

**MANIPAL UNIVERSITY** 

## SCHOOL OF INFORMATION SCIENCES THIRD SEMESTER MASTER OF SCIENCE- MSc( INFORMATION SCIENCE) DEGREE EXAMINATION November-2017 DATE : Wednesday, November 22, 2017 TIME : 10:00AM - 1:00PM Mobile computing [MIS 609.3]

Marks: 100

Duration: 180 mins.

## Answer all the questions.

1)	What are the advantages and limitations of wireless communications? Explain the contributions of radio waves for wireless transmission.	(10)
2)	What is multipath propagation? Explain various multipath propagation effects with example	(10)
3)	<ul> <li>(a). Define the term Cell and draw the seven-cell repeating pattern.</li> <li>(b). Calculate the signal to interference ratio (S/I) of a seven-cell repeating pattern.</li> <li>(c). write a short note on cell sectoring</li> </ul>	(10)
4)	<ul><li>(a). Define the following terms: (i) Call blocking (ii) Call termination</li><li>(b). Write a short note on satellite propagation.</li></ul>	(10)
5)	With neat block diagram explain all the functional blocks in RSS of a GSM.	(10)
6)	Explain the following (a). HLR (b). VLR (c) EIR	(10)
7)	Explain various States of a Bluetooth device with neat diagram	(10)
8)	How the mobility is performed through indirect routing when a mobile is moving between networks. Explain with suitable diagram	(10)
9)	Write a short note on a. Snooping TCP b. Mobile TCP	(10)
10)	What is session mobility? Explain the components involved in session mobility.	(10)

-----End-----