



LESSON PLAN

Subject : MOBILE COMPUTING		
Year : IV B-Tech	Semester : I	Branch : IT
Faculty : MD.IMRAN	Reg : R16	Academic Year : 2021-2022

COURSE OBJECTIVES :

- To make the student understand the concept of mobile computing paradigm, its novel applications and limitations.
- To understand the typical mobile networking infrastructure through a popular GSM protocol
- To understand the issues and solutions of various layers of mobile networks, namely MAC layer, Network Layer & Transport Layer
- To understand the database issues in mobile environments & data delivery models.
- To understand the ad hoc networks and related concepts.
- To understand the platforms and protocols used in mobile environment.

COURSE OUTCOMES :

1	Factual	Able to understand & develop any existing or new protocol related to mobile
2	Conceptual	Able to take any new technical issue related to this new paradigm and come up with a solution(s).
3	Procedural	Able to think and develop new mobile application.
4	Applied	Able to develop new ad hoc network applications and/or algorithms/protocols.

TEXT BOOKS:

1. Jochen Schiller, "Mobile Communications", Addison-Wesley, Second Edition, 2009.
2. Raj Kamal, "Mobile Computing", Oxford University Press, 2007, ISBN: 0195686772

REFERENCE BOOKS:

1. ASOKE K TALUKDER, HASAN AHMED, ROOPA R YAVAGAL, "Mobile Computing,

Technology Applications and Service Creation” Second Edition, Mc Graw Hill.
2. UWE Hansmann, Lothar Merk, Martin S. Nocklous, Thomas Stober, “Principles of Mobile Computing,” Second Edition, Springer.

LINKS:

1. <https://www.youtube.com/watch?v=LZuzO0FKd0A>
2. https://www.youtube.com/watch?v=vYtmW_WAkHM
3. <http://nptel.ac.in/video.php?subjectId=117102062>

UNIT – 1 : I Introduction to Mobile Computing and GSM

[Total Classes : 9]

Activity:

1	Factual	Reading Prerequisite concepts- networks and Basic definitions, Videos related to computer networks, Referring the content on the Internet
2	Conceptual	Video Lectures related to mobile application and computer networks NPTEL Videos Links from the Internet Animations of routing algorithms Explained Examples
3	Procedural	Refer to text book content Other refer the mobile applications
4	Applied	Implementing mobile apps Assignments Quiz etc...

Activity / Schedule of UNIT-1 :

Pre-Class : Videos, E-books, Web links, Case Studies etc...

In-Class : Explanation on concept, discussion, Poll, doubts clarification, PPT, Demo etc..

Post-Class : Discussion Forum, Review on topic, Assessment, Quiz, Notes etc....

CLASS SL NO	CONCEPT	OBJECTIVES	PRE-CLASS	IN-CLASS	POST-CLASS
1.	Introduction to Mobile Communications, Mobile Computing – Paradigm	To make the student understand the concept of mobile computing paradigm, its novel applications and limitations.	Video Link : https://www.youtube.com/watch?v=5kBkJWi71Q&list=PLrjKTql3jnm-kLRBglt8kvuwbTScoI2IJ Text Book : Pdf (e-book) Upload Web Link : https://www.slideshare.net/ankurkumar983/mobile-computing-part1	Discussion on pre-requisites (10 Min) PPT presentation (30 Min) Discussion or Poll activity (5 min) Summery (5min) Doubts clari-fication (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
2.	Promises/Novel Applications	To Understand the applications and architectures	Video Link : https://www.youtube.com/watch?v=7yS575fqGIA Text Book : Pdf (e-book) Upload Web Link : https://medium.com/@rmsrn.85/mobile-computing-b66efd2a7ee4	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (10 min) Doubts clarification	Discussion Forum on the topic in the group Review on the topic Share material on the topic

