

CSL549: MOBILE COMPUTING

Total Marks: 100

CREDITS

L	T	P
4	0	0

Note for Paper Setter:

There will be eight questions of equal marks, two in each of the four sections (Section A to D), corresponding to the distribution of the syllabus. The paper setters are requested to make sub-section (not exceeding 4) of the questions and allocate appropriate marks to each sub section.

Note for Candidate:

Attempt five questions in all by selecting one question from each section and the fifth question may be attempted from any sections.

UNIT-I

Introduction to Mobile Communications and Computing: Introduction to mobile computing, applications, limitations, and architecture. Frequency reuse, GSM (Global system for mobile Communication) : Mobile services, System architecture, Protocols, Localization and calling, Handover, Security, and data services.

UNIT-II

Making the internet Mobile : Overview of the WAP , Components of WAP standard ,WAP architecture ,Design principles , WML – Markup Basics , events, tasks, and bindings ,variables ,Other contents ,Controls ,Document type declaration , Errors and Browser limitations. Wireless Binary Extensible Markup Language. WML script, Language Basics, Standard Libraries, Binary WML script, Data base connectivity.

UNIT-III

Mobile Ad hoc Networks (MANETs): Overview, Properties of a MANET, spectrum of MANET applications, routing and various routing algorithms, security in MANETs.

UNIT-IV

Mobile Agents:-Introduction to Mobile Agents, Mobile Agent Architecture, Mobile Agent Applications, Elements of Mobile Agent Systems.

References:

1. Charles Arehart et al., - The Professional WAP – Wrex Publications.
2. Dale Browk – WAP Beginners Guide – Tata McGrawHill Publications.
3. Kris Jamsa – WML and WML Script A Beginners Guide – Tata McGrawHill Publications.
4. Jochen Schiller - Mobile Communications - Addison-Wesley.
5. . William R Cockayne and Micheal Zyda – Mobile Agents – Printice Hall PTR.