

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 0156

Roll No.

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B.Tech.

(SEM. VIII) EVEN THEORY EXAMINATION 2012-13

MOBILE COMPUTING

Time : 3 Hours

Total Marks : 100

Note :- (1) Attempt **all** questions.

(2) All questions carry equal marks.

(3) Assume any relevant data, if missing.

1. Attempt any **four** parts of the following : (5×4=20)

(a) Explain the word MOBILE COMPUTING and also give any suitable live example with highlights of mobile computing.

(b) What do you mean by the system architecture and protocol suit of IEEE 802.11 with suitable example.

(c) Discuss BLUETOOTH. Where it is used ? Also describe the general format of packet and packet header in Bluetooth.

(d) Explain differences between wireless ATM as compared to fixed ATM.

(e) How the power is controlled in a cellular system ? Explain the difference between open loop and closed loop.

2. Attempt any **two** parts of the following : (10×2=20)

(a) What is GPRS network ? How does GPRS provide a variety of data rates ?

- (b) What is the general goal of a file system ? Explain CODA file system in brief.
- (c) Give an overview of why a strong consistency of file system becomes a problem in wireless and mobile environment.
- 3: Attempt any **two** parts of the following : (10×2=20)
- (a) Explain registration and location updation of wireless mobile terminal in a foreign network.
- (b) What is the basic purpose of agent advertisement in packet forwarding ? Explain the message format of agent advertisement.
- (c) Discuss in detail the security issues related to mobile agent based computing environment.
4. Attempt any **two** parts of the following : (10×2=20)
- (a) Explain the different fundamental differences between ad hoc network and other networks. What advantages do ad hoc networks offer ?
- (b) Discuss the DSDV with example and differentiate it from AODV. Explain pro-active, reactive routing protocol.
- (c) What do you mean by MANET ? Describe its various features.

5. Attempt any **two** parts of the following : (10×2=20)
- (a) Explain TORA. How it is different from Ad-hoc On Demand Distance Vector routing ?
- (b) Compare the TCP header and UDP header. List the fields in the TCP header that are missing from the UDP header. Give the reason for their absence.
- (c) What is the function of 3G ? How it is different from 2G ? Explain its importance in today's world.