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(2126)

16190(D) - 0 DEC 2016

B. Tech 7th Semester Examination

Wireless Communication & Mobile Computing (NS)

CS-414

Time : 3 Hours

Max. Marks : 100

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Candidates are required to attempt five questions in all selecting one questions from each sections A, B, C & D of the question paper and all the sub-parts of the questions in Section E.

SECTION - A

1. (a) Differentiate between guided and unguided transmission. Discuss the frequencies and properties of wireless transmission in VHF and UHF ranges. (10)
(b) Draw a neat sketch and explain mobile computing architecture for a mobile device. (10)
2. (a) Explain the interfacing between different subsystems in GSM architecture. (10)
(b) Describe four kinds of control data bursts. (10)

SECTION - B

3. How is a packet delivered to a computer on LAN after reaching a destination router on a subnet? Explain subnet mask, ARP and RARP. (20)
4. (a) Discuss the problems associated with wireless communication. (10)
(b) Briefly explain network protocols. (10)

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SECTION - C

5. (a) List and explain the components of network architectures. (10)
(b) What are WLAN standards? Explore. (10)
6. Discuss the network architecture of Wireless Metropolitan Area Networks. Also explore potential applications of WMAN. (20)

SECTION - D

7. (a) What do you mean by routing in Ad Hoc networks? Discuss. (10)
(b) Discuss Wireless Mesh Networks. (10)
8. Differentiate between WLAN and WMAN. Discuss the internetworking of WLAN and WMAN. Explain the application environments of WMAN. (20)

SECTION - E

9. (a) Write a note on super and hyper frame.
(b) What do you mean by modulation? Briefly explain different type of modulation.
(c) What is IPsec suite of protocol?
(d) What is frequency reuse?
(e) Briefly explain extended service set.
(f) What is 802.11p?
(g) What do you understand by cellular networks?
(h) Briefly discuss Vehicular AdHoc Networks.
(i) What is 3G and 4G?
(j) Explain packet delivery. (10×2=20)