

LESSON PLAN

- 1) **Subject Code:** Th.1
- 2) **Subject Title:** Entrepreneurship and Management & Smart Technology
- 3) **Semester:** 5th 4) **Branch:** Computer Science & Engg.
- 5) **Faculty:** Shitendra Ku. Baliarsingh
- 6) **No. of Classes / Week:** 3
- 7) **Pre Requisite for the Subject:** NIL / YES, If YES, give details:
- 8) **Text Book to be referred by students:**

Sl No.	Book	Author	Publication	% of Questions Asked	Year (Edition)	Whether available in Library
i	Entrepreneurship and Management & Smart Technology	B. BADHAI	Dhanpat Rai and Sons	90	2007	Yes

9) Course Coverage Schedule

Ch. No.	Name of the Chapter	Course to be Covered	No of periods Required	Total Class for Chapter/ Week (From-To)	Remark
01	ENTREPRENEURSHIP	1.1 Concept / Meaning of Entrepreneurship	01	05 Week-(1-2)	
		1.2 Need of Entrepreneurship	01		
		1.3 Characteristics, Qualities and Types of entrepreneur, Functions	01		
		1.4 Barriers in entrepreneurship	01		
		1.5 Entrepreneurs vrs. Manager	01		
		1.6 Forms of Business Ownership: Sole proprietorship, partnership forms and others	01		
02	MARKET SURVEY AND OPPORTUNITY IDENTIFICATION (BUSINESS PLANNING)	1.7 Types of Industries, Concept of Start-ups	01	03 Week-(2-3)	
		1.8 Entrepreneurial support agencies at National, State, District Level (Sources): DIC, NSIC, OSIC, SIDBI, NABARD, Commercial Banks, KVIC etc.	01		
		1.9 Technology Business Incubators (TBI) and Science and Technology Entrepreneur Parks	01		
		1001 Topic End			
		2.1 Business Planning	01		
03	PROJECT REPORT PREPARATION	2.2 SSI, Ancillary Units, Tiny Units, Service sector Units	01	02 Week-(3-4)	
		2.3 Time schedule Plan, Agencies to be contacted for Project Implementation	01		
		2.4 Assessment of Demand and supply and Potential areas of Growth	01		
		2.5 Identifying Business Opportunity	01		
04	MANAGEMENT PRINCIPLES	2.6 Final Product selection	01	03 Week-(4-5)	
		1002 Topic End			
		3.1 Preliminary project report	01		
		3.2 Detailed project report, Techno economic Feasibility	01		
05	FUNCTIONAL AREAS OF MANAGEMENT	3.3 Project Viability	01	06 Week-(5-6-7)	
		1003 Topic End			
		4.1 Definitions of management	01		
		4.2 Principles of management	01		
		4.3 Functions of management (planning, organising, staffing, directing and controlling etc.)	01		
		4.4 Level of Management in an Organisation	01		
		1004 Topic End			
		5.1 Production management	01		
		5.1.1 Functions, Activities			
		5.1.2 Productivity			
		5.1.3 Quality control			
		5.1.4 Production Planning and control			

