

JK LAKSHMIPAT UNIVERSITY, JAIPUR

INSTITUTE OF ENGINEERING AND TECHNOLOGY

EndTerm Examination (Regular/Backlog), November 2016

B. Tech in Computer Engineering, Semester VII

Roll No.....

COURSE CODE & TITLE: 702 / Mobile Computing

Time: 3 hours

Max. Marks: 100

Instructions to students:

1. Do not write anything other than your roll number on question paper.
2. Assume suitable data wherever required and mention it clearly.
3. Writing appropriate units, nomenclature, and drawing neat sketches/schematics/ flow chart wherever, required are an integral part of the answer.

Q.1A	Objective type multiple choice questions (10 questions @ 1 mark)	10
i.	GSM is an example of a. TDMA cellular systems b. FDMA cellular systems c. CDMA cellular systems d. SDMA cellular systems	
ii.	FDMA is the division of a. Time b. Phase c. Spectrum d. Amplitude	
iii.	When a fraction of assigned channel is reserved for handoffs, it is a. Guard channel concept b. Fixed channel c. Dynamic channel assignment d. None of the above	
iv.	Bluetooth transceiver devices operate in _____ band. a) 2.4 GHz ISM b) 2.5 GHz ISM c) 2.6 GHz ISM d) 2.7 GHz ISM	
v.	An interconnected collection of piconet is called a) scatternet b) micronet c) mininet d) none of the mentioned	
Q.2	Short answer type questions (4 questions @ 2.5 marks)	10
a.	What are the different services provided by GSM?	
b.	What is soft handoff?	
c.	What do you mean by transaction oriented TCP?	
d.	What do you mean by cell in mobile communication? Explain cell structure.	
Q.3A	Explain any five property of MANET.	05
Q.3B	Describe with suitable diagram how cellular phone call is made	05
Q.4A	Explain the process of agent advertisement, discovery and registration process in mobile computing.	05
Q.4B	Write the difference between fast retransmit and fast recovery process.	05
Q.5A	Describe indirect TCP. List out the advantages and disadvantages of indirect	05

	TCP.	
Q.5B	Write short notes on selective retransmission.	05
Q.6A	Why is timeout freezing required in case of mobile nodes?	05
Q.6B	With a neat diagram explain SAP architecture.	05
	OR	
Q.6B	What is the requirement of specialized MAC?	05
Q.7A	What do you mean by Ad Hoc Network? What are the advantages and disadvantages of Ad Hoc Network?	05
Q.7B	What do you mean by scatternet?	05
	OR	
Q.7B	Explain snooping TCP and mobile TCP.	05
Q.8A	What do you mean by push based mechanism in mobile communication?	10
Q.9A	What do you mean by attack? Explain any three attacks.	10
Q.9B	Explain the following (Any Two)	10
	a. Context Aware Computing	
	b. Client Server Computing	
	c. Quality of Service	
	OR	
Q.9B	Explain different elements of GSM network architecture with suitable diagram.	10