

(3 Hours)

Total Marks: 80

N.B (1) Question no. 1 is compulsory

(2) Attempt any three questions from the remaining five questions

(3) All question carry equal marks

(4) Figures to the right indicate full marks

(5) Make suitable assumption wherever necessary and justify them.

- Q1. (a) Why do you need QOS and security in mobile IP? Explain. 5
(b) What is DCF (Distributed Coordination function) in IEEE 802.11 MAC? 5
(c) Discuss the problem in free space signal propagation. 10
- Q2. (a) Explain GSM System Architecture with suitable diagram. 10
(b) What is modulation and signaling and what are the basic concepts of ISM Band? Explain. 10
- Q3. (a) Explain in brief details of W-CDMA with neat labeled diagram. 10
(b) What are the different technologies is used in physical link layer? Explain. 10
- Q4. (a) Explain DECT system architecture in detail. 10
(b) Explain the different types of Handover in GSM. 10
- Q5. (a) What are the different broadcast methodologies and what power management Issues are used in mobile IP? 10
(b) What is replication and Adaptation in mobile IP? 5
(c) Differentiate between 4G and 5G next generation technology. 5
- Q6. Write short notes (Attempt any four) 20
(a) Bluetooth
(b) Localization and Calling in GSM
(c) CODA
(d) LTE
(e) UMTS
(f) Mobile Middleware file system