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ANNA UNIVERSITY
B.E (CSE) / B.Tech DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2013

B.Tech INFORMATION TECHNOLOGY

IT9352 WIRELESS NETWORKS
SEMESTER VI REGULATION 2008

Time: 3 Hrs

Max.Marks: 100

PART A (10*2=20 Marks)
Answer ALL Questions

1. Define reuse factor and express it mathematically.
2. Mention the circumstances under which call drop occurs.
3. What does the term 'distribution system' refer to in IEEE 802.11 WLAN?
4. Write short notes on WiFi.
5. Mention the functions of BSC in GSM networks.
6. Mention the major difference between GSM and GPRS networks.
7. What do you mean by co-located COA?
8. What is the role played by Access Point in Indirect TCP?
9. What is Wireless Application Environment?
10. What is the limitation of HTML in the context of mobile computing?

PART B (5*16=80 Marks)

- 11a. i. Explain the various ways that are used to increase the capacity of the cellular networks. (8)
ii. Explain the steps that are involved in the basic operation of a cellular network. (8)
- 12a. i. Explain the basic Distributed Foundation Wireless Medium Access Control – Distributed Coordinating Function (DFWMAC) of wireless LAN. (8)
ii. Explain the extension of DFWMAC-DCF with RTS and CTS packets. (8)
(OR)
- 12b. i. Explain the Basic Service Set and Extended Service Set of IEEE 802.11 WLAN. (8)
ii. Explain the Independent Service Set of IEEE 802.11 WLAN. (8)
- 13a. Explain the GPRS architecture reference model and GPRS transmission plane protocol reference model. (16)
(OR)
- 13b. i. Explain the Radio Subsystem of GSM networks. (8)
ii. Explain the GSM protocol architecture for signaling. (8)
- 14a. i. Explain the operation of Indirect TCP with a sample scenario. (8)

- ii. Compare the performance of Indirect TCP with Snoop TCP. (8)
(OR)
- 14b. i. Explain AODV with a sample topology. (8)
ii. Compare the performance of proactive protocols and reactive protocols in terms of mobility and density of the nodes. (8)
- 15a. i. Explain the WAP stack with a neat diagram. (8)
ii. Explain the role of WAP Gateway in mobile computing. (8)
(OR)
- 15b. i. Explain the role of WML and WMLScripts in mobile application development. (8)
ii. Explain the SyncML framework in detail. (8)

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