## BLACK DIAMOND SCHOOL OF ENGINEERING, JHARSUGUDA

## LESSON PLAN Session (2022-2023)

<b>Discipline:</b> Computer Science & Engineering	Semester: 3 <sup>rd</sup> , W/2022	Name of the faculty:
Subject: Computer	No. of Days/week: 04	<b>Start Date:</b> 14/09/2022
System Architecture,		<b>End Date:</b> 21/01/2023
(Th-1)		

Week	Class Day	Theory Topics	
1 <sup>st</sup>	1 <sup>st</sup>	<b>1. Introduction to Basic structure of computer hardware</b>	
	2 <sup>nd</sup>	Introduction of computer	
	3 <sup>rd</sup>	Basic Structure of computer	
	4 <sup>th</sup>	computer hardware	
$2^{nd}$	1 <sup>st</sup>	Functional Units	
	2 <sup>nd</sup>	Computer components	
	3 <sup>rd</sup>	Performance measures	
	4 <sup>th</sup>	Memory addressing & Operations	
3 <sup>rd</sup>	1 <sup>st</sup>	Revision	
	2 <sup>nd</sup>	2. Introduction to Instructions & instruction Sequencing	
	3 <sup>rd</sup>	Fundamentals to instructions	
	4 <sup>th</sup>	Operands	
4 <sup>th</sup>	1 <sup>st</sup>	Op Codes	
	2 <sup>nd</sup>	Instruction formats	
	3 <sup>rd</sup>	Addressing Modes	
	4 <sup>th</sup>	Continuing addressing modes	
5 <sup>th</sup>	1 st	Revision	
	2 <sup>nd</sup>	Question answer discussion	
	3 <sup>rd</sup>	3. Introduction to Processor System	
	4 <sup>th</sup>	Register Files	
6 <sup>th</sup>	1 st	Complete instruction execution	
	2 <sup>nd</sup>	Hardware control	
	3 <sup>rd</sup>	Micro program control	
	4 <sup>th</sup>	Revision	
7 <sup>th</sup>	1 st	Quiz – 1	
	2 <sup>nd</sup>	4. Introduction to Memory System	
	3 <sup>rd</sup>	Memory characteristics	
	4 <sup>th</sup>	Memory hierarchy	
8 <sup>th</sup>	1 st	RAM and ROM organization	
	2 <sup>nd</sup>	Continuing about RAM and ROM organization	
	3 <sup>rd</sup>	Interleaved Memory	
	4 <sup>th</sup>	Cache memory	
9 <sup>th</sup>	1 <sup>st</sup>	Virtual memory	

	3 <sup>rd</sup>		
	5	Question answer discussion	
	4 <sup>th</sup>	5. Introduction to Input – Output System	
10 <sup>th</sup>	$1^{st}$	Input - Output Interface	
	2 <sup>nd</sup>	Modes of Data transfer	
	3 <sup>rd</sup>	Programmed I/O Transfer	
	$4^{th}$	Interrupt driven I/O	
11 <sup>th</sup>	$1^{st}$	DMA	
	$2^{nd}$	I/O Processor	
	3 <sup>rd</sup>	Continuing I/O Processor	
	$4^{\text{th}}$	Revision	
12 <sup>th</sup>	$1^{st}$	Question answer discussion	
	2 <sup>nd</sup>	6. Introduction to I/O Interface & Bus architecture	
	3 <sup>rd</sup>	Bus and System Bus	
	$4^{th}$	Types of System Bus	
13 <sup>th</sup>	1 <sup>st</sup>	Bus Structure	
	$2^{nd}$	Basic Parameters of Bus design	
	3 <sup>rd</sup>	SCSI	
	4 <sup>th</sup>	USB	
14 <sup>th</sup>	1 <sup>st</sup>	Revision	
	$2^{nd}$	Quiz – 2	
	3 <sup>rd</sup>	7. Introduction to Parallel Processing	
	4 <sup>th</sup>	Parallel Processing	
15 <sup>th</sup>	1 <sup>st</sup>	Linear Pipeline	
	2 <sup>nd</sup>	Multiprocessor	
	3 <sup>rd</sup>	Flynn"s Classification	
	4 <sup>th</sup>	Revision	