20/2/18 PM

Reg. No.:						

## Question Paper Code: 21293

B.E/B.Tech. DEGREE EXAMINATION, MAY/JUNE 2013.

Seventh Semester

Electronics and Communication Engineering

CS 2060 / CS 807 / EC 1009 – HIGH SPEED NETWORKS

(Common to Eighth Semester - Computer Science and Engineering)

(Regulation 2008)

(Common to PTCS 2060 – High Speed Networks for B.E (Part-Time) Seventh Semester – ECE – Regulation 2009)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

 $PART A - (10 \times 2 = 20 \text{ marks})$ 

- 1. Give few examples for High Speed networks.
- 2. Draw the ATM cell structure.
- 3. What is meant by the term "Congestion" in networks?
- 4. What are the types of queuing models?
- 5. What is exponential RTO backoff?
- 6. Define ABR and GFR.
- 7. Compare Integrated Services architecture and Differentiated Services architecture.
- 8. What is the significance of Random Early Detection technique?
- 9. What are the goals of RSVP?
- 10. List the main functions of RTP and RTCP.

## PART B — $(5 \times 16 = 80 \text{ marks})$

11.	(a)	(i)	Explain ATM Protocol architecture with a neat block diagram.	(10)
		(ii)	Briefly discuss ATM service categories.	(6)
		-	$\mathbf{Or}$	
•	(b)	(i)	Explain in detail about 802.11 architecture.	(10)
	•	(ii)	Write short notes on	•
			(1) Wireless LANs	
	-		(2) Wi-Fi Networks	
			(3) WiMax Networks.	(6)
12.	(a)	(i)	Explain Single Server Queuing model in detail.	(10)
		(ii)	Discuss briefly the effects of congestion in networks.	(6)
			$\mathbf{Or}$	
	(b)	Wri	te notes on congestion control techniques used in	
		(i)	Packet Switching Networks	(8)
		(ii)	Frame relay Networks.	(8)
13.	(a)	(i)	Explain TCP congestion control in detail.	(10)
	•	(ii)	Discuss KARN's algorithm.	(6)
			Or	
	(b)	(i)	Explain ABR Traffic management in detail.	(8)
		(ii)	Explain GFR Traffic management in detail.	(8)
14.	(a)	(i)	Briefly discuss the various queuing disciplines of integservices.	rated (10)
		(ii)	Discuss the advantages and downsides of Integrated Serarchitecture.	rvices (6)
			Or	
	(b)	(i)	Explain Differentiated Services Architecture in detail.	(10)
		(ii)	Explain the benefits of Random Early Detection algorithm.	(6)

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5.	(a)	Exp	lain the following	<b>y</b>			•		
		(i)	RSVP		- •			(10)	
	· · · · · · · · · · · · · · · · · · ·	(ii)	MultiProtocol I	Label Switch	ning mecha	mism.		(6)	
				Or	•		•		•
<b>.</b> -	(b)	Exp	lain the following	3			· · · · · · · · · · · · · · · · · · ·	•	
		(i)	RTP		· .			(10)	
٠.		(ii)	RTCP.	· · · · · · · · · · · · · · · · · · ·	· •	•		(6)	