

Exam. Code : 208602

Subject Code : 5282

**M.Sc. Information Technology 2<sup>nd</sup> Semester  
MOBILE COMPUTING**

**Paper—MIT-201**

Time Allowed—3 Hours]

[Maximum Marks—100

**Note** :— Attempt any **FIVE** questions. All questions carry equal marks. Use of non-storage and non-programmable calculators is allowed for examinees.

1. Present an overview of various techniques, generations and types of wireless communication systems. 20
2. Discuss wireless (LAN) communication standard. Also describe wireless in local loop and LMDS and MMDS. 20
3. Describe the following concepts in cellular wireless context :
  - (a) Frequency spectrum and frequency reuse. 10
  - (b) Channel assignment strategies and handoff strategies. 10
4. Discuss the fundamental concepts and importance of antenna in wireless communication. Also discuss various types of antenna. 20
5. Present and explain the general system architecture of a cellular network. Also describe the functioning of individual elements and overall system. 20

6. What do you understand by channel interference in cellular mobile systems ? Discuss co-channel and non co-channel interferences. Also, describe ways to reduce co-channel interference. 20
7. Describe WAP model, its architecture and its working. Also describe WAP gateway and WAP protocol stack. 20
8. Write detailed notes on the following :
- (a) GPRS mobile data network. 10
  - (b) GSM telephone system. 10