R13

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year I Semester Examinations, March - 2017
MOBILE COMPUTING
(Computer Science and Engineering)

Time: 3 Hours　　　　　　　　　　　　　　　　　　　　　　**Max. Marks: 75**

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)	List the security concerns of GSM.	[2]
b)	Write about mobile computing architecture layers.	[3]
c)	Write about IEEE 802.11	[2]
d)	Describe the "working of Mobile IP".	[3]
e)	Mention about "Query processing architecture" in brief.	[2]
f)	What is transaction oriented TCP in mobile transport layer.	[3]
g)	What is communication asymmetry?	[2]
h)	What is SMIL?	[3]
i)	Write short notes on TORA.	[2]
j)	List the specifications of SYMBION OS for Smartphone.	[3]

Part-B (50 Marks)

2.a)　What are the limitations of mobile and handhold devices ?
　b)　Give the system architecture of GSM.　　　　　　　　　　　　　　[5+5]

OR

3.　Explain about "Radio interfaces for GSM" in detail.　　　　　　　　[10]

4.　Special MACs are needed in wireless domain- Justify the statement with suitable
　　scenarios.　　　　　　　　　　　　　　　　　　　　　　　　　　　[10]

OR

5.　Explain the following Mobile IP Network layer concepts
　　a) Packet delivery and Handover management.
　　b) Location management.　　　　　　　　　　　　　　　　　　　　[5+5]

6.　Briefly write about Conventional TCP / IP transport layer protocols.　[10]

OR

7.　Illustrate on Data Caching techniques in detail.　　　　　　　　　　[10]

8.　Narrate about Public subscribe, On-demand and Hybrid data delivery mechanisms.[10]

OR

9.　Explain various synchronization protocols used for mobile devices.　[10]

10.a)　What is MANET routing?
　　b)　State the principles of DSR and AODV.　　　　　　　　　　　　[5+5]

OR

11.　Write short notes on the following.
　　　a) Java Card　　　　b) Palm OS　　　　c) Windows CE　　　　[10]

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