

Branch- ELECTRONICS

CORE ELECTIVE - II MOBILE TECHNOLOGY

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10x2 = 20)

- 1 What is frequency reuse concept?
- 2 , What is antennas?
- 3 What do you mean TDMA?
- 4 What is Ad-hoc networks? •
- 5 Write the main tasks of the physical layer.
- 6 Expand the term: NSS, RSS. -
- 7 What is the function of VDB? *
- 8 Write any two application of GPRS. »"
- 9 Write the function of UMTS time slots.
- 10' What is HSPA?

SECTION - B (25 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5x5 = 25)

- 11 a Describe the function of mobile antennas.
... OR -
b Explain the concept of cellular structure.
- 12 a List out the advantages of TDMA wireless communication over FDMA communication. •
OR •
b Briefly explain about the spectral efficiency of different wireless access technology.
- 13 a Briefly explain about the GSM channel organization.
OR
b Write a note on radio subsystem. * ' -
- 14 a What is EDGE? Explain.
OR ■
b . With a neat diagram briefly explain GPRS networks architecture.
- 15 a Discuss about UMTS time slots.
OR
b List out the advantages of implementing 4G. ' ,

SECTION - C (30 Marks)

Answer any THREE Questions

ALL Questions Carry EQUAL Marks (3x10 = 30)

- * 16 Write notes on (i) Cell cluster (ii) Cell splitting.
- 17 With a neat diagram explain about the concept of FDMA.
- 18 Explain in detail about GSM call setup procedure. -
- 19 Explain in detail about GPRS shades of mobility management. •
- 20 Discuss about UMTS channels. • .