Code No: RT32053 **R13** SET - 1

III B. Tech II Semester Regular/Supplementary Examinations, April - 2017

COMPUTER NETWORKS

(Common to Computer Science Engineering and Information Technology)

Time: 3 hours Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
2. Answering the question in **Part-A** is compulsory
3. Answer any **THREE** Questions from **Part-B**

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PART –A

1	a)	Define Arpanet	[4M]
	b)	What is multiplexing	[3M]
	c)	What is active document	[3M]
	d)	Define Ten-Gigabit Ethernet	[4M]
	e)	What is fixed size framing	[4M]
	f)	What is multicast and broadcast	[4M]

PART -B

2	a)	Define different Network Topologies.	[7M]
	b)	Explain about WAN, LAN, MAN in details.	[9M]
3	a)	Explain different types of switching techniques along with their advantages and disadvantages.	[8M]
	b)	Explain the frequency division multiplexing with a suitable example.	[8M]
4	a)	Explain the frame format and transition phases of PPP.	[8M]
	b)	Compare various sliding window protocols of data link layer.	[8M]
5	a)	Why there is no need for CSMA/CD on a full-duplex Ethernet LAN? Explain.	[8M]
	b)	Explain the working of Carrier Sense Multiple Access protocol.	[8M]
6	a)	Briefly discuss about the addressing mechanism of IEEE 802.11.	[8M]
	b)	Discuss in detail about standard Ethernet.	[8M]
7	a)	What is a URL and explain about its components.	[9M]
	b)	Explain about HTML with its functionalities.	[7M]

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Code No: RT32053 **R13** SET - 2

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COMPUTER NETWORKS

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Time: 3 hours Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B)**
2. Answering the question in **Part-A** is compulsory
3. Answer any **THREE** Questions from **Part-B**

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PART –A

1	a)	What is the difference between LAN and WAN?	[5M]
	b)	Define virtual circuit?	[4M]
	c)	What is URL?	[3M]
	d)	Discuss about go back N protocol?	[3M]
	e)	What is variable size framing?	[4M]
	f)	What is channelization?	[3M]

PART -B

2	a)	What is network architecture? What is layered architecture? Explain design issues for the layers?	[7M]
	b)	List the similarities and dissimilarities between OSI & TCP/IP reference models. ?	[9M]
3	a)	Explain how TDM works. Why statistical time division multiplexing is more efficient than TDM?	[5M]
	b)	What is multiplexing? In what situations it can be used?	[5M]
	c)	Compare and contrast TDM, STDM and FDM?	[6M]
4	a)	What is meant by PPP? Discuss about framing and transmission phase in it. ?	[8M]
	b)	Explain the working of stop- and- wait flow control protocol. ?	[8M]
5	a)	Explain TDMA with a suitable example?	[7M]
	b)	What is meant by random access method? Give examples of random access protocols. ?	[9M]
6	a)	Explain about Manchester encoding with a suitable example?	[8M]
	b)	Explain the Fast Ethernet MAC sub layer. ?	[8M]
7	a)	What is WEB Documents? Explain with its categories?	[9M]
	b)	Explain about proxy server in detail?	[7M]

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Code No: RT32053 **R13** SET - 3

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COMPUTER NETWORKS

(Common to Computer Science Engineering and Information Technology)

Time: 3 hours Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
2. Answering the question in **Part-A** is compulsory
3. Answer any **THREE** Questions from **Part-B**

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PART –A

1	a)	Explain about BUS topology ?	[4M]
	b)	Define frame relay ?	[3M]
	c)	Define WWW?	[2M]
	d)	List various services provided by data link layer to network layer. ?	[4M]
	e)	What is ALOHA?	[5M]
	f)	What is addressing?	[4M]

PART -B

2	a)	What is internet? Explain birth of internet. ?	[6M]
	b)	Explain OSI reference model and compare it with TCP/IP. ?	[10M]
3	a)	How the message switching implemented in circuit switching networks? Explain with an example	[8M]
	b)	Discuss briefly about virtual circuit networks?	[8M]
4	a)	Describe the services provided by PPP protocol. Also, list some services which does PPP does not provide. ?	[9M]
	b)	Give the frame structure of HDLC. Explain each field. ?	[7M]
5	a)	What is channelization? Explain various channelization protocols. ?	[7M]
	b)	List the differences between a unicast, multicast and broadcast address. ?	[9M]
6	a)	Discuss in detail about fast Ethernet. ?	[8M]
	b)	What are the common Fast Ethernet implementations? Give the purpose of NIC?	[8M]
7	a)	What is WEB Documents? Explain with its categories?	[9M]
	b)	Explain about HTTP Request Message Format ?	[7M]

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Code No: RT32053 **R13** SET - 4

III B. Tech II Semester Regular/Supplementary Examinations, April - 2017

COMPUTER NETWORKS

(Common to Computer Science Engineering and Information Technology)

Time: 3 hours Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
2. Answering the question in **Part-A** is compulsory
3. Answer any **THREE** Questions from **Part-B**

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PART –A

1	a)	What is internet?	[2M]
	b)	Give examples for frequency division multiplexing	[4M]
	c)	What is switching?	[4M]
	d)	What is framing?	[4M]
	e)	What is uncast?	[4M]
	f)	Define Gigabit Ethernet?	[4M]

PART -B

2	a)	What is Open Systems Interconnect (OSI) reference model? What are the principles used in defining the OSI layers. ?	[8M]
	b)	Explain different network topologies. ?	[8M]
3	a)	Distinguish between FDMA and TDMA?	[7M]
	b)	Explain the concept of multiplexing. Why is multiplexing more cost effective?	[9M]
4	a)	Discuss about the configuration and control fields of HDLC. ?	[5M]
	b)	Discuss about unrestricted simplex protocol. ?	[6M]
	c)	What is framing? Why it is implemented in Data Link Layer?	[6M]
5	a)	Discuss about code division multiple access?	[8M]
	b)	What is meant by vulnerable period? Show that the vulnerable time period of slotted ALOHA is half of the pure ALOHA?	[8M]
6	a)	What are the advantages of dividing an Ethernet LAN with a bridge? Give the relationship between a switch and a bridge. ?	[8M]
	b)	Discuss in detail about standard Ethernet?	[8M]
7	a)	Explain about HTTP Response Message Format?	[7M]
	b)	Explain about static document & dynamic document?	[9M]

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