Yashwantrao Chavan College of Science, Karad

Department of Electronics

Student Seminar -2020-21

Class – B.Sc.III

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HOD
Department of Electronics
Yashwantrao Chavan College of Science,
Karad

Principal
Yashwantrao Chavan College of Science, Karad

Yashwantrao Chavan College of Science, Karad

ACTIVITY REPORT

Name of the Department: Electronics	Academic Year – 2020-21
Name of the activity	B.Sc. III Electronics Students Seminar
Purpose of Program	To impose presentation skill in a student To impose stage daring in a student
No. of Students Participated	18
No. of Teachers Participated	05
Program outcomes	1) A well Trained Students 2) student with stage daring
Program Photo	

Teacher In charge

Signature
Head of the Department

HEAD
Department of Electronics

Signature IQAC
Co-ordinator

Signature
Principal

Principal
Yashwantrao Chavan College of Science, Karad

Yashwantrao Chavan College of Science, Karad

Department of Electronics

Student Seminar 2020-21

Class: -B.Sc.III

Notice

Date :02/01/2021

All students of the B.Sc. III class are informed that, seminar is arranged on 05/01/2021 at 12:00 pm in online mode. It is compulsory for all students. All should note and follow.

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Department of Electronics
Yashwantrao Chavan College of Science,
Karad

YASHWANTRAO CHAVAN COLLEGE OF SCIENCE, KARAD

Department of Electronics

Students Attendance B.Sc. III 20-21

Name of the Activity: Students Seminar

Date: 13/01/2021. (B.Sc-III) 20-21

Yashwantrao Chavan College of Science ★ Karad ★ ELECTRONICS

Sr. No.	Students Name	Class	Signature
1.	Bhandare Varsha	BSc-III	Bvarsha
2.	Chalke Aakanksha	B.Sc.III	Achalke
3.	Chitnis Aaraya.	B.Sc-III	Aaraya.
4.	Deshmukh A. V.	B.Sc-III	D.A.V.
5.	Dubal. R.B	B.Sc-III	R.B.Dubal
6.	Deshmuk.A.S.	BSc-III	Deshmuk.A.V
7.	Sinde G.S.	B.Sc III	S.G.S
8.	Desai A.S.	BSc-III	ADesai
9.	Dubal. R.B.	B.Sc-III	D.Rutuja
10.	Dixit Neha Nandkishor	B.Sc-III	Dneha.
11.	Gurav S.S	B.Sc-III	SSGurav
12.	Joshi P.S	B.S.C III	P.S.Joshi
13.	Mohite Pratiksha Uttam	B.Sc-III	Pmohite
14.	More A.J	B.Sc-III	Amore
15.	Mulla. A.D.	B.Sc III	Amulla
16.	Patil. Amruta-Vikas	BSc-III	Patil.
17.	Nalawde Aditya Narayan	B.Sc-III	ANalawde
18.	Vetal. R.S.	B.Sc.III	RVetal

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YASHWANTRAO CHAVAN COLLEGE OF SCIENCE KARAD

DEPARTMENT OF ELECTRONICS

Seminar Report

B.Sc.III

Academic Year 2020 -21

Sr.No.	Name of student	Seminar Title
1.	Chalke Aakanksha Arun	Bluetooth Technology
2.	ChitnisAryaChandrashekhar	Design and construction of speed control of vehicle
3.	Desai AniketShivajirao	Hotspot
4.	DeshmukhAniketVinayak	Smart antenna technology
5.	DubalHrutuja Bharat	3G,4G,5G Technology
6.	GuravSanket Sunil	Wi-Fi Technology
7.	JadhavShashankshivaji	5G Technology
8.	Joshi PrasannaSharad	Nano Technology
9.	KadamVrushaliRavindra	Type of Flip -Flop
10.	MohitePratikshaUttam	Microcontroller
11.	More AbhijeethJangam	Helical Antenna
12	MullaAshpakDadamiya	IOT
13.	NalawdeAditya Narayan	RS-232
14.	PatilAmrutaVikas	PLC
15.	PatilAshitoshadhikarao	Robot arm
16.	SapkalAswiniKrishnat	6G mobile Technology
17.	ShindeAbhishekBaban	3D Internet
18.	VetalRushikesh Sanjay	Light emitting diode display

Teacher Incharge **HOD**

Principal
Yashwantrao Chavan College of Science, Karad

Yashwantrao Chavan College of Science ★ Karad ★ ELECTRONICS

Roll No. 3078

Date

Yashwantrao Chavan College of Science, Karad.

