

Shantilal Shah Engineering College, Bhavnagar
Department of Electronics & Communication

Semester-V

Microcontroller & Interfacing--2151001

ALA topic distribution


[10 Marks]

Topic No.	Topic Name
1	Comparison of Microprocessor & microcontroller, Embedded Systems and AVR family
2	Architecture of AVR Microcontroller
3	AVR programming Model
4	ATmega 32 chip pin configuration and function of each pin
5	Addressing Modes of AVR
6	AVR Data Types
7	AVR Assembler Directives
8	Instruction classification of AVR and explanation of Data Transfer, Arithmetic and logical Instructions
9	Compare, Rotate and Shift Instructions
10	Branch and Jump Instructions, Types of Jumps
11	AVR I/O port programming (Assembly & C)
12	AVR serial port programming (Assembly & C)
13	AVR Interrupt programming (Assembly & C)
14	AVR Timer and delay programming (Assembly & C)
15	Basic steps to interface LCD and Keyboard with AVR with suitable examples
16	Basic steps to interface ADC,DAC and Sensor with AVR with suitable examples
17	Relay, stepper motor and DC motor interfacing with AVR with suitable examples
18	PWM programming.
19	SPI protocol and I2cC protocol
20	Introduction, installation and use of Arduino board with proper screen shots

Roll No	Topic No	Roll No	Topic No	Roll No	Topic No	Roll No	Topic No
4001	1	4021	1	4041	1	4061	1
4002	2	4022	2	4042	2	4062	2
4003	3	4023	3	4043	3	4063	3
4004	4	4024	4	4044	4	4064	4
4005	5	4025	5	4045	5		
4006	6	4026	6	4046	6		
4007	7	4027	7	4047	7		
4008	8	4028	8	4048	8		
4009	9	4029	9	4049	9		
4010	10	4030	10	4050	10		
4011	11	4031	11	4051	11		
4012	12	4032	12	4052	12		
4013	13	4033	13	4053	13		
4014	14	4034	14	4054	14		
4015	15	4035	15	4055	15		
4016	16	4036	16	4056	16		
4017	17	4037	17	4057	17		
4018	18	4038	18	4058	18		
4019	19	4039	19	4059	19		
4020	20	4040	20	4060	20		

The first slide should contain Topic name, name of the Student, Enrollment Number, and name of the Faculty, Department and College.

Last date for submission of PPT is 30/8/18


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