

PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2022
(Sixth Semester)

Branch – ELECTRONICS

DISCIPLINE SPECIFIC ELECTIVE – II : MOBILE TECHNOLOGY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry **EQUAL** marks (10 x 1 = 10)

Cont...

SECTION - B (25 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 5 = 25)

- 11 a Describe the frequency reuse concept.
OR
b Narrate the cell splitting procedure.
- 12 a Enumerate the point on CDMA Technique used in wireless communications.
OR
b Outline the concept of FDMA technique.
- 13 a Elucidate the authentication and security of GSM.
OR
b Summarize about the radio subsystem in GSM.
- 14 a Analyze the mobility management of GPRS.
OR
b Write the applications of GPRS.
- 15 a State the process involved in UMTS handover.
OR
b Organize the important features of UMTS interfaces.

SECTION -C (40 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 8 = 40)

- 16 a Justify the functional block of cell structure.
OR
b Highlight the importance of antennas in mobile communications.
- 17 a Summarize the TDM scheme.
OR
b Examine the SDMA principles and operations.
- 18 a Elucidate the GSM architecture operation.
OR
b Enumerate the Channel organization of GSM.
- 19 a Point out the GPRS network architecture in detail.
OR
b Enumerate the GPRS location management procedure.
- 20 a Infer about the UMTS architecture.
OR
b Summarize the usage of UMTS channels

Z-Z-Z

END