Mobile Computing Assignment - I

- 1. Discuss the principle and operations of cellular wireless networks in detail.
- 2. What is the principle of frequency reuse in context of cellular network, list the ways of increasing the capacity of a cellular system?
- 3. What is hidden and exposed terminal problem?
- 4. Explain how multiple access with collision avoidance scheme avoid hidden and exposed terminal problem?
- 5. Explain how mobile terminated call works detailing the role of HLR and VLR.
- 6. What are the modifications required to an existing GSM network to be upgraded to GPRS? Explain with the help of a neat diagram.
- 7. What is hand over? Draw a model to illustrate the effects of handover.
- 8. Explain in detail about the motivation for a specialized Medium Access Control (MAC) layer.
- 9. Compare the mechanisms of SDMA, TDMA, FDMA and CDMA.
- 10. Explain clearly the various schemes for Medium Access Control with Time Division Multiple Access (TDMA).
- 11. Explain the security algorithms in GSM.

Submit on: 20th August, 2018.