

(6 pages)

Reg. No. :

Code No. : 20261 E Sub. Code : SECA 6 C

B.C.A. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2022.

Sixth Semester

Computer Application

Major Elective — MOBILE COMMUNICATION

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Which database stores permanent data about subscribers?
(a) MSC (b) HLR
(c) MSN (d) AUC

6. A Private Branch Exchange (PBX) is a telephone system owned and operated within a _____.
(a) Country (b) Continent
(c) Home (d) Enterprise
7. Which common protocol allows users to move from one network to another with the same IP address?
(a) IP (b) TCP
(c) TCP/IP (d) Mobile IP
8. Co-channel interference depends on cell _____.
(a) Radius (b) Distance
(c) Both (d) None
9. Which technology replace cables within a short range communication?
(a) Share IT (b) MANET
(c) Bluetooth (d) Wifi
10. AMPS means
(a) Advanced Mobile Phone System
(b) Adhoc Mobile Phone System
(c) Adhoc Mobile Public System
(d) Advanced Mobile Processing System

2. The most commonly used radio wave propagation is _____.
(a) Line of sight (b) Groundwave
(c) Sky wave (d) All
3. DECT stands for
(a) Digital European Cordless Telephone
(b) Digital Enhanced Communication Technology
(c) Digital European Cellular Technology
(d) Duplex Enhanced Communication Technology
4. _____ is a light-weight portable wireless telephone that function as a cordless phone in home and as mobile phone elsewhere.
(a) Palmtop
(b) Laptop
(c) Personal handyphone
(d) All
5. GPS uses _____ satellites.
(a) Geosynchronous Earth Orbit Satellites
(b) Medium Earth Orbit satellites
(c) Low Earth Orbit Satellites
(d) High Earth Orbit Satellites

Page 2 Code No. : 20261 E

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).
Each answer should not exceed 250 words.

11. (a) What is frequency reuse? Mention its use.
Or
(b) Explain cellular structure with a diagram.
12. (a) Explain IEEE 802.11 in detail.
Or
(b) Describe channel borrowing approaches in detail.
13. (a) Write short notes on cordless telephones.
Or
(b) List out the advantages and disadvantages of satellite communication.
14. (a) Explain fading in detail.
Or
(b) How will you measure signal to noise distortion ratio?

Page 3 Code No. : 20261 E

Page 4 Code No. : 20261 E
[P.T.O.]

15. (a) Explain routing in ad-hoc networks.

Or

- (b) Explain the protocols used in wireless network.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b)
Each answer should not exceed 600 words.

16. (a) Explain the use of HLR and VLR in a mobile system.

Or

- (b) Write down the properties of wireless networks.

17. (a) Describe roaming management in detail.

Or

- (b) What is cell splitting? Explain its types with examples.

18. (a) Explain the working of wireless private box exchange.

Or

- (b) Illustrate the application of CDPD architecture with a neat diagram.

19. (a) Explain the different types of interference in cellular mobile communication.

Or

- (b) Explain the working of mobile IP in detail.

20. (a) Describe MANET in detail.

Or

- (b) Write short notes on WDP and WTP.
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