

**Code No: C6206,C2506****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****M.TECH I - SEMESTER EXAMINATIONS APRIL/MAY-2012****WIRELESS NETWORKS AND MOBILE COMPUTING****(COMMON TO WEB TECHNOLOGIES, SOFTWARE ENGINEERING)****Time: 3hours****Max.Marks:60**

**Answer any five questions**  
**All questions carry equal marks**

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1. Explain the protocol architecture of HIPERLAN with a neat sketch.
2. Explain the significance of MAC sub-layer in wireless and mobile systems. Illustrate the hidden and exposed terminal problems. Discuss about their solutions.
- 3.a) With respect to Mobile IP, explain the concepts of encapsulation and tunneling.  
b) Explain the concept of reverse tunneling.
4. State the reasons for unsuitability of traditional TCP for mobile environment. Explain how I-TCP overcomes those issues through a neat sketch.
5. Explain the following:
  - a) WAP
  - b) Thin-client Computing.
6. What is Push model? Write the algorithm for Broadcast Disk Model. Illustrate through an example.
7. Compare and contrast the two routing protocols of Mobile Ad hoc Networks- AODV and DSDV.
8. Write on the following:
  - a) GPRS Protocol
  - b) Bluetooth Technology.

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