

S.No. 2236

12UELE09

(For the candidates admitted from 2012–2013 onwards)

B.Sc. DEGREE EXAMINATION, APRIL/MAY 2018.

Sixth Semester

Electronics and Communication

Elective — MOBILE COMMUNICATION SYSTEMS

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What is 800 MHz frequency spectrum?
2. Define the principle of frequency reuse.
3. Define antenna gain.
4. What is a cell site antenna?
5. What is FHSS?
6. What is multiplexing?
7. List the major systems of GSM network.

8. What is the frequency band used for bluetooth technology?

9. What is the use of an intelligent cell?

10. What are the two types of intelligent cells?

PART B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Write short note on basic cellular system.

Or

(b) What are the shapes related to a cell?

12. (a) Explain the gain of an antenna.

Or

(b) Define about diversity receiver.

13. (a) Define the process of FHSS.

Or

(b) What are the uses of CDMA.

14. (a) Write short note on IEEE 802. 11.

Or

(b) Write short note on Radio interface.

15. (a) Write short note on power delivery in intelligent cell.

Or

(b) Explain how the intelligence can be used to reduce interference.

PART C — (3 × 10 = 30 marks)

Answer any THREE out of Five questions.

16. Explain briefly about the hand off mechanism.

17. Describe briefly about the functions of MTSO.

18. Explain the working of Slotted ALOHA with neat diagrams.

19. Explain localization and calling procedure to locate and address a Mobile Station.

20. What is processing gain in intelligent cells? Explain with suitable diagrams.