

Exam. Code : 208602

Subject Code : 4667

M.Sc. Information Technology 2nd Semester

MOBILE COMPUTING

Paper : MIT-201

Time Allowed—Three 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. Describe the present state of wireless and mobile communication system highlighting various evolutionary stages therein. 20
2. Describe in detail 2G, 2.5G, 3G and 4G wireless network standards in ample details. 20
3. Describe following concepts in cellular wireless context :
 - (a) FDMA
 - (b) CDMA
 - (c) TDMA 20
4. Write notes on following :
 - (a) Wireless in local loop 6
 - (b) Antenna and its types 8
 - (c) Co-channel interference. 6

5. Describe the architecture, elements and operations of cellular networks. Also discuss performance evaluation criteria for cellular networks. 20
6. Describe following in wireless application protocol context :
- (a) WAP architecture
 - (b) Wireless LAN
 - (c) Wireless PAN. 20
7. Describe following topics :
- (a) Mobile network layer
 - (b) Mobile transport layer
 - (c) Mobile data networks. 20
8. Write notes on following :
- (a) GSM architecture
 - (b) GSM bearer services
 - (c) GSM-SMS architecture
 - (d) GSM protocol hierarchy. 20