		5.2 Inventory Management 5.2.1 Need for Inventory management 5.2.2 Models/Techniques of Inventory management	01		
		5.3 Financial Management 5.3.1 Functions of Financial management 5.3.2 Management of Working capital 5.3.3 Costing (only concept)	01		
		5.3.4 Break even Analysis 5.3.5 Brief idea about Accounting Terminologies: Book Keeping, Journal entry, Petty Cash book, P&L Accounts, Balance Sheets(only Concepts)	01		
		5.4 Marketing Management 5.4.1 Concept of Marketing and Marketing Management 5.4.2 Marketing Techniques (only concepts) 5.4.3 Concept of 4P s (Price, Place, Product, Promotion)	01		
		5.5 Human Resource Management 5.5.1 Functions of Personnel Management 5.5.2 Manpower Planning, Recruitment, Sources of manpower, Selection process, Method of Testing, Methods of Training & Development, Payment of Wages 1005 Topic End	01		
06	LEADERSHIP AND MOTIVATION	6.1 Leadership 6.1.1 Definition and Need/Importance 6.1.2 Qualities and functions of a leader 6.1.3 Manager Vs Leader 6.1.4 Style of Leadership (Autocratic, Democratic, Participative)	01	03 Week-(7-8)	
		6.2 Motivation 6.2.1 Definition and characteristics 6.2.2 Importance of motivation 6.2.3 Factors affecting motivation	01		
		6.2.4 Theories of motivation (Maslow) 6.2.5 Methods of Improving Motivation 6.2.6 Importance of Communication in Business 6.2.7 Types and Barriers of Communication 1006 Topic End	01		
		7.1 Human relationship and Performance in Organization 7.2 Relations with Peers, Superiors and Subordinates	01		
		7.3 TQM concepts: Quality Policy, Quality Management, Quality system 7.4 Accidents and Safety, Cause, preventive measures, General Safety Rules, Personal Protection Equipment(PPE) 1007 Topic End	01		
		8.1 Intellectual Property Rights(IPR), Patents, Trademarks, Copyrights 8.2 Features of Factories Act 1948 with Amendment (only salient points) c) 8.3 Features of Payment of Wages Act 1936(only salient points) 1008 Topic End	01		
		9.1 Concept of IOT, How IOT works 9.2 Components of IOT, Characteristics of IOT, Categories of IOT 9.3 Applications of IOT- Smart Cities, Smart Transportation, Smart Home, Smart Healthcare, Smart Industry, Smart Agriculture, Smart Energy Management etc 1009 Topic End	02		
07	WORK CULTURE, TQM & SAFETY			02 Week-8	
08	LEGISLATION			02 Week -9	
09	SMART TECHNOLOGY			04 Week(9-10)	

S. Balasingh
Faculty

Ser.
18.7.23
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Rangaiah
25/07/2023
Principal

LESSON PLAN

- 1) Subject Code: Th-2
- 2) Subject Title: INTERNET AND WEB TECHNOLOGY
- 3) Semester: 5th
- 4) Branch: Computer Science Engg.
- 5) Faculty: Nadeep Jena
- 6) No. of Classes / Week: 4P/week
- 7) Pre Requisite for the Subject: NIL / YES, If YES, give details:
- 8) Text Book to be referred by students:

SI No.	Book	Author	Publication	% of Questions Asked	Year (Edition)	Whether available in Library
I	Internet and Web Designing	Neha Dutta, Adesh Pandey	Katson Books	90		Not Available

9) Course Coverage Schedule:

Ch. No.	Name of Chapter	Course to be Covered	No of periods Required	Total Class for Chapter/ Week (From-To)	Remarks
1.	Internet Basics	1.1 Computer network	1	3 Week(1)	
		1.2 Concept of Internet, Intranet, Modem	1		
		1.3 IP Address, Internet Domains, CIDR Notation, ISP, TCP/IP	1		
2.	Internet Connectivity & WWW	2.1 Introduction of connectivity	1	4 Week(1-2)	
		2.2 Medium and methods of connectivity, ISDN, VSAT, RF Link	1		
		2.3 Working of Internet			
		2.4 Introduction to WWW, Application Level Protocol	1		
		2.5 Web Browser, URL, Hyper text, Hyperlinks, Hypermedia, 2.6 Search Engine, Proxy sever, CGI, URI, Dreamweaver	1		
3.	Internet Security	3.1 Introduction to security	1	3 Week(2-3)	
		3.2 Types of security, Authentication & Authorization	1		
		3.3 Firewalls, Encryption & Decryption, SSL	1		
4.	Internet Application	4.1 E-Mail, Email protocols	1	4 Week(3-4)	
		4.2 Telnet			
		4.3 FTP	1		
		4.4 Newsgroup			
		4.5 Chartroom	1		
		4.6 Internet Relay Chat			
		4.7 Video Conferencing	1		
		4.8 E-Commerce			

