

Code No: 09A70508

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, November - 2013

**MOBILE COMPUTING
(Common to CSE, ECM)**

Time: 3 Hours

Max. Marks: 75

**Answer any Five Questions
All Questions Carry Equal Marks**

1. With a neat sketch of architectural diagram explain the important subsystems of GSM Protocol. [15]
- 2.a) Explain the problems of hidden and exposed terminals.
b) Explain how they are addressed in IEEE 802.11 standard for WLANs. [7+8]
3. Explain how the problems of IP to support Host mobility with the help of following concepts:
i) COA
ii) Encapsulation
iii) Tunneling and Reverse Tunneling. [15]
4. Compare and contrast the following two solutions for TCP in mobile environment:
i) Indirect TCP
ii) Snooping TCP [15]
- 5.a) Explain issues of host mobility towards implementation of transaction concept.
b) List any mobile transaction models, and compare them. [7+8]
- 6.a) What is meant by Communication Asymmetry?
b) What is a Push Model? Explain its pros and cons data dissemination to mobile hosts. [7+8]
- 7.a) What are the characteristics and challenges of mobile ad hoc networks?
b) Compare and contrast the proactive and reactive routing protocols with examples. [7+8]
8. Write short notes on ANY TWO:
i) Bluetooth Protocol Architecture
ii) J2ME Architecture
iii) Symbian OS. [15]

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