

C

Reg. No. :

--	--	--	--	--	--	--	--	--	--

Question Paper Code: 59224

B.E./B.Tech. DEGREE EXAMINATION, MAY 2018

Elective

Computer Science and Engineering

15UCS924 – MOBILE COMPUTING

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

Answer All Questions

PART A - (5x 1 = 5 Marks)

1. World's first cellular system was developed by CO1- R
(a) Nippon Telephone and Telegraph (NTT) (b) Bellcore and Motorola
(c) AT&T Bell Laboratories (d) Qualcomm

2. The 2G cellular network uses CO2- U
(a) TDMA/FDD (b) CDMA/FDD (c) Digital modulation (d) All of the above

3. The 2G GSM technology uses a carrier separation of CO3- R
(a) 1.25 MHz (b) 200 KHz (c) 30 KHz (d) 300 KHz

4. Bluetooth is an example of CO4- U
(a) WAN (b) PAN (c) MAN (d) ZAN

5. Which operating system is used for Apple products? CO5- R
(a) Android (b) Black Berry (c) IOS (d) None of these

PART – B (5 x 3= 15Marks)

- | | |
|---|--------|
| 6. Distinguish mobile computing and wireless computing. | CO1- U |
| 7. What is ARP? | CO2- U |
| 8. Define UMTS. | CO3- U |
| 9. Define routing. | CO4- U |
| 10. What is monolithic kernel OS design? | CO5- U |

PART – C (5 x 16= 80Marks)

- | | | |
|--|--------|------|
| 11. (a) (i) Explain the structure of mobile computing application in detail | CO1-U | (8) |
| (ii) Discuss about the wireless MAC issues. | CO1-U | (8) |
| Or | | |
| (b) Discuss about the mobile computing applications. | CO1 -U | (16) |
| 12. (a) Define Mobile IP. Explain about the key mechanism in mobile IP. | CO2 -U | (16) |
| Or | | |
| (b) Explain about the architecture and operation of TCP/IP in detail. | CO2 -U | (16) |
| 13. (a) (i) Explain the protocol stack of UMTS in detail. | CO3- U | (8) |
| (ii) Discuss about General Packet Radio Service in detail. | CO3- U | (8) |
| Or | | |
| (b) Discuss about the GPRS in detail. | CO3- U | (16) |
| 14. (a) Explain Ad hoc On-Demand Distance Vector (AODV) protocol in detail. | CO4-U | (16) |
| Or | | |
| (b) Explain the characteristics and applications of MANET in detail. | CO4 -U | (16) |
| 15. (a) Briefly describe any four of the commercial mobile operating system. | CO5- U | (16) |
| Or | | |
| (b) Explain in detail the online payment system with an example. | CO5- U | (16) |