(6 pages)

Reg. No. :

Code No.: 7494

Sub. Code: KCAM 43/

PCAM 43

M.C.A. (CBCS) DEGREE EXAMINATION, APRIL 2019.

Fourth Semester

Computer Application

MOBILE COMPUTING

(For those who joined in July 2016 and afterwards)

Time: Three hours

Maximum: 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer.

- Type of signaling that have same circuit and is used for both signaling and voice communication is called
 - (a) out-band
 - (b) in-band
 - (c) signal transport ports
 - (d) signal points

- 2. Repeaters inside communication satellite are known as
 - (a) Transceivers
- (b) Transponders
- (c) Transducers
- (d) TWT
- WiMAX stands for
 - (a) Wireless maximum communication
 - (b) Worldwide interoperability for microwave access
 - (c) Worldwide international standard for microwave access
 - (d) Wireless international standard for microwave access
- 4. The size of IP address in IPv6 is
 - a) 4 bytes
- (b) 128 bits
- (c) 8 bytes
- (d) 100 bits
- Code Division Multiple Access (CDMA) differs from Time Division Multiple Access (TDMA) because there is no
 - (a) bandwidth
- (b) link
- (c) carrier
- (d) timesharing

Page 2 Code No. : 7494

- In cellular telephony, bands and Channels of Interim Standard 95 (IS-95) uses two bands for
 - (a) Duplex communication
 - (b) Traditional ISM communication
 - (c) Digitized communication
 - (d) Scrambled communication
- In cellular telephony, for forward and reverse communication, system uses two separate
 - (a) Digital Signals
 - (b) Analog Systems
 - (c) Digital Data
 - (d) Analog Channels
- To prevent interference of adjacent cell signals, size of cell is
 - (a) Increased
- b) Expanded
- (c) Optimized
- (d) Constant
- We use Cryptography term to transforming messages to make them secure and immune to
 - (a) Change
- (b) Idle
- (c) Attacks
- (d) Defend

Page 3 Code No. : 7494

- 10. Which of the following is true about Public Key Infrastructure?
 - (a) PKI is a combination of digital certificates, public-key cryptography, and certificate authorities that provide enterprise wide security
 - (b) PKI uses two-way symmetric key encryption with digital certificates, and Certificate Authority
 - (c) PKI uses private and public keys but does not use digital certificates
 - (d) PKI uses CHAP authentication

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Discuss about mobility of bits and bytes.

Or

- (b) Explain about client contest manager.
- 12. (a) Discuss about RFID.

Or

(b) What is mobile IP? Explain registration.

Page 4 Code No.: 7494

[P.T.O.]

(a) What is GPRS? Write the applications for GPRS.

Or

- (b) Write about spread spectrum technology.
- (a) Write the advantages and limitations of mobile adhoc networks.

Or

- (b) Define INCM. Write the technologies and interfaces for IN.
- (a) Explain about the memory architecture in the palm OS.

Or

(b) Explain hardware interface in the Symbian OS.

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Explain briefly about the Three Tire Architecture.

Or

(b) Elaborate mobile computing through Telephone.

Page 5 Code No.: 7494

- 17. (a) Discuss the following:
 - (i) Bluetooth
 - (ii) Value added services through SMS.

Or

- (b) Draw and explain GSM Architecture.
- (a) Explain about the Third Generation Networks.

Or

- (b) Explain briefly about WAP network architecture and applications.
- (a) Write and explain IEEE 802.11 Standards with its architecture.

Or

- (b) Define client programming in mobile computing. Discuss the recent features of client programming.
- 20. (a) Draw and explain palm OS Architecture.

Or

(b) Discuss about Security issues in mobile computing.

Page 6 Code No.: 7494