5.	Website Classifications	5.1 Static Websites	1	3 Week(4-5)	
		5.2 Dynamic websites			
		5.3 Web portals	1		
		5.4 Social Networking Sites			
		5.5 RSS Feed, Blog, Netiquette	1		
6.	Development of Portals Using HTML	6.1 Design a webpage, Good Web Design	1	5 Week(5-6)	
		6.2 HTML Introduction	1		
		6.3 HTML Tags, Anchor Tag, Table Tag	1		
		6.4 HTML Frames, Forms	1		
		6.5 Disadvantages of HTML			
		6.6 Separating style from structure with style sheets	1		
		6.7 CSS Rules, Types of CSS			
7.	Client side Scripting with JavaScript	7.1 Introduction to script, Client side Scripting, Types of Scripting	1	9 Week(6-8)	
		7.2 Variables in JavaScript, Built-in Function	1		
		7.3 Arrays in JavaScript, Conditional statements, Loops	1		
		7.4 Document Object Model	1		
		7.5 Creating Functions, objects in JavaScript	1		
		7.6 Event handling in JavaScript	1		
		7.7 Embedding JavaScript with HTML	1		
		7.8 Working with Cookies	1		
		7.9 Connecting database using JavaScript in HTML Page			
		7.10 Working with Browser, validating and submitting Forms	1		
8.	Server Side Scripting	8.1 Introduction to server side Scripting	1	4 Week(8-9)	
		8.2 Components of SSS			
		8.3 Difference between CSS and SSS	1		
		8.4 Server side Scripting method	1		
		8.5 JavaScript on server	1		
		8.6 SQL			
9.	Server Side Programming using PHP	9.1 Introduction to PHP	1	5 Week(9-10)	
		9.2 Variables, string, operator types	1		
		9.3 Conditional statement, Loops	1		
		9.4 Array	1		
		9.5 GET and POST Method and Sessions	1		

N. Jena
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LESSON PLAN

- 1) Subject Code: Th-3
- 2) Subject Title: SOFTWARE ENGINEERING
- 3) Semester: 5th
- 4) Branch: CSE
- 5) Faculty: Biswajit Barik
- 6) No. of Classes / Week: 4P/week
- 7) Pre Requisite for the Subject: NIL / YES, If YES, give details:
- 8) Text Book to be referred by students:

Sl No.	Book	Author	Publication	% of Questions Asked	Year (Edition)	Whether available in Library
i	Fundamentals of Software Engineering	Rajib Mall	PHI	90		yes

9) Course Coverage Schedule:

Ch. No.	Name of Chapter	Course to be Covered	No of periods Required	Total Class for Chapter/ Week (From-To)	Remarks
1.	Introduction to Software Engineering	1.1 Program vs. Software product	1	6 Week(1-2)	
		1.2 Emergence of Software Engineering.	1		
		1.3 Computer Systems Engineering	1		
		1.4 Software Life Cycle Models	3		
2.	Software Project Management	2.1 Responsibility of Project Manager	1	9 Week(2,3-4)	
		2.2 Project Planning			
		2.3 Metrics for Project size estimation(LOC and FP)	1		
		2.4 Project Estimation Techniques	2		
		2.5 COCOMO Models, Basic, Intermediate and complete			
		2.6 Scheduling	2		
		2.7 Organization and Team structure	1		
		2.8 Staffing	1		
3.	Requirement Analysis and specification	2.9 Risk Management		3 Week (4-5)	
		2.10 Configuration Management	1		
		3.1 Requirements gathering and analysis	1		
		3.2 Software Requirements Specification	2		

4.	Software Design	4.1 What is a Good S/W design	1	7 Week(5-7)	
		4.2 Cohesion and coupling.			
		4.3 Neat arrangement	1		
		4.4 S/W Design approaches			
		4.7 Symbols used in DFD			
		4.8 Designing DFD	1		
		4.9 Developing DFD model of a system			
		4.10 Shortcomings of DFD	1		
		4.11 Structured design			
		4.12 Principles of transformation of DFD to Structure Chart	1		
5.	User Interface Design	4.13 Transform analysis and Transaction Analysis	1	3 Week(7)	
		4.14 Design Review	1		
		5.1 Characteristics of Good Interface	1		
		5.2 Basic concepts of UID.			
6.	Software Coding & Testing	5.3 Types of User interfaces	1	9 Week(8,9-10)	
		5.4 Components based GUI development	1		
		6.1 Coding	1		
		6.2 Code Review			
		6.3 Testing	1		
		6.4 Unit testing			
		6.5 Black Box Testing	1		
		6.6 Equivalence class partitioning and boundary value analysis			
		6.7 White Box Testing			
		6.8 Different White Box methodologies statement coverage branch coverage, condition coverage, path coverage, cyclomatic complexity data flow based testing and mutation testing	2		
		6.9 Debugging approaches	1		
		6.10 Debugging guidelines			
		6.11 Integration Testing	1		
		6.12 Phased and incremental integration testing			
		6.13 System testing alphas beta and acceptance testing	1		
		6.14 Performance Testing, Error seeding			
7	Software Reliability	6.15 General issues associated with testing	1	3 Week 10	
		7.1 Software Reliability	1		
		7.2 Different reliability metrics			
		7.3 Reliability growth modeling	1		
		7.4 Software quality			
		7.5 Software Quality Management System	1		

