



Yashwantrao Chavan College of Science, Karad

Department of Electronics

Student Seminar -2019-20

Class – B.Sc.II

INDEX

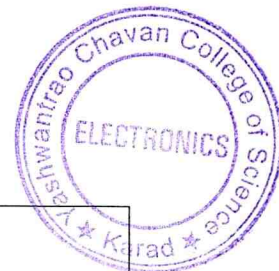
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HOD
Head

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 – 2019-20
Name of the activity	B.Sc. II Electronics Students Seminar	
Purpose of Program	To impose presentation skill in a student To impose stage daring in a student	
No. of Students Participated	22	
No. of Teachers Participated	04	
Program outcomes	1) A well Trained Students 2) A student with improved Presentation skill	
Program Photo	 Karad, Maharashtra, India YC College of Science, Tarangan Wishaw Colony, Vidyanagar, Karad, Maharashtra 415124, India Lat 17.308981° Long 74.188647° 02/03/20 11:38 AM GMT +05:30	

[Signature]

Teacher In charge

[Signature]

Signature

Head of the Department

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Karad

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Principal

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Department of Electronics

Student Seminar 2019-20

Class: -B.Sc.II

Notice

Date : 13/01/2020

All students of the B.Sc. II class are informed that, a student seminar is arranged on 18/01/2020 at 1:00 pm in the electronics department. 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. II 19-20

Name of the Activity: Students Seminar

Date: 24-01-2020. (B.Sc-II) 19-20



Sr. No.	Students Name	Class	Signature
1.	Bhandare Varsha	B.Sc: II	Bhandare Varsha
2.	Chalke Akanksha	B.Sc-II	Chalke Akanksha
3.	chitnis. Araya.	B.Sc II	chitnis. Araya.
4.	Deshmukh.A.V	BSC-II	Deshmukh.A.V.
5.	Dubal. H.B	B.Sc - II	H.B. Dubal
6.	Desai A. S.	BSC-II	Desai A. S.
7.	Dubal. R.B	B.Sc-II	D. Putug
8.	Dixit Neha Namdevshor	B.Sc-II	Dixit Neha
9.	Gurav S.S.	B.Sc-II	S.S. Gurav
10.	joshi P. S	B.S.C II	P.S. Joshi
11.	Mohite Pratiksha Hasm	B.Sc II	Mohite Pratiksha
12.	shinde A.S	B.Sc-II	shinde A.S
13.	Sapkal Ashwin Krishant	B.Sc II	Sapkal Ashwin
14.	Vetal. R.S.	B.Sc-II	R. Vetal
15.			
16.			
17.			
18.			
19.			
20.	Vetal. R.S	B.Sc-II	R. Vetal
21.			

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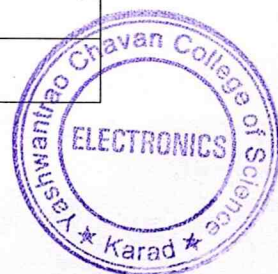
DEPARTMENT OF ELECTRONICS

Seminar Report

B.Sc. II

Academic Year 2019 -20

Sr.No.	Name of student	Seminar Title
1.	Bhandare Varsha Panjabrao	Amplifiers
2.	Chalke Aakanksha Arun	Cascode Amplifier
3.	Chitnis Arya Chandrashekhar	Bipolar junction Transistor
4.	Dabhade Sumedh Pandurang	Bluetooth Technology
5.	Desai Aniket Shivajirao	Transistor Biasing
6.	Deshmukh Aniket Vinayak	CE Amplifier
7.	Dixit Neha Nandkishor	Input, Output Impedance
8.	Dubal Hrutuja Bharat	Current and Voltage Gain
9.	Gurav Sanket Sunil	Concept of Feedback
10.	Jadhav Aditi Suresh	Negative Feedback
11.	Jadhav Rohit Ramesh	Dc load line and Q point
12.	Jadhav Shashank shivaji	Crystal Oscillator
13.	Joshi Prasanna Sharad	Coupling method
14.	Kharade Baljeeth Dhondiram	Bluetooth
15.	KadamVrushaliRavindra	AstableMultivibrator Using IC555
16.	Mohite Pratiksha Uttam	PN junction Diode
17.	More Abhijeeth Jangam	BCD Codes



18.	MullaAshpakDadamiya	ASCII codes
19.	Nalawde Aditya Narayan	Boolean algebra
20.	Patil Gurav Sayajirao	De-Morgan's Theorem
21.	Pawar Rutuja Rajendra	Universal Gate
22.	Sapkal Ashwini Krushnat	Hexadecimal arithmetic
23.	Patil Amruta Vikas	Addition Methode
24.	Patil Ashitosh adhikarao	SubstactionMethode
25.	SapkalAswiniKrishnat	K-Map
26.	Shinde Abhishek Baban	4-bit binary Adder
27.	Thorat Shamburaj Vijay	Bluetooth and Technology
28.	Vetal Rushikesh Sanjay	4-bit binary Subtractor ALU



Teacher Incharge



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YASHWANTRAO CHAVAN COLLEGE OF SCIENCE, KARAD

NAME :- DABHADE SUMEDH
PANDURANG

ROLL NO :- 2002

DEPARTMENT OF
ELECTRONICS

SEMINAR ON :- "BLUETOOTH"

B.Sc

:- II

~~my~~ Year

:- 2020

Teacher
in charge

Examiner
Principal



Head of
Department

INTRODUCTION

Bluetooth is a short-range wireless technology standard that is used for exchanging data between fixed & mobile devices over short distances using UHF radio waves in the ISM bands, from 2.402 GHz to 2.48 GHz, & building personal area networks (PANs).