				(10 min)	
3.	Impediments and Architecture	To understand the architecture	Video Link : https://www.youtube.com/watch?v=ohhdNRtDpCY&t=36s Text Book : Pdf (e-book) Upload Web Link : https://ieeexplore.ieee.org/document/960338	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
4.	Mobile and Handheld Devices and Limitations of Mobile and Handheld Devices.	To know the different types of handheld devices	Video Link : https://www.youtube.com/watch?v=mTh25nvES6Y Text Book : Pdf (e-book) Upload Web Link : www.ucdenver.edu/assembly/anschutz/Documents	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
5.	GSM – Services, System Architecture	To understand GSM architecture	Video Link : https://www.youtube.com/watch?v=t8a4GjVnqR8 Text Book : Pdf (e-book) Upload Web Link: https://www.tutorialspoint.com/gsm/gsm_architecture.htm	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic Exercises to solve

6.	Radio Interfaces, Protocols	To understand the radio interfaces	Video Link : https://www.youtube.com/watch?v=1kG-uKegCqI Text Book : Pdf (e-book) Upload Web Link: http://etutorials.org/Mobile+devices/gprs+mobile+internet/Chapter+1+Introduction+to+the+GSM+System/Radio+Interface/	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic Exercises to solve
7.	Localization Calling, Handover	To know how localization works in mobile communications	Video Link : https://www.youtube.com/watch?v=j1bdTxwmPtE Text Book : Pdf (e-book) Upload Web Link: https://www.slideshare.net/poonampkc/unit-1-11466458	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic Exercises to solve
8.	Security, New Data Services	To understand the different security issues in GSM architecture	Video Link : https://www.youtube.com/watch?v=EzUtfSqW8G0 Text Book : Pdf (e-book) Upload Web Link: https://www.slideshare.net/poonampkc/unit-1-11466458	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic Quiz

9.	GPRS	To understand the working of GPRS	Video Link : https://www.youtube.com/watch?v=MKw-9DVahQ4 Text Book : Pdf (e-book) Upload Web Link https://www.tutorialspoint.com/gprs/gprs_overview.htm	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
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UNIT – 2 : Medium Access Control (MAC):

[Total Classes : 07]

Activity:

1	Factual	Reading Prerequisite concepts-Data link Layer and its responsibilities, Videos related to Medium Access layer, Referring the content on the Internet
2	Conceptual	Video Lectures related to DLL NPTEL Videos Links from the Internet Animations related to DLL Explained Examples from Internet
3	Procedural	Refer to text book content and architectures Understanding the architectures Installation and Procedure Syntax with examples(simple to complex)
4	Applied	Assignments Quiz etc...

Activity / Schedule of UNIT-2 :

Pre-Class : Videos, E-books, Web links, Case Studies etc...

In-Class : Explanation on concept, discussion, Poll, doubts clarification, PPT, Demo etc..

Post-Class : Discussion Forum, Review on topic, Assessment, Quiz, Notes etc....

CLASS SL NO	CONCEPT	OBJECTIVES	PRE-CLASS	IN-CLASS	POST-CLASS
1.	Introduction to (Wireless) Medium Access Control (MAC)	To understand various methods used by communication systems	Video Link : https://www.youtube.com/watch?v=PcbTMSf0D2M https://www.youtube.com/watch?v=T0aZ0APuYzE Text Book : Pdf (e-book) Upload Web Link : https://www.slideshare.net/junnubabu/wn-unit-i-ch3	Discussion on pre-requisites (10 Min) PPT presentation (30 Min) Discussion or Poll activity (5 min) Summery (5min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
2.	Medium Access Control (MAC) properties	To understand the various properties exhibited by MAC	Video Link : https://www.youtube.com/watch?v=Q9nez9IMC3M Text Book : Pdf (e-book) Upload Web Link : https://www.researchgate.net/publication/4177712_Physical_properties_and_medium_access_control_for_wireless_ad-hoc_networks	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (30 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
3.	Motivation for a specialized MAC (Hidden and exposed terminals, Near and far terminals)	To Understands the different types of terminals like near and far terminals	Video Link : https://www.youtube.com/watch?v=cIxm2a4Cvo4 Research Papers: Combating Hidden and Exposed Terminal Problems in Wireless Networks Text Book : Pdf (e-book) Upload	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (30 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic

