

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2024
(Sixth Semester)

Branch – ELECTRONICS

DISCIPLINE SPECIFIC ELECTIVE –II MOBILE TECHNOLOGY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (5 x 1 = 5)

1. 3G CDMA is also known as
i)UMTS ii) CDMA iii) DECT iv)DECS 1800
2. Which of the following usually stores all user related data that is also relevant to GSM?
i)SIM ii) MEMORY iii) NETWORK iv) all
3. Which one of the following enables us to use the entire bandwidth simultaneously?
i)TDMA ii) FDMA iii) CDMA iv) all
4. Mobile 2-way radio uses _____ types of service.
i) Commercial ii) non-commercial iii) paid iv) all
5. Mobile communication technology is built with _____.
i) Speed ii) protocols iii) service iv) all

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

6. a Describe the term “co channel”.
OR
b State the procedure of cell sectoring in detail.
7. a List out the advantages of FDMA.
OR
b Explain the efficiency of different wireless technology in detail.
8. a Illustrate the GSM architecture with neat diagrams .
OR
b Analyze the term authentication and security.
9. a Explain the concept of mobility management .
OR
b Narrate about EDGE.
10. a Discuss about UMTS time slots.
OR
b Explain the UMTS hand over with diagrams.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

11. a Explain the procedure for cell clustering .
OR
b Discuss about the various mobile communication antennas.
12. a Enumerate about CDMA and its applications.
OR
b Discuss in detail about FDMA.
13. a Explain the GSM call setup procedure.
OR
b Discuss about GSM protocols and signaling.
14. a Explain the GPRS network architecture with neat sketch.
OR
b Discuss in detail about HSCSD.
15. a Explain the UMTS architecture in detail.
OR
b What is HSPA? Explain.

Z-Z-Z

END