

JES, JHARSUGUDA

Lesson Plan

Name	SABYASACHI SARANGI	Total Hrs planned:60 Total Hrs per week: 04
Designation	PTGF	Pre requisite :
Subject: Code/Name	ITT-601	Mobile Computing
Semester/Programme/ Department	6 th Sem / Diploma/ Information Technology	
Course Objective	<ol style="list-style-type: none">1. To understand basics of Wireless networks & Mobile Computing.2. To be able to Mobile Development Frameworks3. To learn about Wireless Transmission, Wireless LANs4. To understand various Mobile IP, Wireless Telecomm Networks, Messaging Services.	

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Sl.No	Detail Description of Topics/Subtopics	Mode of Lecture
1	Chapter1: Introduction to Wireless networks & Mobile Computing	Chalk & talk
2	Networks	Chalk & talk
3	Wireless Networks	Chalk & talk
4	Mobile Computing	PPT
5	Mobile Computing Characteristics	PPT
6	Application of Mobile Computing	NPTEL VIDEO
7	Revision of Chapter 1	Questionnaires & Class Test
8	Chapter2: Introduction to Mobile Development Frameworks	Chalk & talk
9	C/S architecture	NPTEL VIDEO
10	n-tier architecture	PPT
11	n-tier architecture and www	NPTEL VIDEO
12	Peer-to Peer architecture	Chalk & talk
13	Mobile agent architecture	NPTEL VIDEO
14	Revision of Chapter 2	Questionnaires & Class Test
15	Chapter 3: Wireless Transmission	Chalk & talk
16	Introduction	Chalk & talk
17	Signals	PPT
18	Period, Frequency and Bandwidth.	Chalk & talk
19	Antennas	Chalk & talk
20	Signal Propagation	Chalk & talk
21	Multiplexing	NPTEL VIDEO
22	Modulation	Chalk & talk
23	Spread Spectrum	NPTEL VIDEO
24	Cellular System	NPTEL VIDEO
25	Revision of Chapter 3	Questionnaires & Class Test
26	Chapter 4: Medium Access Control	Chalk & talk
27	Introduction	PPT
28	Hidden/ Exposed Terminals	Chalk & talk
29	The basic Access Method	Chalk & talk
30	Near / Far Terminals	NPTEL VIDEO
31	SDMA, FDMA, TDMA, CDMA	NPTEL VIDEO
32	Revision of Chapter 4	Questionnaires & Class Test

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33	Chapter 5: Wireless LANs	Chalk & talk
34	Wireless LAN and communication	PPT
35	Infrared	Chalk & talk
36	Radio Frequency	NPTEL VIDEO
37	IR Advantages and Disadvantages	Chalk & talk
38	RF Advantages and Disadvantages	Chalk & talk
39	Wireless Network Architecture Logical	Chalk & talk
40	Types of WLAN	Chalk & talk
41	IEEE 802.11	Chalk & talk
42	MAC layer	Chalk & talk
43	Security	NPTEL VIDEO
44	Synchronization	NPTEL VIDEO
45	Power Management	NPTEL VIDEO
46	Roaming	NPTEL VIDEO
47	Bluetooth Overview	NPTEL VIDEO
48	Revision of Chapter 5	Questionnaires & Class Test
49	Chapter 6 : Ubiquitous Wireless Communication	Chalk & talk
50	Introduction	Chalk & talk
51	Scenario of Mobile Communication	NPTEL VIDEO
52	Mobile Communication Generations 1G to 3G	Chalk & talk
53	3 rd Generation Mobile Communication Network	PPT
54	Universal Mobile telecommunication System (UMTS)	Chalk & talk
55	Revision of Chapter 6	Questionnaires & Class Test
56	Chapter 7 : Mobile IP	Chalk & talk
57	Overview	Chalk & talk
58	Working with mobile IP	NPTEL VIDEO
59	Mobile IP Entities	PPT
60	Mobility Agents	NPTEL VIDEO
61	Components of Mobile IP	NPTEL VIDEO
62	Mobile IPv6 Features	NPTEL VIDEO
63	Mobile IPv6 Address Types	NPTEL VIDEO
64	Mobile IPv6 Address Scope	NPTEL VIDEO
65	Revision of Chapter 7	Questionnaires & Class Test

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66	Chapter 8 : Mobile Computing	Chalk & talk
67	WWW architecture for Mobile computing	Chalk & talk
68	Need of WAP	Chalk & talk
69	Benefits of WAP	Chalk & talk
70	Examples of WAP	Chalk & talk
71	WAP- Architecture	Chalk & talk
72	WAP protocols	Chalk & talk
73	WML	Chalk & talk
74	WAP Push architecture	Chalk & talk
75	Push-Pull based data acquisition	Chalk & talk
76	I-mode	Chalk & talk
77	WAP 2.x	Chalk & talk
78	Revision of Chapter 8	Questionnaires & Class Test
79	Chapter 9: Wireless Telecomm Networks	Chalk & talk
80	GSM	Chalk & talk
81	GPRS	Chalk & talk
82	IS-95	Chalk & talk
83	CDMA-2000	Chalk & talk
84	W-CDMA	NPTEL VIDEO
85	Wireless Sensor Networks	NPTEL VIDEO
86	Revision of Chapter 9	Questionnaires & Class Test
87	Chapter 10: Messaging Services	Chalk & talk
89	Short Message Services (SMS)	Chalk & talk
90	Multimedia Message Services (MMS)	NPTEL VIDEO
91	Multimedia transmission over wireless	NPTEL VIDEO
92	Revision of Chapter 10	Questionnaires & Class Test

BOOK

1. Mobile Computing ; By : Dr. N.NJani, Kamaljit I. Lakhtaria, Dr. Ashish N. Jani & Nita Kanabar (S.Chand & Company Ltd.)

SUBJECT FACULTY

H.O.D

ACADEMIC COORDINATOR

PRINCIPAL