USN

Eighth Semester B.E. Degree Examination, Dec.2013/Jan.2014 **Wireless Communication**

		Tx	ne: 3	3 hrs. Max. Max. Max. Max. Max. Max. Max. Max	arks:100
		J	C	Note: Answer FIVE full questions, selecting at least TWO questions from each part. PART - A	* *] -
ice.				PART - A	
ract		1	a.	Explain briefly the evolution of different generations of cellular systems.	
g blank pages. = 50, will be treated as malpractice.		•	b.	With a neat timing diagram, explain the AMPS hand-off operation.	(10 Marks) (10 Marks)
nted a		2	a.	With the help of net block diagram, explain the working of a subscriber device.	(08 Marks)
tre			b.	Explain the functions of VLR, HLR and MSC.	(06 Marks)
our answers, compulsority draw diagonal cross lines on the remaining blank pages identification, appeal to evaluator and /or equations written eg, $42+8 = 50$, will be			c.	Explain the subscriber device identification parameters:	(06 Marks)
), 라		3	a.	What factors determine frequency re-use distance?	(O.4 Mandas)
ta E.S.		3	b.	Explain the different power saying schemes.	(04 Marks)
. <u>₹</u>			υ.		(06 Marks)
maii 3, 42			C.	Discuss the different capacity expansion technique in cellular communication.	(10 Marks)
5 E		4	a.	With a neat schematic explain the working of GSM network and system architectu	ire
o th		7	и.	With a heat schematic explain the working of GSW hetwork and system are incerta	(10 Marks)
55 OH			b.	Discuss with the help of a neat diagram the working of signaling model also e	
Jing Sign				different protocols.	(10 Marks)
oss Tuat					
2 2				PART - R	
g or a		5	а	What is MSRN? What is the purpose of MSRN? Explain the GSM call setup	using the
liag ran			٠	MSRN.	(10 Marks)
ato o			Ъ.	With a neat diagram explain:	(10 ///4/183)
를 다 하는 기계를 다 되었다.			υ.	i) GSM service request operations.	
ار دورو				ii) GSM authentication operations.	(10 Marks)
ulso al t				n) OSW authoritication operations.	(10 Marks)
umpel appe		6	a.	With a neat diagram, explain the elements of the CDMA 2000 packet core network	ž
3, E		U	и.	with a fical diagram, explain the elements of the editin 2000 packet core fictions	 (10 Marks)
zatí,			b	Axplain the generation of the CDMA paging channel signal.	(10 Marks)
ansv Itific			\circ	, ×	
your a	•	Z	G,	Why is the free space path loss model in-appropriate to apply to wireless cellular	operation? (04 Marks)
ting ng	N	1. 3	b.	Describe FHSS and DSSS operation.	(08 Marks)
울(종(10		c.	If a certain CDMA radio base station can output a 50 watt carrier signal, how muc	
E S			٠.	•	(08 Marks)
Ę Š				on the phot elamier. How much power on the synolicine incliner.	(vo mains)
ortant Note: f. On completing ye 2. Any revealing of		8	a.	Discuss the design issues of IEEE 802.11 and also provide the working of BDS, D	S and ESS
ਜ਼ ::		~	***	networks.	(10 Marks)
Ž			b.		(04 Marks)
ant			c.		(06 Marks)
Ĕ			U.	Describe the differences octween widhin and within.	(ON MINIMS)