			Web Link : http://www.cruiserselit.e.co.in/downloads/btech/materials/4/1314/mc/unit-2.pdf	Doubts clarification (10 min)	
4.	Examples on Specialized MAC (Near and Far Terminals)	To discuss the examples by using near and far terminals	Video Link : https://www.youtube.com/watch?v=cIxm2a4Cvo4 Text Book : Pdf (e-book) Upload Web Link : http://www.cruiserselit.e.co.in/downloads/btech/materials/4/1314/mc/unit-2.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (30 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
5.	SDMA, FDMA with Examples	To understand SDMA and FDMA architectures	Video Link : https://www.youtube.com/watch?v=oYRMYsIVj1o Text Book : Pdf (e-book) Upload Web Link : http://www.cruiserselit.e.co.in/downloads/btech/materials/4/1314/mc/unit-2.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (30 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
6.	TDMA, CDMA with Examples	To understand SDMA and FDMA architectures	Video Link : https://www.youtube.com/watch?v=oYRMYsIVj1o Text Book : Pdf (e-book) Upload Web Link : http://www.cruiserselit.e.co.in/downloads/btech/materials/4/1314/mc/unit-2.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (30 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic

				Doubts clarification (10 min)	
7.	Wireless LAN/(IEEE 802.11)	To understand the working of wireless Local Area Networks	Video Link : https://www.youtube.com/watch?v=WcMoZ2VUyfU Text Book : Pdf (e-book) Upload Web Link : http://www.cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-2.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (30 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic

Activity / Schedule of UNIT-3

[Total Classes : 09]

Pre-Class : Videos, E-books, Web links, Case Studies etc...

In-Class : Explanation on concept, discussion, Poll, doubts clarification, PPT, Demo etc..

Post-Class : Discussion Forum, Review on topic, Assessment, Quiz, Notes etc....

CLASS SL NO	CONCEPT	OBJECTIVES	PRE-CLASS	IN-CLASS	POST-CLASS
1.	Introduction to Mobile Network Layer : IP and Mobile IP Network Layers	To understand the mobile IP network layer	Video Link : https://www.youtube.com/watch?v=h0maZ03CRXA Text Book : Pdf (e-book) Upload Web Link : https://www.geeksforgeeks.org/mobile-internet-protocol-or-mobile-ip/	Discussion on pre-requisites (10 Min) PPT presentation (30 Min) Discussion or Poll activity (5 min) Summery (5min) Doubts clari-fication (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
2.	Architecture of IP and Mobile IP Network Layers	To understand the architecture of Mobile IP	Video Link : https://www.youtube.com/watch?v=h0maZ03CRXA Text Book : Pdf (e-book) Upload Web Link : https://docs.oracle.com/cd/E19455-01/806-7600/6jgfbep0v/index.html	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (10 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
3.	Packet Delivery and Handover Management	To understand packet delivery procedure	Video Link : https://www.youtube.com/watch?v=OE3s0cqlk1k Text Book : Pdf (e-book) Upload Web Link : https://www.dauniv.ac.in/public/frontassets/coursematerial/mobilecomputing/MobileCompChap06L04MobileIPPacketDeliveryHandoverMgt.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic

4.	Location Management	To understand the managing of new location network	Video Link : https://www.youtube.com/watch?v=2TFn8oylzYE Text Book : Pdf (e-book) Upload Web Link : https://www.dauniv.ac.in/public/frontassets/coursematerial/mobilecomputing/MobileCompChap06L04MobileIPPacketDeliveryHandoverMgt.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
5.	Mobile Network Layer Registration	To understand the registration of nodes in the networks	Video Link : https://www.youtube.com/watch?v=hAHYEAB5M0k Text Book : Pdf (e-book) Upload Web Link : https://www.dauniv.ac.in/public/frontassets/coursematerial/mobilecomputing/MobileCompChap06L04MobileIPPacketDeliveryHandoverMgt.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
6.	Tunneling and Encapsulation		Video Link : https://www.youtube.com/watch?v=vl0hu_LmSY8 Text Book : Pdf (e-book) Upload Web Link : https://www.dauniv.ac.in/public/frontassets/coursematerial/mobilecomputing/MobileCompChap06L04MobileIPPacketDeliveryHandoverMgt.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic Exercises to solve

