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M. Tech. 2nd Semester (CSE) CBCS Scheme  
(Elective-I) Examination, July-2022

**MOBILE AND WIRELESS COMMUNICATION**

**Paper-MTCSE22D1**

Time allowed : 3 hours]

[Maximum marks : 100

*Note : Attempt five questions, selecting one question from each section and question no. 1 is compulsory.*

1. Explain the following : 20
- (a) How Cellular system works ? Explain.
  - (b) Define Multiplexing and its types.
  - (c) What is Modulation ? Explain.
  - (d) How handover is done in satellite system ? Explain.

**Section-A**

2. (a) Explain various types of antenna and their characteristics. 10
- (b) Write a short note on following : 10
- (i) Spread spectrum
  - (ii) Multiplexing
3. (a) Explain the concept of GSM Mobile service architecture in detail. 10
- (b) Compare classical ALOHA and slotted ALOHA. 10

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( 2 )

**22645**

**Section-B**

4. (a) How MAC layer management is done in IEEE 802.11 ? Explain. 10
- (b) Compare and contrast GEO, LEO and MEO. 10
5. Write notes on following : 20
- (a) Security and Link Management
- (b) IEEE 802.11 protocol architecture

**Section-C**

6. (a) What is mobile IP ? How IP packet delivery is done in mobile IP ? 10
- (b) Explain agent advertisement and discovery process in detail. 10
7. (a) Discuss the concept of hierarchical algorithm in detail. 10
- (b) Explain Dynamic Host Configuration Protocol in detail. 10

**Section-D**

8. (a) How transaction-oriented TCP works ? Explain in detail. 10

**22645**

( 3 )

**22645**

- (b) Explain the difference between traditional TCP and indirect TCP in detail. 10
9. Write short note on following : 20
- (a) HTML
- (b) Wireless transaction protocol

**22645**