

T.E./COMP/Sem-VI/CBCGS/R-19/C Scheme/ Sub:- MC/S.H. 2024

Date: -10/12/2024

BP. Code: -10068142

Marks : 80

Time : 3 Hours

**Instructions to Candidates**

1. Question Number 1 is Compulsory, solve any 3 from Remaining Questions
2. Please Specify your answers with neat sketch wherever Necessary
3. Assume any suitable Data and Mention the same in your answer.

- Q1. a) Compare all Mobile Generations i.e. 1G, 2G, 3G, 4G and 5G. 10
- b) Explain GPRS Architecture in detail. 10
- Q2. a) Compare Infrastructure Based Network with Ad-hoc network 05
- b) Explain GSM Authentication in brief 05
- c) Explain in detail GSM System Architecture and Describe Function of Each Block. 10
- Q3 a) How IP Packet Delivery Takes Place to and from Mobile Node? Explain in detail. 10
- b) Explain Signal Propagation in detail. What are various Signal Propagation Effects? 10
- Q4 a) Explain Mobile Terminated and Mobile Originated Call in detail. 10
- b) Explain UMTS Architecture. 10
- Q5 a) What is Snooping TCP? What are it's advantages and Disadvantages? 10
- b) Explain need of Mobile Communication in various areas. 10
- Q6 a) Write a Short Note on the following 10
- 1) Tunnelling and Encapsulation Mobile
  - 2) Agent Advertisement and Agent Discovery
- b) Draw a neat sketch of Bluetooth protocol Stack and explain the same 10