ELECTRONICS DEPARTMENT

Seminar

Name - Mohite Pratiksha Uttam

Std - B.Sc. III

Sub - Electronics

Teacher in-charge 4/04/2021

Head of the Department

External Examiner

Principal
Yashwantrao Chavan College of Science, Karad

Yashwantrao Chavan College of Science ★ Karad ★ ELECTRONICS

Microcontrollers

* ~~Em~~ Embedded Systems :

1] An embeadded systems is a specical-purpose computor system designed to perform one or a few dedicated function
2] in contoast, a general-purpose computer, such as a personal computer, can do many different tasks depending on programming
3] A wide variety of the electronic devies we use today come under embedded systems.
4] From a simple toy car, traffic lights to cell phones but of different ~~devices~~ we use ~~today come e~~ complexity
5] Hence the microcontroller.

Why Microcontrollers :

1] A microcontrolleos is a complete microprocessor system built on a single IC.
2] Microcontroliers were developed to meet a need for microprocessor to be put into low cost products.
3] Building a complete microprosessor system on a single chip substantially reduces the cost of building simple products, which use the

Blocks of a Microcontroller

CPU core
- This is the processing unit which executes the program

Flash Memory
- The place where the program is stored. This is read by the cpu core and executes each instruction
- Non-volatile (remains even after ~~temporary~~ device power off)

SRAM
- RAM used by the cpu to store temporary variables
- volatile

EEPROM
- ROM for storing finished results or data for future use
- Non-volatile

I/O ports
- Digital ports used for input/output to control leds etc

Peripherals
- ADC
- Timers

Basic I/O Port Configuration

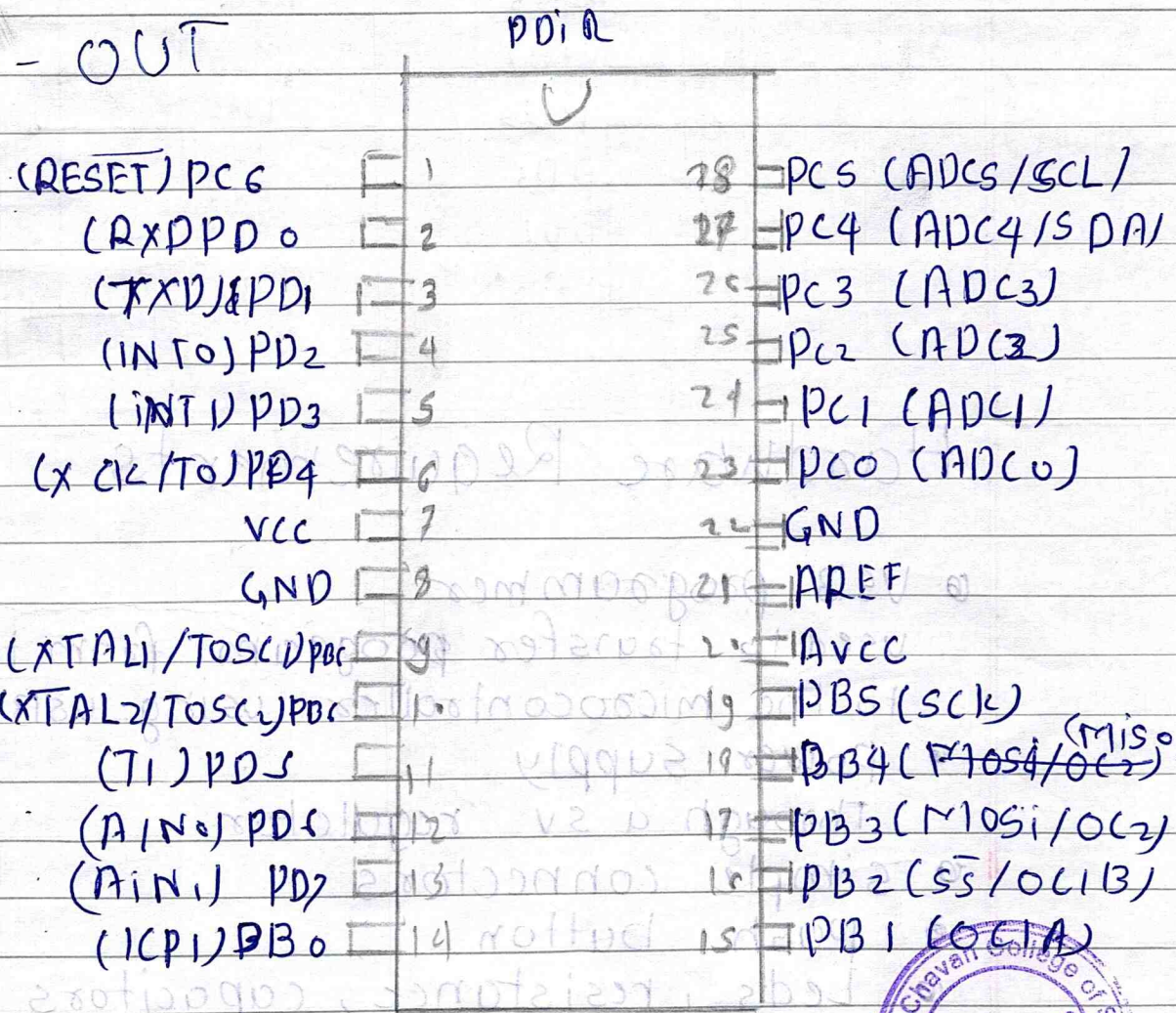
- use I/O ports, to write values to port pins and read values from them.
- Glowing LED or activating / enabling external circuits by writing a high or low to them
- Readings states from sensors.

