

**QP Code : 29911**

(3 Hours)

Total Marks: 100

- Instructions: - 1) Question No 1 is compulsory; solve any 4 questions from remaining 6 question.  
 2) Assume suitable data wherever necessary.  
 3) Figures to the right indicate full marks.

- Q 1) a) List and explain the features of traditional TCP that influence the efficiency of TCP in Mobile environment. (10 Marks)
- b) Explain the operations of CDMA with timing diagram. (10 Marks)
- Q 2) a) Discuss the IP reverse tunneling. (10 Marks)
- b) Name the main difference Adhoc Network and other networks what advantages do other network offers? Explain in detail with suitable example. (10 Marks)
- Q 3) a) What are the general problems of mobile IP regarding security and support of quality of service? (10 Marks)
- b) What is meant by WATM? Describe WATM reference model, location management, services and QOS. (10 Marks)
- Q 4) a) Name the main elements of GSM system architecture and describe their functions. What are the advantages of specifying not only the radio interface but also the internal interfaces of the GSM system? Explain the inter-BSC, intra-MSC handover process in the GSM system using typical signals and a message sequence chart. (10 Marks)
- b) Discuss the role of WWW in support for mobility. (10 Marks)
- Q 5) a) Discuss the IP reverse tunneling.? (10 Marks)
- b) What are mobile agents? Discuss their primary advantages over other approaches. (10 Marks)
- Q 6) a) What are the major difference between WAP 2.0 and WAP 1.x? What influenced the WAP 2.0 development? (10 Marks)
- b) Distinguish between HSCSD and GPRS? How is GPRS made possible over GSM? Explain? (10 Marks)
- Q 7) Write short notes on any two. (20 Marks)
- a) Wireless Telephony applications.
- b) M-Commerce
- c) Name the inefficiencies of mobile IP regarding data forwarding from a correspondent node to a mobile node. What are optimizations and what additional problems do they cause?