

Code No: 07A7EC21

R07**Set No. 2****IV B.Tech I Semester Examinations November 2010****MOBILE COMPUTING**

Common to Information Technology, Electronics And Computer
Engineering, Computer Science And Engineering

Time: 3 hours**Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

1. What are the advantages and disadvantages of MANETS and explain in detail? [16]
2. What is wireless application protocol (WAP)? Explain in detail. [16]
3. With an example explain how push-based data delivery system works. [16]
4. How difference Business services can be provided using wireless and mobile networks? [16]
5. (a) Why guard bands are required in FDMA? What is the disadvantage of guard bands?
(b) To use FDMA, what is the requirement on the part of sender and receiver.
(c) What is the performance of TDMA in highly congested environment? [5+5+6]
6. (a) Explain about congestion control of TCP.
(b) Suppose one application uses TCP and other application use UDP and assume there is congestion in the network. How the performance of two applications differ. [8+8]
7. What are the solutions that were proposed to support mobility apart from mobile IP? What are the problems associated with these solutions? [16]
8. Discuss the architecture of pervasive computing software? Briefly explain about the issues Mobility and distribution? How they are related too pervasive computing. [16]

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R07**Set No. 4****IV B.Tech I Semester Examinations November 2010****MOBILE COMPUTING**

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Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. What is MANET? Describe the various properties of a MANET? [16]
2. (a) What is hidden and exposed terminal problem in wireless networks? What is the solution for it?
(b) What is near and far terminal problem in wireless networks. What is the solution for it? [8+8]
3. What is hybrid data scheduling? What are the issues which classify the Hybrid data scheduling explain each of them. [16]
4. (a) Why Access point maintains buffers in Indirect TCP?
(b) How Indirect TCP hides the problems of wireless links from fixed host?
(c) The foreign agent can act as a gateway to translate between the different protocols in Indirect TCP. Comment. [5+5+6]
5. (a) How vehicular traffic can be controlled using wireless and mobile networks?
(b) How pollution can be controlled using wireless and mobile networks?
(c) How emergency services can be provided using wireless and mobile networks? [6+4+6]
6. What is wireless application environment? Discuss in detail. [16]
7. (a) With the help of a diagram, explain the basic architecture of hierarchical mobile IP.
(b) With the help of a diagram, explain the basic architecture of Hawaii. [8+8]
8. (a) Discuss the problem associated with cache.
(b) What are the problem involved in client mobility. [8+8]

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R07**Set No. 1****IV B.Tech I Semester Examinations November 2010****MOBILE COMPUTING**

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Time: 3 hours**Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

1. Briefly discuss about wireless transaction protocol. [16]
2. With the help of a neat diagram, explain the reference model of wireless and mobile networks. [16]
3. What are the hoarding techniques? Explain in detail. [16]
4. (a) What is the use of Cellular IP?
(b) How Hawaii works? [8+8]
5. Write short notes on the following:
(a) IPv6
(b) MANET Routing.
(c) DSDV. [6+5+5]
6. (a) What is the logic behind segmenting a TCP connection in Indirect TCP?
(b) Indirect TCP violates the end-to-end connectivity of TCP. Comment.
(c) Handover latency can be a problem in Indirect TCP. Comment. [5+5+6]
7. (a) What are the reasons for failure of MAC schemes of wired networks in wireless networks?
(b) Under what conditions MACA fails in case of hidden/exposed terminals.
(c) What is the effect of near and far terminals? [6+5+5]
8. Explain in detail about selective tuning techniques. [16]

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R07**Set No. 3****IV B.Tech I Semester Examinations November 2010****MOBILE COMPUTING**

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Time: 3 hours**Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

1. (a) How the reservations improve performance of time based multiple access schemes?
(b) What are the different reservation based multiple access schemes? [6+10]
2. Explain in detail about client server computing with adaptation. [16]
3. Explain the different mobile phone technologies. [16]
4. What are the mechanisms of traditional TCP that influence its efficiency in a mobile environment? Explain it [16]
5. What is link management? Explain in detail. [16]
6. What is the need for Reverse Tunneling and how it works? [16]
7. Explain in detail about Hybrid routing protocols. [16]
8. (a) With the neat sketch explain the architecture of adaptive hybrid broad cast mechanism.
(b) Explain the hashing based scheme in detail. [10+6]