Ports and Port pins

- 4 I/O ports: port A, B, C, D also denoted as PA, PB, PC, PD
- Each port has 8 lines that can be independently set as H/L
- Each of the 8 lines can be configured independently as an input or an output pin
- The above feature is called True Read Modify Write Functionality
- Pin drivers are strong enough to drive LEDs directly
- All pins have voltage invariant internal pull up resistors
- Each of them can be individually pulled up as H/L

- Two wire interface (I2C bus)
  connects to external devices that talk through this bus, fo eg SRF-04 sonar rangeos
- SPI serial interface
  A serial protocol / standard for talking to external devices, developed by Motorola. Analog devices accelerometers use this interface
- programmable serial USART

Pin-OUT



- Rest (idealy high, pull to low to reset)
- ADC (0-5) ADC input
- Vcc, Gnd power
- Avcc. Aref ADC.

Example

```
unsigned char i;
...
/* Define pull-ups and set outputs high */
/* Define directions for Port pins */
PORTB = (1<<PB7)|(1<<PB6)|(1<<PB1)|(1<<PB0);
DDRB = (1<<DDB3)|(1<<DDB2)|(1<<DDB1)|(1<<DDB0);
/* Insert nop for synchronization */
_NOP();
/* Read port pins */
i = PINB;
...
```

Peripheral programming

- Important Registers to be considered while using peripherals

* control register
  - used to specify mode of operation, control interrupts
* status register
  - contains interrupt flags and other flags indicating state of operation
* Data register
  - contains send data, finished results

Yashwantrao Chavan College of Science, Karad

Department of Electronics

Feedback form 20-21

Name of the Activity– Students Seminar

Class:...B.Sc.-III..... Roll No.....3056.....

		Excellent (5)	Very Good (4)	Good (3)	Satisfactory (2)	Poor (1)
1	Subject Interest generated by Teacher Incharge	✓				
2	Support by Teachers during seminar		✓			
3	Behavior and help extended by the Non-teaching staff	✓				
4	Providing ICT facilities		✓			
5	Overall fulfilment and your expectations from the Department	✓				

Any other suggestions if any.....

Name of the Students.....Gurav S.S.....

Date: 13/01/2021

Sign. SSGurav

Yashwantrao Chavan College of Science, Karad

Department of Electronics

Feedback form 2020-21

Name of the Activity– Students Seminar

Class:.....B.Sc.-III..... Roll No.....2007.....

		Excellent (5)	Very Good (4)	Good (3)	Satisfactory (2)	Poor (1)
1	Subject Interest generated by Teacher Incharge	✓				
2	Support by Teachers during seminar		✓			
3	Behavior and help extended by the Non-teaching staff	✓				
4	Providing ICT facilities					✓
5	Overall fulfilment and your expectations from the Department	✓				

Any other suggestions if any.....

