

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2024
(Fifth Semester)

Branch - INFORMATION TECHNOLOGY

MAJOR ELECTIVE COURSE – I : MOBILE COMPUTING

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

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

- 1 Which of these is required for the transmission of digital information by translating it into analogue signals via a particular frequency?
(i) BSPK (ii) QPSK
(iii) Modulation (iv) Demodulation
- 2 Expand IVR
(i) Initial Vocal Response (ii) Interactive Voice Response
(iii) Interactive Vocal Response (iv) Initial Voice Response
- 3 Which of the following does not come under subsystem of GSM architecture?
(i) BSS (ii) NSS
(iii) OSS (iv) Channel
- 4 GPRS can also called _____ network.
(i) 2G (ii) 2.5G
(iii) 3G (iv) 3.5G
- 5 Which of the following is the 802.11 High Rate Standard?
(i) IEEE 802.15 (ii) IEEE 802.15.4
(iii) IEEE 802.11g (iv) IEEE 802.11b

SECTION - B (15 Marks)

Answer ALL Questions

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

- 6 a Summarize the evolution of wireless PAN.
OR
b How to define Ubiquitous computing?
- 7 a Outline the functionalities of low medium orbit satellite.
OR
b What do you mean by SDMA?
- 8 a Describe GSM entities.
OR
b Outline various strength of SMS.
- 9 a. Describe channel coding in GPRS.
OR
b comment user agent in WAP.
- 10 a Describe about IEEE 802.11 standards.
OR
b Distinguish Ad-hoc and infrastructure mode.

Cont...

SECTION -C (30 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks (5 x 6 = 30)

- 11 a Discuss various applications of mobile computing.
OR
b Explain the functions of transaction processing middleware.
- 12 a Illustrate Bluetooth protocol stack with diagram.
OR
b Determine working principles of RFID.
- 13 a Examine the components of GSM addresses and identifiers.
OR
b Evaluate the functions of SMMT& SMMO.
- 14 a Interpret various modes in GPRS data services.
OR
b Analyse 3G specific applications with example.
- 15 a. Inference various types of WLAN.
OR
b Enumerate the key principles of AES.

Z-Z-Z

END