

Code No: 07A7EC21

**R07****Set No. 2**

IV B.Tech I Semester Examinations, MAY 2011

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

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1. What are the different types of data dissemination techniques? Briefly explain each of them. [16]
2. What is the infrastructure of a GSM system? How it is used to achieve successful communication in GSM? [16]
3. What are the advantages and disadvantages of MANETS and explain in detail? [16]
4. (a) While network layer allows you to address hosts, transport layer allows you to address applications. Comment.  
(b) What are the applications which prefer UDP to TCP? Why? [6+10]
5. With a neat diagram explain about caching architecture in detail. [16]
6. Explain the given below terms of Bluetooth:  
(a) Networking  
(b) Security. [8+8]
7. Explain the scenarios where reservation based schemes performs better, where reservation based schemes can be totally avoided. What are the scenarios in which carrier sensing is also needed and what are the scenarios in which carrier sensing can be avoided. Justify your answers. [16]
8. One solution to mobility is to assign to the computer, a new topologically correct IP address. Why this solution fails? How DNS is of little use in this case? What is the problem with working of TCP when mobility is considered? [16]

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**R07****Set No. 4**

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Time: 3 hours

Max Marks: 80

Answer any FIVE Questions  
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1. (a) In Indirect TCP Access point is seen as the mobile host for the fixed host and as fixed host for mobile host. Explain.  
(b) How handover takes place in Indirect TCP? [8+8]
2. (a) What are the entities that are part of mobile IP? Explain them with an example network.  
(b) What is tunneling in mobile IP? [8+8]
3. What is MANET? Describe the various properties of a MANET? [16]
4. What is client server model and distributed component model, Explain? Compare the characteristics of both. [16]
5. (a) Discuss about radio layer.  
(b) Discuss briefly about link manager protocol. [8+8]
6. With a suitable example discuss the various types of Hybrid mechanism. [16]
7. How Banking system works using wired networks. What is the infrastructure required and how it operates? [16]
8. How starvation can be avoided in all multiple access schemes which you have studied. Explain in detail. [16]

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**R07****Set No. 1**

IV B.Tech I Semester Examinations, MAY 2011

MOBILE COMPUTING

Common to Information Technology, Electronics And Computer  
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Time: 3 hours

Max Marks: 80

Answer any FIVE Questions  
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1. Explain routing in mobile ad-hoc networks. [16]
2. (a) How the reservations improve performance of time based multiple access schemes?  
(b) What are the different reservation based multiple access schemes? [6+10]
3. Explain how push- based data delivery works? Give one example application of push-based data delivery. [16]
4. Explain in detail about push architecture. [16]
5. What are the problem of cache in real life .What type of content can be cached? Which type of contents causes problems? [16]
6. Who are the telecommunication operators in India? What are the services they are providing? What are the strategies that are being adopted? [10+6]
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) What are the applications in which packet delayed is equivalent to packet lost? Explain.  
(b) What are the applications for which packet loss can create severe problems? Explain it. [8+8]

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**R07****Set No. 3**

IV B.Tech I Semester Examinations, MAY 2011

MOBILE COMPUTING

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Time: 3 hours

Max Marks: 80

Answer any FIVE Questions  
All Questions carry equal marks

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1. What is the basic purpose of DHCP? Name the entities of DHCP. [16]
2. (a) How Foreign Agent is discovered in mobile IP.  
(b) What is the format of advertisement packet? [10+6]
3. Explain in detail about physical layer of Bluetooth? [16]
4. What is congestion? What is congestion control? Why congestion control improves performance of TCP in wired networks. Can the same be applied to mobile network? Justify your answer. [16]
5. (a) What is the effect of hidden and exposed terminals in case of reservation Aloha and MACA?  
(b) Explain about SDMA. [10+6]
6. (a) What are the messaging services provided by GSM?  
(b) What is closed user group service?  
(c) What is redirection and forwarding service? [8+4+4]
7. (a) Which type of indexing is suitable for broad casting data through wireless Channel, why?  
(b) What are the advantages of data broad cast over point-to-point access. [8+8]
8. Discuss the architecture of pervasive computing software? Briefly explain about the issues Mobility and distribution? How they are related to pervasive computing. [16]

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