Name of the Students....Pubal Rutuja Bharat.....

Date: 13/01/2021

D Rutuja.
Sign.

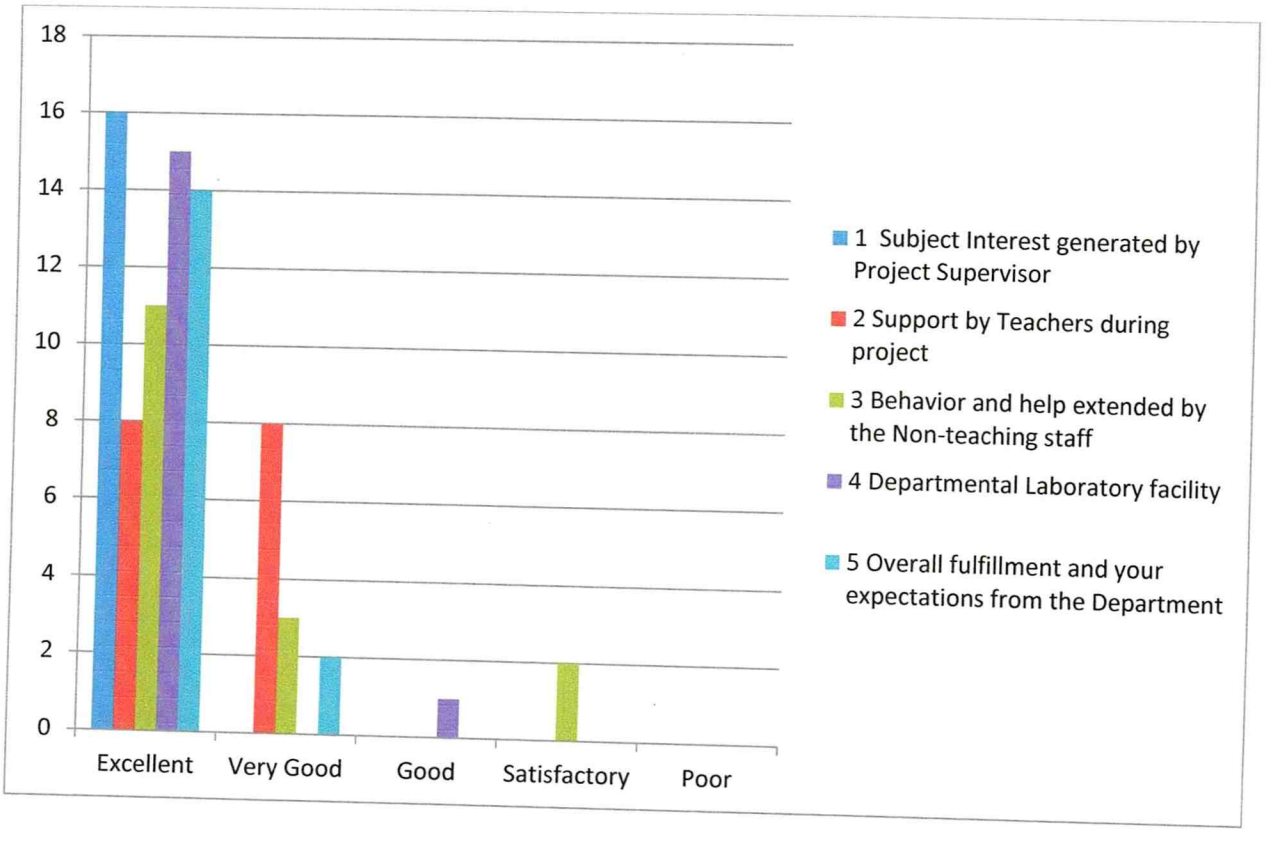
Yashwantrao Chavan College of Science, Karad

Department: Electronics

No. of. student - 18 Seminar

Name of the Activity– Students ~~Projects~~ B.Sc. III **(2020-21)**

		Excellent	Very Good	Good	Satisfactory	Poor
1	Subject Interest generated by Project Supervisor	16				
2	Support by Teachers during project	8	8			
3	Behavior and help extended by the Non-teaching staff	11	3		2	
4	Departmental Laboratory facility	15		1		
5	Overall fulfillment and your expectations from the Department	14	2			



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