B. S. S.
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LESSON PLAN

- 1) Subject Code: Th-4
- 2) Subject Title: COMPUTER HARDWARE& MAINTENANCE
- 3) Semester: 5th
- 4) Branch: Computer Science Engg.
- 5) Faculty: Monalisa Batu
- 6) No. of Classes / Week: 3P/week
- 7) Pre Requisite for the Subject: NIL / YES, If YES, give details:
- 8) Text Book to be referred by students:

Sl No.	Book	Author	Publication	% of Questions Asked	Year (Edition)	Whether available in Library
i	Self Note					

9) Course Coverage Schedule:

Ch. No.	Name of Chapter	Course to be Covered	No of periods Required	Total Class for Chapter/ Week (From-To)	Remarks
1.	COMPUTER CENTRE MANAGEMENT	1.1 Need of Management in Computer Centre	1	4 Week(1-2)	
		1.2 Types of Jobs carried out in computers in an organization	1		
		1.3 Duties and responsibilities of personnel involved			
		1.4 Need of Training of Staff	1		
		1.5 Idea about Various makes of Computers.	1		
2.	SITE PREPARATION & INSTALLATION	2.1 Layouts of computer centre	1	3 Week(2-3)	
		2.2 False Roofing, Air Conditioning, Dust Proofing	1		
		2.3 Power Conditioning equipments like CVT, UPS, Isolation Circuits with Principles of functioning	1		
3.	MOTHER BOARD and COMPONENTS	3.1 Components and slots (Processor socket/slot, memory sockets, Chip sets, Cache, BIOS, Clock Generator, RTC, I/O Controller, power Connector, Key Board/Mouse Connectors, Jumpers, Pin Connectors etc)	1	5 Week (3-4)	
		3.2 Mother architecture and Block Diagram	1		
		3.3 Processors (Core2 Duo Processor, Quad Core Processor, Core i3,i5,i7 series, AMD A10 series, Xeon Processor)	1		
		3.4 Chip Sets	1		
		3.5 Bus Standards: PCI, AGP, USB etc.			
		3.6 Colour Codes for Devices/ports	1		

4.	MEMORY AND I/O DEVICES	4.1 Primary and secondary Memory	1	5 Week(5-6)	
		4.2 Memory speed , Access time			
		4.3 Hard Disk, Construction, Working Principles			
		4.4 File System, Formatting, Partitioning	1		
		4.5 Removable Storage and Special devices and their working principles(CD, DVD, External drives, Memory stick, USB flash drive, Solid state drive)			
		4.6 Key Board(Interfacing, USB, Wireless, Types of keys, Keyboard Matrix, Key Bouncing)	1		
		4.7 Mouse Interfacing	1		
5.	DISPLAY , POWER SUPPLY AND BIOS	4.8 Printers(Types, operation and Trouble shooting)		4 Week(6-7)	
		4.9 Scanners(Types, operation and Trouble Shooting)	1		
		5.1 Displays and Graphics Cards	1		
		5.2 LCD, PLASMA, TFT, LED Displays			
		5.3 SMPS (Basic Principles and operations, O/P voltage)	1		
6.	MAINTENANCE AND TROUBLE SHOOTING	5.4 BIOS(Functions, setups, types of BIOS)	1	6 Week(8-9)	
		5.5 POST(Operation, Faults related to Hardware)	1		
		6.1 Assembly of Components of Desktop Computers	1		
		6.2 Configuring Laptops and Power settings			
		6.3 Laptop Components(Adapter , Battery, Basic problems, RAM types, CPU types, Laptop Motherboard, block diagram, Laptop Keyboard)	1		
		6.4 Formatting , Partitioning and installation of OS			
		6.5 Trouble shooting of Common ly faced problems in Desktops and Laptops	1		
		6.6 Basic Maintenance concepts(Preventive, Corrective, online)			
		6.7 Diagnostic programs and tools	1		
		6.8 Methods of Trouble shooting(symptom observation, analysis, diagnosis, Correction)			
7	NETWORKING DEVICES AND THEIR INTERFACES	6.9 Up gradation of system and application software	1	3 Week(10)	
		6.10 Virus concepts, Antivirus	1		
		7.2 Networking interconnecting devices such as hub, switch, Router	1		
		7.3 Types of Network cable	1		
		7.4 Types of Network connector	1		