7.	Route Optimization		Video Link : https://www.youtube.com/watch?v=3Y8CUl7v0LE Text Book : Pdf (e-book) Upload Web Link : https://www.dauniv.ac.in/public/frontassets/coursematerial/mobilecomputing/MobileCompChap06L04MobileIPPacketDeliveryHandoverMgt.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic Exercises to solve
8.	DHCP	To understand the dynamic host configuration protocol	Video Link : https://www.youtube.com/watch?v=FWRBMeofRsM Text Book : Pdf (e-book) Upload Web Link : https://www.dauniv.ac.in/public/frontassets/coursematerial/mobilecomputing/MobileCompChap06L04MobileIPPacketDeliveryHandoverMgt.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic Exercises to solve
9.	DHCP Examples	To understand the example DHCP network with example	Video Link : https://www.youtube.com/watch?v=FWRBMeofRsM Text Book : Pdf (e-book) Upload Web Link : https://www.dauniv.ac.in/public/frontassets/coursematerial/mobilecomputing/MobileCompChap06L04MobileIPPacketDeliveryHandoverMgt.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic Quiz

Pre-Class : Videos, E-books, Web links, Case Studies etc...

In-Class : Explanation on concept, discussion, Poll, doubts clarification, PPT, Demo etc..

Post-Class : Discussion Forum, Review on topic, Assessment, Quiz, Notes etc....

CLASS SL NO	CONCEPT	OBJECTIVES	PRE-CLASS	IN-CLASS	POST-CLASS
1.	Introductions to Mobile Transport Layer : Conventional TCP/IP Protocols	To understand the mobile transport layer	Video Link : https://www.youtube.com/watch?v=9h6OK5agsyk Text Book : Pdf (e-book) Upload Web Link : http://cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-4.pdf	Discussion on pre-requisites (10 Min) PPT presentation (30 Min) Discussion or Poll activity (5 min) Summery (5min) Doubts clari-fication (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
2.	Indirect TCP	To understand indirect TCP	Video Link : https://www.youtube.com/watch?v=4EVXWUShBaA Text Book : Pdf (e-book) Upload Web Link : http://cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-4.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (10 min) Doubts clarification (10 min)	. Discussion Forum on the topic in the group Review on the topic Share material on the topic
3.	Snooping TCP	To understand how Snooping TCP works	Video Link : https://www.youtube.com/watch?v=0LWbbu-VMo Text Book : Pdf (e-book) Upload Web Link : http://cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-4.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min)	. Discussion Forum on the topic in the group Review on the topic Share material on the topic

				Doubts clarification (10 min)	
4.	Mobile TCP, Other Transport Layer Protocols for Mobile Networks		Video Link : https://www.youtube.com/watch?v=b8TnfaQol3s Text Book : Pdf (e-book) Upload Web Link : http://cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-4.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
5.	Introduction to Database Issues		Video Link : https://www.youtube.com/watch?v=BWvncI0K7WE Text Book : Pdf (e-book) Upload Web Link : http://cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-4.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
6.	Database Hoarding & Caching Techniques		Video Link : https://www.youtube.com/watch?v=5bzmlBfmayg Text Book : Pdf (e-book) Upload Web Link : http://cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-4.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification	Discussion Forum on the topic in the group Review on the topic Share material on the topic Exercises to solve

				(10 min)	
7.	Client-Server Computing & Adaptation		Video Link : https://www.youtube.com/watch?v=VyvTabQHevw Text Book : Pdf (e-book) Upload Web Link : http://cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-4.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	. Discussion Forum on the topic in the group Review on the topic Share material on the topic Exercises to solve
8.	Transactional Models		Video Link : https://www.youtube.com/watch?v=pomxJOFVcQs Text Book : Pdf (e-book) Upload Web Link : http://cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-4.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	. Discussion Forum on the topic in the group Review on the topic Share material on the topic Exercises to solve
9.	Query processing		Video Link : https://www.youtube.com/watch?v=SI8GrBH47Oo Text Book : Pdf (e-book) Upload Web Link : . http://cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-4.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	. Discussion Forum on the topic in the group Review on the topic Share material on the topic Quiz

10.	Data Recovery Process & QOS Issues		Video Link : Text Book : Pdf (e-book) Upload Web Link : http://cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-4.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
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Activity / Schedule of UNIT-5 :

[Total Classes : 8]

Pre-Class : Videos, E-books, Web links, Case Studies etc...

