

SRI VENKATESHWARAA COLLEGE OF ENGINEERING & TECHNOLOGY

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CS E84 MOBILE COMPUTING

UNIT-I

PART A

- 1. Define Mobile Computing.
- 2. Define Nomadic & Pervasive Computing.
- 3. What is MSS?
- 4. What is GSM?
- 5. Define AIN.
- 6. What is CTIA?
- 7. Define TDMA.
- 8. What is CDMA?
- 9. What is ETDMA & write its advantage?
- 10. Define spread spectrum modulation scheme.
- 11. Define IrDA.
- 12. What are the major categories of Wireless technologies?
- 13. What is poletop infrastructure?
- 14. What are the advantages of WLAN?
- 15. Define CDPD.
- 16. Explain mapping of the mobility.
- 17. Explain hand-held computers.
- 18. Define sub-notebooks.

- 1. Explain in Detail about Digital Cellular System. (2013 apr/may)
- 2. Explain the following in Detail. (2013 apr/may)
 - (a) Palm-top Computers.
 - (b) Hand Held Computers.
- 3. List out the Limitations of the Wireless and Mobile Environment. (2013 nov/dec)
- 4. Discuss about the Architecture of Wireless Mobile Computing with neat diagram. (2013 nov/dec)
- 5. Briefly discuss about the Wireless Network Technology. (2013 nov/dec)
- 6. Explain the Wireless and Mobile Computing Architecture. (2014 apr/may)
- 7. Explain briefly about TDMA, CDMA. (2014 apr/may)
- 8. Explain CDMA and Spread Spectrum in Detail. (2014 nov/dec)
- 9. List and discuss various wireless network techniques in detail. (2014 nov/dec)
- 10. Explain the basics of Digital Cellular Systems. (2015 apr/may)
- 11. Discuss about any four portable information appliances. (2015 apr/may)

UNIT-II

PART A

- 1. Define ITU.
- 2. Define UMTS.
- 3. Define ACTS.
- 4. Define pilot channel.
- 5. Define paging channel
- 6. Define synchronization & access channel
- 7. Define traffic channel
- 8. What is soft hand-off.?
- 9. Write the different types of interference.
- 10. Define Remote-Node
- 11. Define Client proxy
- 12. Define Replication
- 13. Define Adaptation
- 14. Define Agents
- 15. List out the adaptation strategies.
- 16. Define Universally Unique Identifiers.
- 17. Define WAP.
- 18. Define RM-ODP.

- 1 . Explain in Detail about the Third Generation Wireless Networks. (2013 apr/may) , (2014 apr/may), (2015 apr/may)
 - 2.Explain the End User Applications. (2013 apr/may), (2015 apr/may)
- 3.Illustrate the puppeteer Architecture and Explain in details about client application. Interacts with data servers through proxies? (2013 nov/dec)
 - 4. Write short note on Unicast and Multicast discovery. (2013 nov/dec)
 - 5. Explain in details about security mechanisms of three services Discovery frameworks. (2013 nov/dec)
 - 6. Write notes on Mobility Middleware. (2014 apr/may)
- 7. Discuss the need for mobile agents and explain the components of mobile agent architecture in detail. (2014 nov/dec)
 - 8.Explain the need for mobility support software and discuss end user application in detail. (2014 nov/dec)

UNIT - III

PART A

- 1. Define AMT.
- 2. Describe the SONY protocol.
- 1. What is MN (Mobile Node)?
- 2. Define HA (Home Agent).
- 3. Define FA (Foreign Agent).
- 4. Define distance vector algorithm.
- 5. Define Link state routing algorithm.
- 6. Define Mosquito Net.
- 7. What is IP-in-IP tunneling
- 8. What is dynamic source routing?
- 9. Define CDPD.
- 10. What is WDF?
- 11. What are MHF & SF?
- 12. Define M-ES & MD-IS.
- 13. Define MNRP & MNLP and writes its function.
- 14. Define MDBS.
- 15. Define GSN.
- 16. Define GPRS.
- 17. Define Deffie-Hellamn key.
- 18. Name the three research efforts that address QoS
- 19. What is MHP?
- 20. Define W4.
- 21. Define MOWSER.
- 22. Define caching.
- 23. What is Differencing?
- 24. Define protocol reduction.
- 25. Define Header reduction.
- 26. Define CSI & SSI.

