Sardar Patel University

M.Sc. (Electronics & Communication) (Semester-IV) Examination

Day & Date: Saturday, 09-04-2016

Time: 2:30 p.m. to 5:30 p.m.
Subject: Telecommunication Switching System

Paper No. PS04CELC03

Instructions: Marks: 70 Figures to the right indicate marks.				
Q-1	Multiple Choice Questions:			
1.	With n inlet and m outlet, when n=m, then the switching network is called a			
	a) Symmetric network	b) Asymmetric network		
	e) non symmetric network	c) Folded network		
2.	In the form of communication the information transfer takes place in both directions simultaneously is called as			
	a) Half duplex	b) Full duplex		
	c) simplex	c) none		
3.	The switching network designed to provide N/2 simultaneous path is called network.			
	a) Non blocking	b) folded		
	c) blocking	c) symmetric		
4.	Strowger switching system is the control system.			
	a) direct	b) indirect		
	c) semi direct	d)both a & b		
5.	The traffic in telecommunication network is measured in			
	a) ccs	b) erlang		
Ý.	c) cm	d)All of above		
6.	The ratio of number of successful call	s to the number of attempt call is called as		
	a) busy hour call attempt	b) call completion rate		
	c) busy hour	d) peak busy hour		
7.	determines the routes for the call through the network and also determines the charging method.			
	a) line unit	b) initial translator		
	c) register finder	d) final translator		
8.	The number of call attempt in the busy hour is called			
	a) busy hour call attempt	b) call completion rate		
	c) busy hour	d) peak busy hour		

Q-2	Answer in short. (Any SEVEN)		[14]
1.	Define blocking probability.		[7.4]
2.	Summarize the classification of switching system.		
3.	What is dial tone? When its works?		
4.	What are the drawbacks of rotary dial telephone?'		•
5.	Give the procedure for establishing connection of crossbar switch.		
6.	What is the function of initial translator?		:
· 7.	Explain grade of service (GOS).		
8.	Explain Busy hour.		
9.	Explain day to busy hour traffic ratio.		
Q-3 (a)	Explain impulsing circuit of rotary dial telephone in detail		(6)
(b)	Explain different signaling function (tones) in detail.		(6)
	OR		
(b)	Write a short note on Strowger switching components with necessary diagram.		(6)
Q-4 (a)	Explain block diagram of common control switching system.		(6)
(b)	Describe the design consideration for touch tone signaling system.		: (6)
	OR .		(9)
(b)	Write a short note on Crosspoint technology.		. (6)
			(6);
Q-5 (a)	Write a short note on Distributed SPC.	•	(6)
			(6)
(b)	Describe in detail time division time switching.		(6)
	OR		(6)
(b)	Write a short note on centralized SPC.	•	
(b)			(6)
Q-6 (a)	Explain network traffic load and their parameters in detail.		
	road and their parameters in detail.	•	(6)
(b)	Explain blocking models and loss estimates.		(6)
	OR		(6)
(b)	Write a short note on birth-death process related to traffic engineering.		
- 1	areas process related to traffic engineering.		(6)