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Reg. No. :

Question Paper Code: 59224

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

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. Routing protocols of wireless networks not feasible in mobile networks   CO1-R
    because of_____

    (a) Interference   (b) Mobility   (c) No topology   (d)All the above

2. Which provides a temporary IP address for a mobile device?   CO2- R

    (a) Care of Address   (b)MAC protocols   (c)IP data gram   (d) IP server

3. Important feature of GSM security is   CO3- R

    (a) International Mobile Subscriber Identity   (b) Temporary Mobile Subscriber Identity

    (c) Location Area Identity   (d) All the above

4. When a source node and destination node for a message is out of the   CO4- R
    radio range, the MANETs are capable of _____

    (a) Care of Address   (b) Multi-hop routing   (c)Tunneling   (d) Encapsulation

5. Constraints of Mobile OS is   CO5- R

    (a) Small size   (b)Limited capacity   (c)Limited battery   (d) All the above

PART – B (5 x 3= 15 Marks)

6.	List the advantages of Mobile computing.	CO1- R
7.	What is encapsulation in mobile IP?	CO2- R
8.	What are the main elements of UMTS?	CO3- R
9.	Relate Proactive and Reactive protocols.	CO4- U
10.	What are the Pros and cons of M-Commerce?	CO5- R

PART – C (5 x 16= 80 Marks)

11. (a) (i) What are the issues in wireless MAC? CO1- U (8)

(ii) Explain the three tier structure of Mobile computing CO1- U (8)
Application.

Or

(b) Explain the various taxonomy of MAC protocols in detail? CO1- U (16)

Or

12. (a) (i) With a diagram explain DHCP and its protocol architecture? CO2- U (8)

(ii) Explain IP-in-IP, Minimal IP and GRE encapsulation methods. CO2- U (8)

Or

(b) (i) With a neat diagram explain the architecture of TCP/IP. CO2- U (8)

(ii) Explain the various improvements in TCP/IP performance with CO2- U (8)
diagram.

13. (a) Describe GSM architecture along with its Authentication and CO3-U (16)
security in detail.

Or

(b) Explain GPRS and its protocol architecture. CO3-U (16)

14. (a) What are multicast routing protocols? CO4-U (8)
(i) DSDVR protocol.
(ii) DSR Protocol CO4-U (8)

Or

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(b) (i) Explain characteristics, applications of MANET. CO4-U (8)

(ii) Draw and explain the architecture of VANET . CO4-U (8)

15. (a) Explain the components of Mobile operating system with its functions. CO5- U (16)

Or

(b) (i) Explain the various applications of M-Commerce. CO5-U (8)

(ii) Explain the Mobile payment schemes and security issues CO5-U (8)

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