In-Class : Explanation on concept, discussion, Poll, doubts clarification, PPT, Demo etc..

Post-Class : Discussion Forum, Review on topic, Assessment, Quiz, Notes etc....

CLASS SL NO	CONCEPT	OBJECTIVES	PRE-CLASS	IN-CLASS	POST-CLASS
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1.	Introduction to Data Dissemination and Synchronization	To understand the broadcast systems for digital audio and video broadcasts	Video Link : https://www.youtube.com/watch?v=t-ZeZGWcfXY Text Book : Pdf (e-book) Upload Web Link : http://cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-5.pdf	Discussion on pre-requisites (10 Min) PPT presentation (30 Min) Discussion or Poll activity (5 min) Summery (5min) Doubts clari-fication (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
2.	Communications Asymmetry	To understand the reasons for asymmetry	Video Link : https://www.youtube.com/watch?v=EcWhJbEWxHU Text Book : Pdf (e-book) Upload Web Link : http://cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-5.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (10 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
3.	Classification of Data Delivery Mechanisms	To understand the data delivery mechanisms	Video Link : https://www.youtube.com/watch?v=aKoC2RgxxnU Text Book : Pdf (e-book) Upload Web Link : http://cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-5.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
4.	Data Dissemination	To understand the transmission	Video Link : https://www.youtube.com/watch?v=t-ZeZGWcfXY&t=11s Text Book : Pdf (e-book) Upload	Revise previous class – (5 mins) Asking Questions on previous class	Discussion Forum on the topic in the group

		of records from server	Web Link : http://cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-5.pdf	randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Review on the topic Share material on the topic
5.	Broadcast Models	To understand the modeling for hybrid data delivery mechanism	Video Link : https://www.youtube.com/watch?v=3OANqMxvF3c Text Book : Pdf (e-book) Upload Web Link : http://cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-5.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	. Discussion Forum on the topic in the group Review on the topic Share material on the topic
6.	Selective Tuning and Indexing Methods	To understand different indexing techniques	Video Link : https://www.youtube.com/watch?v=3HCK-ksM_60 Text Book : Pdf (e-book) Upload Web Link : http://cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-5.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	. Discussion Forum on the topic in the group Review on the topic Share material on the topic Exercises to solve
7.	Data Synchronization – Introduction	To understand the data synchronization	Video Link : https://www.youtube.com/watch?v=LBvuGEoGPzU Text Book : Pdf (e-book) Upload Web Link :	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins)	. Discussion Forum on the topic in the group

			http://cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-5.pdf	PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Review on the topic Share material on the topic Exercises to solve
8.	Software and Protocols.	To understand the protocols while synchronizing the data	Video Link : https://www.youtube.com/watch?v=iXv7WWT_j4Q&t=3s Text Book : Pdf (e-book) Upload Web Link : http://cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-5.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	. Discussion Forum on the topic in the group Review on the topic Share material on the topic Exercises to solve

Activity / Schedule of UNIT-6 :

[Total Classes : 12]

Pre-Class : Videos, E-books, Web links, Case Studies etc...

In-Class : Explanation on concept, discussion, Poll, doubts clarification, PPT, Demo etc..

Post-Class : Discussion Forum, Review on topic, Assessment, Quiz, Notes etc....

CLASS SL NO	CONCEPT	OBJECTIVES	PRE-CLASS	IN-CLASS	POST-CLASS
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1.	Mobile Ad hoc Networks (MANETs) : Introduction	To understand about MANETS	Video Link : https://www.youtube.com/watch?v=W9oCY_SXkjr4 Text Book : Pdf (e-book) Upload Web Link : http://www.cruiserselitte.co.in/downloads/btech/materials/4/1314/mc/unit-6.pdf	Discussion on pre-requisites (10 Min) PPT presentation (30 Min) Discussion or Poll activity (5 min) Summery (5min) Doubts clari-fication (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
2.	Applications & Challenges of a MANET	To understand the applications and challenges	Video Link : https://www.youtube.com/watch?v=PFv3q4nr1fY Text Book : Pdf (e-book) Upload Web Link : http://www.cruiserselitte.co.in/downloads/btech/materials/4/1314/mc/unit-6.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (10 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
3.	Routing	To understand MANET routing	Video Link : https://www.youtube.com/watch?v=mdkr6GV5HvE Text Book : Pdf (e-book) Upload Web Link : http://www.cruiserselitte.co.in/downloads/btech/materials/4/1314/mc/unit-6.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Discussion Forum on the topic in the group Review on the topic Share material on the topic
4.	Classification of Routing Algorithms		Video Link : https://www.youtube.com/watch?v=ioTiKYFiMrs	Revise previous class – (5 mins) Asking Questions on previous class	Discussion Forum on the topic in the group

