DEPT. OF ELECTRONICS AND COMMUNICATION ENGINEERING
END SEMESTER EXAMINATION MAY 2024
Introduction to Communication Systems – ECE-4304

Q1. List five advantages and disadvantages of optical fiber communication. (4)

Q2. How do GPS receivers distinguish between the different satellite signals all transmitted on the same frequencies? (4)

Q3. What is RFID and near-field communications? (2)

Q4. Explain the terms with examples (a) Simplex (b) Full Duplex (c) Half Duplex (4)

Q5. Explain GSM Network Architecture (4)

Q6. How are satellite attitude adjustments made from the ground station? (2)

Q7. Explain (a) Pulse radar and (b) duplexer. (4)

Q8. Explain the concept of IoT with a block diagram and list five applications. How does IoT help in Wireless sensor Networks? (4)

Q9. What is the voltage gain of an amplifier that produces an output of 700 mV for a 20μV input? (2)

Q10. Explain the Cellular communication with a diagram and explain the concept of frequency reuse. (4)

Q11. Explain in detail: (a) Facsimile (b) paging systems (c) internet telephony (d) VoIP fundamentals. (4)

Q12. Explain the plane position indicator (PPI) of radar. (2)

Q13. Explain the principle of (a) Radar beacons (b) MTI Radar (4)

Q14. Explain the following terms of satellite communication (a) Apogee (b) Perigee (c) angle of elevation (d) Transponder. (4)

Q15. The power output of an amplifier is 10 watts (W). The power gain is 90. What is input power? (2)