

DHABALESWAR INSTITUTE OF POLYTECHNIC

LESSON PLAN

Discipline	Semester	Name of the Teaching Faculty
Diploma	4th Sem	Gireija Sankar Pradhan
Subject	No. of days per Week Class Alloted	4th Semester from Dt. 14/03/22 To Dt. 04/06/22 No. of Weeks: 15 weeks
Mpt Mic	5 days/week	
Week	Class Day	Theory / Practical Topics
1st	1st	Introduction to Microprocessor and microcontroller and distinguish between them
	2nd	concept of Address bus, Data bus, Control bus and System bus
	3rd	General Bus Structure Block Diagram
	4th	Basic Architecture of 8085 Microprocessor
	5th	Signal Description (Pin Diagram) of 8085 Microprocessor
2nd	1st	Signal Description (Pin Diagram) of 8085 Microprocessor
	2nd	Register Organisation, Distinguish between SPR and GPR. Timing and Control Module
	3rd	Stack Stack Pointer and Stack Top
	4th	Interrupts - 8085 Interrupts, Masking of Interrupts
	5th	Addressing data & Differentiate between one-byte, two-byte and three-byte instructions with examples.


 H.O.D. Electronics & Telecomm. Engg.
 DIP Athgarh

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Diploma	4th Sem	Giirejja Somkare Pradham
Subject	No. of days per Week Class Alloted	4th Semester from Dt. 14/03/22 To Dt. 04/06/22 No. of Weeks: 15 weeks
Mp	5 days	
Week	Class Day	Theory / Practical Topics
3rd	1st	Addressing modes in instructions with suitable examples
4th	2nd 1st	Instruction Set of 8085 (Data Transfer, Arithmetic, Logical, Branching, stack I/O, Machine Control)
	3rd 2nd	Simple Assembly Language Programming in 8085: Addition and subtraction
	3rd	Logic operation AND, OR complement, 1's, 2's, Masking of bits.
	4th	Counter and Time delay (Single Register, Register Pair and More than Two registers)
	5th	Looping, Counting and Indexing (call/JMP etc)
5th	1st	Stack and Subroutine Programmes code conversion, BCD Arithmetic and 16 bit data operation, block transfer.


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 DIP - Aithgarh

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Diploma	4th Sem	Gireja Samkar Pradham
Subject	No. of days per Week Class Alloted	<u>4th</u> Semester from Dt. <u>14/03/22</u> To Dt. <u>04/06/22</u>
MP	5 days/week	No. of Weeks: <u>15 weeks</u>
Week	Class Day	Theory / Practical Topics
6th	2nd	Compare between two numbers
	3rd	Array handling (Largest and smallest No in a data array)
	1st	Memory and I/O Addressing
	2nd	Define op. code, operand, T-state, fetch cycle, Machine cycle, instruction cycle and concept of timing diagram
7th	3rd	Draw timing diagram for memory read, memory write, I/O read, I/O write machine cycle
	4th	Draw a neat sketch for the timing diagram of 8085 instruction
	1st	Concept of interfacing, Define mapping and data transfer mechanism, memory mapping
	2nd	Concept of memory interfacing, interfacing EPROM and RAM
	3rd	Concept of Address decoding for I/O devices

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Diploma	4th Sem	S. Girija Sarekare Pradhani
Subject	No. of days per Week Class Alloted	4th Semester from Dt. 14/03/22 To Dt. 04/06/22
UP	5 days	No. of Weeks: 15 weeks.
Week	Class Day	Theory / Practical Topics
8th	1st	programmable peripheral interface 8255
	2nd	ADC and DAC with interfacing
	3rd	Interfacing seven segment displays
	4th	Generate square waves on all lines of 8255
	5th	Design interface a traffic light control system using 8255
9th	1st	Design interface for stepper motor control using 8255
	2nd	Internal architecture of 8086
	3rd	Signal Description of 8086
	4th	General Bus operations and Physical memory organisation
	5th	Minimum mode and timings
10th	1st	Maximum mode and timings
	2nd	Interrupts and interrupt service routine interrupt cycle, ^{Non} maskable interrupt,
	3rd	8086 instruction set and programming addressing modes, instruction set, Directives and operators