			Text Book : Pdf (e-book) Upload Web Link : http://www.cruiserselit.co.in/downloads/btech/materials/4/1314/mc/unit-6.pdf	randomely (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Review on the topic Share material on the topic
5.	Algorithms such as DSR, AODV, DSDV, etc	To understand different routing algorithms	Video Link : https://www.youtube.com/watch?v=7RSml9cLcko https://www.youtube.com/watch?v=6Q4A_snx4MQ Text Book : Pdf (e-book) Upload Web Link : http://www.cruiserselit.co.in/downloads/btech/materials/4/1314/mc/unit-6.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	. Discussion Forum on the topic in the group Review on the topic Share material on the topic
6.	Mobile Agents, Service Discovery	To understand mobile agents	Video Link : https://www.youtube.com/watch?v=zi9Qw-MrFHM Text Book : Pdf (e-book) Upload Web Link : http://www.cruiserselit.co.in/downloads/btech/materials/4/1314/mc/unit-6.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	. Discussion Forum on the topic in the group Review on the topic Share material on the topic Exercises to solve
7.	Protocols and Platforms for Mobile Computing		Video Link : https://www.youtube.com/watch?v=DPcqnhtvYm8 Text Book : Pdf (e-book) Upload Web Link :	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins)	. Discussion Forum on the topic in the group

			http://www.cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-6.pdf	PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Review on the topic Share material on the topic Exercises to solve
8.	WAP, Bluetooth		Video Link : https://www.youtube.com/watch?v=nElP0R6r5A0 https://www.youtube.com/watch?v=tL9POFR0mxM Text Book : Pdf (e-book) Upload Web Link : http://www.cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-6.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	. Discussion Forum on the topic in the group Review on the topic Share material on the topic Exercises to solve
9.	XML, J2ME	To understand XML language and and J2ME	Video Link : https://www.youtube.com/watch?v=pCmPduLzD0k https://www.youtube.com/watch?v=9IvHon64Z4c Text Book : Pdf (e-book) Upload Web Link : http://www.cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-6.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	. Discussion Forum on the topic in the group Review on the topic Share material on the topic Quiz
10.	JavaCard, PalmOS, Windows CE, SymbianOS	To understand plamOS, Windows CE, SymbianOS	Video Link : https://www.youtube.com/watch?v=khgT5dwKvOo Text Book : Pdf (e-book) Upload Web Link : http://www.cruiserselite.co.in/downloads/btec	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins)	. Discussion Forum on the topic in the group Review on the topic

			h/materials/4/1314/mc/unit-6.pdf	PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	Share material on the topic
11.	Linux for Mobile Devices,Android.	To understand Linux for Mobile Devices,Android.	Video Link : https://www.youtube.com/watch?v=GEOqEIXdY7I Text Book : Pdf (e-book) Upload Web Link : http://www.cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-6.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	. Discussion Forum on the topic in the group Review on the topic Share material on the topic Quiz
12.	Android applications & Examples	To understand Android applications & Examples	Video Link : https://www.youtube.com/watch?v=TwXuY2w7Zv0 Text Book : Pdf (e-book) Upload Web Link : http://www.cruiserselite.co.in/downloads/btech/materials/4/1314/mc/unit-6.pdf	Revise previous class – (5 mins) Asking Questions on previous class randomly (5 Mins) PPT presentation (20 min) Example (15 min) Doubts clarification (10 min)	. Discussion Forum on the topic in the group Review on the topic Share material on the topic Assignment - 1