

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION MAY 2018
(Sixth Semester)

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 (10 x 2 = 20)

- 1 Define cell.
- 2 What is a cluster?
- 3 Expand FDM and TDM.
- 4 What do you mean by Multiplexing?
- 5 List the subsystems in GSM system.
- 6 Give the functions of OSS in GSM.
- 7 List out the various applications in GPRS.
- 8 What is meant by location management?
- 9 Expand UMTS and HSPA.
- 10 What is UMTS ?

SECTION - B (25 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 5 = 25)

- 11 a Write a note on cell sectoring.
OR
b Explain the concepts of interference occur by adjacent cell.
- 12 a Write a short note on FDMA.
OR
b Enumerate the features of CDMA.
- 13 a Give an account on radio system.
OR
b Describe the function of protocol and signaling in GSM.
- 14 a Write the procedure for location management in GPRS.
OR
b Give an account on HSCSD.
- 15 a Explain the handover techniques using UMTS.
OR
b Describe the operation of HSPA.

SECTION - C (30 Marks)

Answer any THREE Questions

ALL Questions Carry EQUAL Marks (3 x 10 = 30)

- 16 Discuss in detail about Mobile Communication antenna usage.
- 17 Explain the TDMA frame system.
- 18 Draw and explain the function of GSM architecture with blocks.
- 19 Illustrate the application used in GPRS.
- 20 Describe the operation of mobility management for UMTS network.