: 3 Hours **Max Marks: 75**

Answer any FIVE Questions
All Questions carry equal marks
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1. a) Explain about the TCP\IP reference model in detail.
   b) What is Ethernet? Explain.

2. a) Differentiate between circuit switching and packet switching.
   b) Explain about twisted pair and coaxial cable.

3. a) What is the purpose of PPP? Explain.
   b) Explain about the GO-BACK-N protocol in detail.

4. Explain about various kinds of IEEE802.X standards.

5. a) What is routing? How is shortest path routing implemented?
   b) What is multi-cast routing? Explain.

6. a) What is the need of congestion control in networks? Explain.
   b) What is dynamic routing? Explain.

7. a) Differentiate between TCP and UDC protocols.
   b) How TCP protocol is implemented in the internet transport protocol.

8. Write short notes on the following
   (a) WWW (b) LAN (c) DNS (d) Network layer

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Code No: R32041 **R10** **Set No: 4**

III B.Tech. II Semester Regular Examinations, April/May -2013

COMPUTER NETWORKS

(Comm to Electronics and Communication Engineering & Electronics and Computer Engineering)

Time: 3 Hours **Max Marks: 75**

Answer any FIVE Questions
All Questions carry equal marks
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1. a) What is OSI reference model? Explain.
   b) What is 802.11? Explain.

2. a) Explain the mechanism of fiber optics in detail..
   b) Explain about radio and microwave transmissions.

3. a) Explain about various design issues of DLL.
   b) What is HDLC? Explain.

4. a) Differentiate between PURE ALOHA and SLOTTED ALOHA.
   b) What is bridge? Explain its limitations.

5. What are Non-adaptive and adaptive routing algorithms? Explain.

6. a) Discuss about ATM network in detail.
   b) Define IP address and explain about mobile IP.

7. a) How is UDP protocol implemented in the internet transport protocol.
   b) List out the major design issues of transport layer.

8. Write a short note on the following:
   (a) SNMP (b) MAN (c) Internet (d) Bridge

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