



Reg. No. : .....

Name : .....

**Eighth Semester B.Tech. Degree Examination, April 2016**  
**(2008 Scheme)**  
**08.805 (3) : MOBILE AND WIRELESS NETWORKS (Elective III) (R)**

Time : 3 Hours

Max. Marks : 100

**PART – A**

Answer **all** questions. **Each** question carries **4** marks.

1. What is meant by (a) fast fading (b) frequency selective fading (c) coherence bandwidth (d) coherence time in the context of radio signal propagation ?
2. Write notes on code division multiplexing.
3. Describe the FDMA scheme for wireless medium access control.
4. What is meant by CSMA ? Write notes on non-persistent, p-persistent and 1-persistent CSMA.
5. What is meant by a broadcast disk ? Explain the different broadcast disk patterns.
6. Describe the advantages and disadvantages of using Infra Red technology for implementing wireless LANs.
7. Distinguish between infrastructure based and ad-hoc wireless networks.
8. Write notes on piconets and scatternets in the context of Bluetooth networks.
9. Describe the different mechanisms used to maintain the consistency of data in distributed file systems.
10. Briefly explain transaction oriented TCP used with mobile hosts.



## PART – B

Answer **one full** question from **each** Module.

**Module – 1**

11. a) Describe the various wireless propagation modes and explain the factors that effect antenna gain. **10**
- b) What is meant by modulation ? Write notes on APSK modulation techniques. **10**

OR

12. a) Describe the classification of radio frequencies used for wireless transmission. **10**
- b) Describe the concept of direct sequence spread spectrum. **10**

**Module – 2**

13. a) Briefly explain how security is implemented in Bluetooth networks ? **8**
- b) Write brief notes on digital audio broadcasting. Describe the multimedia object transfer protocol. **12**

OR

14. a) Explain FAMA – FDMA and DAMA – FDMA schemes for satellite communication. **8**
- b) Describe the DFWMAC-DCF mechanism for accessing the medium in 802.11 wireless LANs using CSMA/CA. **12**

**Module – 3**

15. a) Explain the process of foreign agent discovery by mobile hosts under Mobile IP scheme. **8**
- b) Describe the snooping TCP approach for improving the performance of traditional TCP in wireless and mobile environments. **12**

OR

16. a) Describe any three mobile file systems in detail. **8**
- b) Write brief notes on the architecture of WAP. **12**
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