C

Reg. No. :

Question Paper Code: 59224

B.E./B.Tech. DEGREE EXAMINATION, MAY 2022

Elective

Computer Science and Engineering

15UCS924- MOBILE COMPUTING

(Regulation 2015)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 1 = 5 Marks)

1. MAC protocols works in _____ layer   CO1- R

   (a) Transport   (b) Network   (c) Data link   (d) Physical

2. Mobile IP is _____   CO2- U

   (a) Static   (b)Dynamic   (c) Fixed   (d) None of these

3. GSM was introduced in _____ Generation of networks   CO3- U

   (a) First   (b) Second   (c) Third   (d) Fourth

4. DSR Stands for   CO4- R

   (a) Distance source routing   (b) Dynamic source routing

   (c) Differential speed routing   (d) None of these

5. Mobile OS used in Apple phones are called as   CO5- U

   (a) AppleOS   (b)IOS   (c) Android   (d) None of these

PART – B (5 x 3= 15 Marks)

6. List few Unique characteristics of Mobile computing.   CO1- U

7. State the limitations of Conventional TCP in mobile networks.   CO2- R

8. List the different types of nodes and their responsibilities in GPRS.   CO3- U

9. List some application of Ad hoc networks.   CO4- U

10. State the main requirements of Mobile OS.   CO5- U

PART – C (5 x 16= 80 Marks)

11. (a) (i) Compare Mobile computing and wireless networks   CO1- U   (8)

       (ii) Examine the different Wireless MAC issues.   CO1- U   (8)

Or

(b) Examine the working principle of Reservation Based Protocols in detail.   CO1- U   (16)

12. (a) Discuss in detail about the salient features and working of Mobile IP.   CO2-U   (16)

Or

(b) Elaborate on any two mechanisms used in TCP to get improved performance in wireless environment.   CO2-U   (16)

13. (a) Elaborate on the components involved in GSM architecture and its working principle.   CO3- U   (16)

Or

(b) With suitable illustration explain GPRS in operation.   CO3- U   (16)

14. (a) (i) Discuss in detail the working principle of Dynamic source routing protocol.   CO4- U   (10)

       (ii) Compare Table driven routing and On demand routing   C04- U   (6)

Or

(b) (i) Discuss on the design issues for Mobile ad hoc networks   CO4- U   (8)

       (ii) Explain the concept of security provisioning in ad hoc networks.   C04- U   (8)

15. (a) Examine the design issues in Mobile Payment System. List the different solutions for that.   CO5- App   (16)

Or

(b) State the difference between Open source and Proprietary OS. Examine Android and IOS with respect to their salient features and software development cycle.   CO5- App   (16)

59224