- 1. Explain in Detail about the Mobile Internet Protocol. (2013 apr/may)
- 2. Explain in Detail about the Quality of Service in Mobile Networks. (2013 apr/may) (2015 apr/may)
- 3. (a) Write short notes on CDPD.(6)
 - (b)Briefly discuss about Security and Authentication in Mobile Networking.(5) (2013 nov/dec)
- 4. (a) Write short notes on UMTS with Architecture. (6)
 - (b)Discuss about the Mobile Access in World Wide Web.(5) (2013 nov/dec) (2014 nov/dec)
- 5. Discuss in detail about the application of GPRS. (2014 apr/may) (2014 nov/dec)
- 6. Explain the concept of Mobile IP with neat example. (2014 apr/may) (2014 nov/dec)
- 7. Compare and contrast Loose Source Routing Protocol and Mobile IP. (2015 apr/may)

UNIT-IV

PART A

- 1. What are the categories of mobile data access?
- 2. Define server-push.*
- 3. Define client-pull.*
- 4. What is rover
- 5. Define RDO & QRPC.*
- 6. What is mobile transaction?
- 7. Mention the difference types of Mobile Transaction.
- 8. Define atomic & compensatable transactions.
- 9. What is reporting transaction?
- 10. What is Co-transaction?
- 11. Define KT & JT.*
- 12. Define cluster.
- 13. What is m-degree relation?
- 14. What is hoarding?
- 15. What is semantic distance?
- 16. Define IOT.
- 17. What is Difference between Reporting & Co-transaction.

- 1. Explain in detail about the following . (2013 apr/may)
 - Reporting and Co-
 - (a) Transactions (4)
 - (b) The Kangaroo Transaction (4)
 - (c) The Clustering Model. (3)
- 2. Explain in Detail about the following. (2013 apr/may)
 - (a) Isolation-Only Transactions (4)
 - (b) The Two-tier Transaction(4)
 - (c) Semantic-based Nomadic Transaction (3)
- 3. (a) Briefly explain about the Mobile Transactions.(5)
 - (b)Explain about the Clustering Algorithms. (6) (2013 nov/dec)
- 4. (a) Discuss about 2-Tier Transaction model. (6)
 - (b) Explain about Isolation Transaction levels. (5) (2013 nov/dec)
- 5. Explain briefly about kangaroo transaction model and Clustering model. (2014 apr/may) (2014 nov/dec)
- 6. Explain briefly about Isolation only and 2-tier transaction model. (2014 apr/may)
- 7. Explain Reporting and Co-Transactions Model and Semantic-based Nomadic Transaction processing. (2014 nov/dec)
- 8. Write short notes on Reporting and Co-Transactions and The kangaroo Transaction Model. (2015 apr/may)
- 9. Discuss about Isolation-Only Transactions and Semantic-based Nomadic Transaction Processing. (2015 apr/may)

UNIT-V

PART A

- 1. Write the advantage & disadvantage of the C/S model?
- 2. What is C/S model?
- 3. Define MCDS.
- 4. Define C/P/S model.
- 5. Write the functions of proxy.
- 6. Write the advantage of C/P/S model.
- 7. What is Static Agents?*
- 8. What is Mobile Scripts?*
- 9. What is MetaFrame?
- 10. Write the major categories of JAVA APIs and virtual machines.
- 11. Define MIDP.
- 12. DefineJXTA.
- 13. Define BREW.*
- 14. What is ADOCE?
- 15. Define SOAP.
- 16. What is a bearer network?
- 17. Define SMIL.*
- 18. Define microbrowsers.*
- 19. Define PPG.
- 20. Define PI.
- 21. What is Symbian?*
- 22. What is EPOC?*

- 1. Explain in detail about the following. (2013 apr/may)
 - (a) Client/Server (6)
 - (b) Client/Proxy/Server Model. (5)
- 2. Explain in detail about the following (2013 apr/may)
 - (a) Disconnected Operation Model (3)
 - (b) Mobile Agents (5)
 - (c) The Thin Client Model (3)
- 3. (a) Write Short notes on Thin Client Model.(5)
 - (b) Discuss about Client-Server Model. (6) (2013 NOV/DEC)
- 4. Briefly Explain about the Tools used in Mobile computing model. (2013 NOV/DEC)
- 5. Explain the following mobile Computing models: (2014 APR/MAY)
 - (a)Client server model
 - (b) Mobile agent model
- 6. Explain the thin Client model and disconnected operation model. (2014 APR/MAY)
- 7. List Mobile computing models and explain any two models in brief? (2014 NOV/DEC)
- 8.Explain the Mobile development tools. (2014 NOV/DEC)
- 9. Compare the Client/Server Model with the Client/Proxy/Server Model. (2015 APR/MAY)
- 10. Give brief introduction to the following tools: Sybian and EPOC (2015 APR/MAY)