



**DEPARTMENT OF MATHEMATICS AND SCIENCE**  
**ORISSA SCHOOL OF MINING ENGINEERING,**  
**KEONJHAR**

**LESSON PLAN**

<b>Discipline: Mechanical Engineering</b>			<b>Semester: 1<sup>st</sup> semester</b>	<b>Name of the Teaching Faculty : Akash Kumar Sahoo</b>
<b>Subject: Introduction to IT System-I(B)</b> Sub code: <b>Th-1(B)</b>			<b>No of days /week class allotted:03/week</b>	<b>Semester from Date:16/08/2024 to 24/12/2024</b> <b>No of weeks:20</b>
<b>Month</b>	<b>Week</b>	<b>No of periods available</b>	<b>Theory topics to be covered</b>	
<b>August</b>	1 <sup>st</sup>	01P	Basic Internet skills (About Networks(LAN, MAN, WAN, PAN), About Internet)	
	2 <sup>nd</sup>	03P	Application of Internet, Internet Basics(WWW, Domain name, URL, HTTP, HTTPS, FTP, Hyperlink, Browser, Webpage, Website, Search Engine, ISP, Download, Upload, DNS, TCP/IP, Modem, Cloud computing)	
	3 <sup>rd</sup>	03P	Understanding A Browser (Working, Types of Browser( GOOGLE CHROME, MOZILA FIREFOX, MICROSOFT-EDGE, APPLE SAFARI, UC BROWSER, OPERAMINI etc), Element of Chrome Browser.	
<b>September.</b>	4 <sup>th</sup>	03p	Features of Web browser, Search Engine (Working, Types (Google, Microsoft-bing, Yahoo, Duck-duck go, Yandex, Baidu etc), Bydefault Search Engine of Each Browser.	
			Types of Web Searches( Navigational, Informational, Transactional), how Search Engine works(Crawling, Indexing, retrieving & Ranking.	
			Google Search Symbols, Operator, Command.	
	5 <sup>th</sup>	03P	Digital India Program(Awareness about digital India program, Pillars of Digital India	
			Digital India Portals ( Infrastructure, Service Based, Empowerment), State portals, College Portals..	
			Block Diagram of computer ( Input unit, MU, CU, ALU, Output unit).	
	6 <sup>th</sup>	03p	Measurement Unit of Digital data, Types of computer Memory.	
Display and its Types.				
Input and Output devices ( Working, Examples), HDD & SSD and its Comparison.				
7 <sup>th</sup>	03p	Discussion about OPERATING SYSTEM(like desktop os and mobile os), Need of OS, Types of Os.		
		<b>Monthly Test-01 and Discussion</b>		
		Installation of LINUX and WINDOWS OS.		
<b>October</b>	8 <sup>th</sup>	03P	About Unix OS, Architecture of Unix OS(Hardware, Kernel, Shell, Application software, User).	
			Features of Shell, Shell types etc,Vi editor(Working & its Features) .	
			Basic command of Unix OS, Practice question related to Operating System.	
	9 <sup>th</sup>	03P	HTML(Introduction, about Website and webpages).	
			Structure of an HTML Document, Basic HTML Tags.	
			<b>1<sup>st</sup> Internal Assessment.</b>	
10 <sup>th</sup>	03P	Listing tags, adding Graphics to the HTML.		
		About CSS and Way to apply CSS in HTML documents.		
11 <sup>th</sup>	02P	HTML Forms with input Tags. Create a web Form for Annual day Participation		
		<b>Monthly Test-02 and Discussion</b>		

November	12 <sup>th</sup>	01P	Introduction to open office software and installation process of open office, advantage of open office over ms-office.
	13 <sup>th</sup>	03P	Open-office writer, parts of writer interface(title bar, Menu bar, Standard tool bar, formatting tool bar, side tool bar, status bar, Ruler).
			Cut, Copy, paste, insert image, insert Special Character, font color, back ground color, font( style, Size, alignment(Left, Right, Center, justify)).
			Finding and replacing of text, spelling and grammar checking, with one practice question is Student create their own Resume with open office writer.
	14 <sup>th</sup>	02P	About Open-office CALC, Advantage of Calc over Writer,.
			parts of CALC interface( Title bar, menu bar, standard tool bar, Formatting Tool Bar, side bar, Status bar), Formula bar, creating charts, Creating Formula.
15 <sup>th</sup>	03P	One practice question- Student Create a Bill of a shop and Create their own mark sheet to calculate sum, percentage, grade, and pass or Fail.	
16 <sup>th</sup>	03P	Second practice question- Create their own mark sheet to calculate sum, percentage, grade, and pass or Fail.	
		<b>Monthly Test-03 and Discussion</b>	
December	17 <sup>th</sup>	03P	About open-Office impress, Creating new presentation, Parts of impress Interface, Applying animation effect, insert images, Printing Presentation.
			One practice question- Create printer Presentation using impress.
			<b>2<sup>nd</sup> Internal Assessment.</b>
	18 <sup>th</sup>	03P	Introduction to information security, common information security attacks and vulnerabilities (Malware, Worm, Spyware, Adware, Keyloggers, Virus, Sweepers, Backdoor)
			Social Engineering Attacks (Phishing, Vishing, Smishing, Baiting, Quid Pro quo scam),Network Threat. General Internet Browsing
			Social networking.
	19 <sup>th</sup>	03P	Practice question related to Information Security.
			Practice question related to Unit-1( Basic Internet skill).
Practice question related to Unit-2(operating system)			
20 <sup>th</sup>	03P	Practice question related to Unit-3(HTML &CSS) & unit-4 (Open-office)	
		<b>Revision &amp;Previous year question &amp; Answer discussion.</b>	
<b>. VERY SIMILAR TEST/MOCK TEST</b>			