

CE1.5-R4 : MOBILE COMPUTING

NOTE :

1. Answer question 1 and any FOUR from questions 2 to 7.
2. Parts of the same question should be answered together and in the same sequence.

Time : 3 Hours

Total Marks : 100

1. (a) What are the limitations of Mobile Devices? (7x4=28)
(b) Explain General Packet Radio Service?
(c) What is Hyperlan? Explain its role in Local area mobile communication access?
(d) Explain handover management in mobile network layer?
(e) Explain the limitations of TCP in mobile wireless systems?
(f) What is Hoarding and Caching in Mobile Databases? Explain
(g) Explain the mobile file system?
2. (a) What is Information Security in the context of Mobile Computing? Explain the various techniques for security used in mobile computing?
(b) What is Java 2 Micro Edition? Explain the various features and components of J2ME used in Mobile Computing? (9+9)
3. (a) What is Mobile Operating System? Explain the features of Palm OS and Symbian OS?
(b) What are broadcast disks? Explain selective tuning and indexing in mobile databases? (9+9)
4. (a) What is Snooping? Elaborate on different invariants of TCP?
(b) What are the benefits of routing algorithms? Explain the difference between DSR and AODV? (9+9)
5. (a) In the context of satellite communication : Explain LEO, GEO and MEO
(b) What is UMTS? Explain in detail. (9+9)

6. (a) Explain optimization of IP Packet forwarding in mobile IP using Triangular routing.
- (b) What are the key design concepts of Temporally-ordered routing algorithm (TORA)? Elaborate three basic functions of TORA: Route creation, Route maintenance, Route erasure. (9+9)
7. Write Short notes on any **three** of the following (3x6=18)
- (a) X HTML
 - (b) IMT- 2000
 - (c) ZigBee
 - (d) TCP Freeze

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