M. Bala
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LESSON PLAN

- 1) **Subject Code:** Th-5
- 2) **Subject Title:** Mobile Computing
- 3) **Semester:** 5th
- 4) **Branch:** CSE
- 5) **Faculty:** Binaya Ranjan Pattanaik
- 6) **No. of Classes / Week:** 4P/week
- 7) **Pre Requisite for the Subject:** NIL / YES, NIL
- 8) **Text Book to be referred by students:**

SI No.	Book	Author	Publication	% of Questions Asked	Year (Edition)	Whether available in Library
i	Mobile Computing	Dr. N.N.Jani, Kamaljit I. Lakhtaria, Dr. Ashish N. Jani & Nita Kanabar	S.Chand& Company Ltd	90	2018	yes

9) **Course Coverage Schedule:**

Ch. No.	Name of Chapter	Course to be Covered	No of periods Required	Total Class for Chapter/ Week (From-To)	Remarks
1.	Introduction to Wireless networks & Mobile Computing 06	1.1 Networks	1	4 Week(1)	
		1.2 Wireless Networks			
		1.3 Mobile Computing	1		
		1.4 Mobile Computing Characteristics	1		
		1.5 Application of Mobile Computing	1		
2.	Introduction to Mobile Development Framework	2.1 C/S architecture	1	3 Week(2)	
		2.2 n-tier architecture			
		2.3 n-tier architecture and www	1		
		2.4 Peer-to Peer architecture	1		
		2.5 Mobile agent architecture			
3.	Wireless Transmission	3.1 Introduction	2	6 Week (2,3-4)	
		3.2 Signals			
		3.3 Period, Frequency and Bandwidth.			
		3.4 Antennas	2		
		3.5 Signal Propagation			
		3.6 Multiplexing			
		3.7 Modulation	2		
		3.8 Spread Spectrum			
		3.9 Cellular System			
4.	Medium Access Control	4.1 Introduction	1	2 Week(4)	
		4.2 Hidden/ Exposed Terminals			
		4.3 The basic Access Method			
		4.4 Near / Far Terminals	1		
		4.5 SDMA, FDMA, TDMA, CDMA			
5.	Wireless LANs	5.1 Wireless LAN and communication	2	6 Week(4,5-6)	
		5.2 Infrared			
		5.3 Radio Frequency			
		5.4 IR Advantages and Disadvantages			

		5.5 RF Advantages and Disadvantages 5.6 Wireless Network Architecture Logical 5.7 Types of WLAN 5.8 IEEE 802.11 5.9 MAC layer	2		
		5.10 Security 5.11 Synchronization 5.12 Power Management 5.13 Roaming 5.14 Bluetooth Overview	2		
6.	Ubiquitous Wireless Communication	6.1 Introduction 6.2 Scenario of Mobile Communication 6.3 Mobile Communication Generations 1G to 3G	1	3 Week(6)	
		6.4 3rd Generation Mobile Communication Network	1		
		6.5 Universal Mobile telecommunication System (UMTS)	1		
7	Mobile IP	7.1 Overview 7.2 Working with mobile IP 7.3 Mobile IP Entities 7.4 Mobility Agents	1 1 1 1	5 Week (6-7)	
		7.5 Components of Mobile IP 7.6 Mobile IPv6 Features	1 1		
		7.7 Mobile IPv6 Address Types 7.8 Mobile IPv6 Address Scope 7.9 Mobile IP Operation	2		
8	Mobile Computing	8.1 WWW architecture for Mobile computing 8.2 Need of WAP 8.3 Benefits of WAP 8.4 Examples of WAP	1 1 1 1	6 Week (8-9)	
		8.5 WAP- Architecture 8.6 WAP protocols 8.7 WML 8.8 WAP Push architecture 8.9 Push-Pull based data acquisition 8.10 I-mode 8.11 WAP 2.x	1 1 1 1 1 1 1		
9	Wireless Telecomm Networks	9.1 GSM 9.2 GPRS 9.3 IS-95 9.4 CDMA-2000 9.5 W-CDMA 9.6 Wireless Sensor Networks	1 1 1 1 1 1	3 Week (9-10)	
10	Messaging Services	10.1 Short Message Services (SMS) 10.2 Multimedia Message Services (MMS) 10.3 Multimedia transmission over wireless	1 1 1		

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