

R15

Code No: 127FN

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, November/December - 2018

MOBILE COMPUTING
(Computer Science and Engineering)

Max. Marks: 75

Time: 3 Hour

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A.
Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART- A

(25 Marks)

- 1.a) What is CSHSD? [2]
- b) What are mobiles devices and list the hardware limitations of them? [3]
- c) Describe shortly on "hidden and exposed terminals scenario" in MAC? [2]
- d) What is DHCP? [3]
- e) What are the advantages of Mobile TCP? [2]
- f) Why traditional TCP is not suitable in mobile computing. [3]
- g) What is skewed disk model? [2]
- h) What is SYNCML? [3]
- i) List the properties of AODV. [2]
- j) State the scenario of Linux for mobile devices. [3]

PART-B

(50 Marks)

- 2.a) Define mobile computing and state the novel applications of mobile computing? [5+5]
- b) Draw and explain the mobile computing architecture.

OR

3. Describe the following GSM concepts
a) Protocols [5+5]
b) Handover

4. Briefly write about SDMA, FDMA, TDMA, CSMA and Wireless LAN. [10]

OR

5. Explain the following Mobile IP Network layer concepts.
a) Tunneling and Encapsulation [5+5]
b) Route Optimization.

6. Describe about Indirect TCP and Snooping TCP of Mobile Transport layer. [10]

OR

7. Explain the concept of "Client server computing for mobile computing and adaption" in detail. [10]

8. Illustrate about "selective tuning and indexing techniques". [10]
OR
9. Explain about synchronization software for mobile devices with suitable examples. [10]

10. Write about the following.
a) MANET applications
b) AODV. [5+5]

OR
11.a) What is XML and write the procedure for parsing XML documents? [5+5]
b) Explain the characteristics of symbianOS.

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