Reg. No. : ☐☐☐☐☐☐☐☐☐☐

Question Paper Code: 92022

M.E. DEGREE EXAMINATION, OCTOBER - 2014.

Elective

Communication Systems

01PCM510 - WIRELESS NETWROKS

(Regulation 2013)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions.

PART A - (10 x 2 = 20 Marks)

1. Enumerate the advantages of wireless communication.

2. How do you generate pseudo random codes?

3. Mention some of major challenges for implementing of WLAN services.

4. Differentiate HIPER LAN and WLAN.

5. When a network is said to be Ad - hoc mode? Give example.

6. Bring out the importance of routing table in routing algorithm.

7. List some evolving standards in wireless sensor network.

8. What do you mean by location discovery in WSN terms?

9. Is UWB transmission a "short pulse transmission? Support your answer.

10. Define last mile problem in optical wireless network.

PART - B (5 x 14 = 70 Marks)

11. (a) Using neat block diagram, explain the Direct Sequence Spread Spectrum System
    (DSSS).Sketch necessary signals in the time domain and frequency domain.   (14)

Or

(b) Illustrate the different signal encoding and error control principles with examples. (14)

12. (a) Explain IEEE 802.11 wireless standards and bring out the salient features and its general architecture. (14)

Or

(b) Write short notes on

    (i) Blue Tooth (7)

    (ii) Home RF. (7)

13. (a) (i) Discuss the design goals of transport layer protocol. (7)

    (ii) Explain the classification of Routing Protocols. (7)

Or

(b) Explain in detail about the energy management schemes in Ad - hoc networks. (14)

14. (a) (i) With neat diagram, explain the architecture of wireless sensor network. (7)

    (ii) Discuss the design issues and challenging factors for a wireless sensor network. (7)

Or

(b) Explain briefly about the types of MAC Protocols for wireless sensor network. (14)

15. (a) Explain in detail about the Ultra Wide Band radio communication. Mention its advantages. (14)

Or

(b) (i) Explain the architecture of optical wireless network. (7)

    (ii) Explain about Meghadoot architecture in detail. (7)

PART - C (1 x 10 = 10 Marks)

16. (a) Enumerate the design issues in Ad - hoc network. (10)

Or

(b) Make a study on the need for mobile IP and wireless access protocol. (10)

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