

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2017
(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 Foot Print.
- 2 What is adjacent channel interference?
- 3 Write the features of SDMA.
- 4 Expand CDMA and TDMA.
- 5 List the databases of NSS in GSM.
- 6 What do you mean by Protocol?
- 7 What is mean by GPRS?
- 8 Define EDGE.
- 9 What do you mean by home network?
- 10 Define HSPA.

SECTION - B (25 Marks)

Answer **ALL** Questions

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

- 11 a Explain the frequency reuse technique used in cellular radio systems.
OR
b Write a note on cell cluster.
- 12 a Explain the features of CDMA.
OR
b Describe the function of SDMA techniques.
- 13 a Explain the call setup procedure in GSM.
OR
b Elucidate the working of Authentication and Security in GSM.
- 14 a Write a short note on GPRS roaming.
OR
b Explain the function of Mobility management.
- 15 a Elucidate the planning step in toward 4G.
OR
b Write the handing over technique used in UMTS.

SECTION - C (30 Marks)

Answer any **THREE** Questions

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

- 16 Differentiate the co channel interference and adjacent channel interference.
- 17 Elaborate the different spectral efficiency technique in wireless access technologies.
- 18 Illustrate the concept of routing call to mobile subscriber.
- 19 Enumerate the working of GPRS applications.
- 20 Explain the function of UMTS architecture.