BLUETOOTH

Developed by	Bluetooth Special interest Group
Introduced	7 May 1998; 24 24 years ago
Industry	Personal area networks
Compatible hardware	Personal Computers Smartphones, Audio devices Gaming consoles
Physical range	Less than 10m (33ft), up to 100m (330ft). Bluetooth 5.0: 40-400 m (100-1000 ft).

HISTORY

The development of the "short-link" radio technology, later named Bluetooth, was initiated in 1989 by Nils Rydbeck, CTO at Ericsson Mobile in Lund, Sweden.

The purpose was to develop wireless headsets, according to two inventions by Johan Ullman, SE 8902098-6 , issued 1989-06-12 and SE 9202239 , issued 1992-07-24. Nils Rydbeck tasked Tord Wingren with specifying and Dutchman Jaap Haarsten and Sven Mattisson with developing. Both were working for Ericsson in Lund.

Principal design and development began in 1994 and by 1997 the team had a workable solution. From 1997 Örjan propelled the technology and standardization.



IMPLEMENTATION

Bluetooth operates at frequencies between 2.402 and 2.480 GHz, or 2.400 and 2.4835 GHz, including guard bands 2 MHz wide at the bottom end and 3.5 MHz wide at the top. This is in the globally unlicensed industrial, scientific and medical (ISM) 2.4 GHz short-range radio frequency band. Bluetooth uses a radio technology called frequency-hopping spread spectrum.

Bluetooth divides transmitted data into packets, and transmits each packet on one of 79 designated Bluetooth channels. Each channel has a bandwidth of 1 MHz. It usually performs 1600 hops per second, with adaptive frequency-hopping (AFH) enable. Bluetooth low energy uses 2 MHz spacing, which accommodates 40 channels.



COMMUNICATION AND CONNECTION

A main BR/EDR Bluetooth device can communicate with a maximum of seven devices in a piconet, though not all devices reach this maximum. The devices can switch roles, by agreement, and the follower can become the main.

The Bluetooth Core Specification provides for the connection of two or more piconets to form a scatternet, in which certain devices simultaneously play the main/leader role in one piconet and the follower role in another.

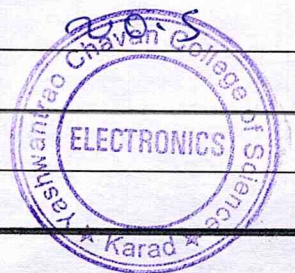
At any given time, data can be transferred between the main and one other device. The main chooses which follower device to address; typically, it switches rapidly from one device to another in a round robin fashion. Since it is the main chooses which follower to address, whereas a follower is supposed to listen in each receive slot, being a main is a lighter burden than being a follower.



RANGE

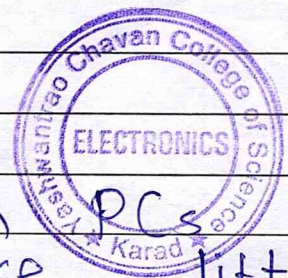
Ranges of Bluetooth devices by class

Class	Max. permitted power		Typ. range (m)
	(mW)	(dBm)	
1	100	20	~100
1.5	10	10	~20
2	2.5	4	~10
3	1	0	~1
4	0.5	-3	



APPLICATION

- Wireless control and communication between a mobile phone and a hands-free headset. This was one of the earliest applications to become popular.
- Wireless communication between a smartphone and a smart lock for unlocking doors.
- Wireless streaming of audio to headphones with or without communication capabilities.
- Wireless streaming of data collected by Bluetooth - enabled fitness devices to phone or pc.
- Wireless networking between PCs in a confined space and where little bandwidth is required.



Yashwantrao Chavan College of Science, Karad

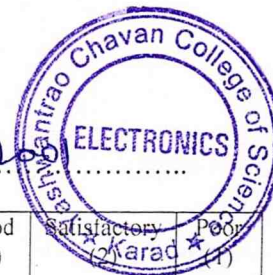
Department of Electronics

Feedback form 2019-20

Name of the Activity- Students Seminar

Class:.....B.Sc. - II.....

Roll No.....2001.....



		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.....Bhandare vishal Panjabrao,.....

Date: 29/11/20

Sign. Bhandare

Yashwantrao Chavan College of Science, Karad

Department of Electronics

Feedback form 2019-20



Name of the Activity- Students Seminar

Class: ... B.Sc. II ...

Roll No.: 2002

		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: ... Chahne Aakankshu Aran ...

Date: 24/07/20

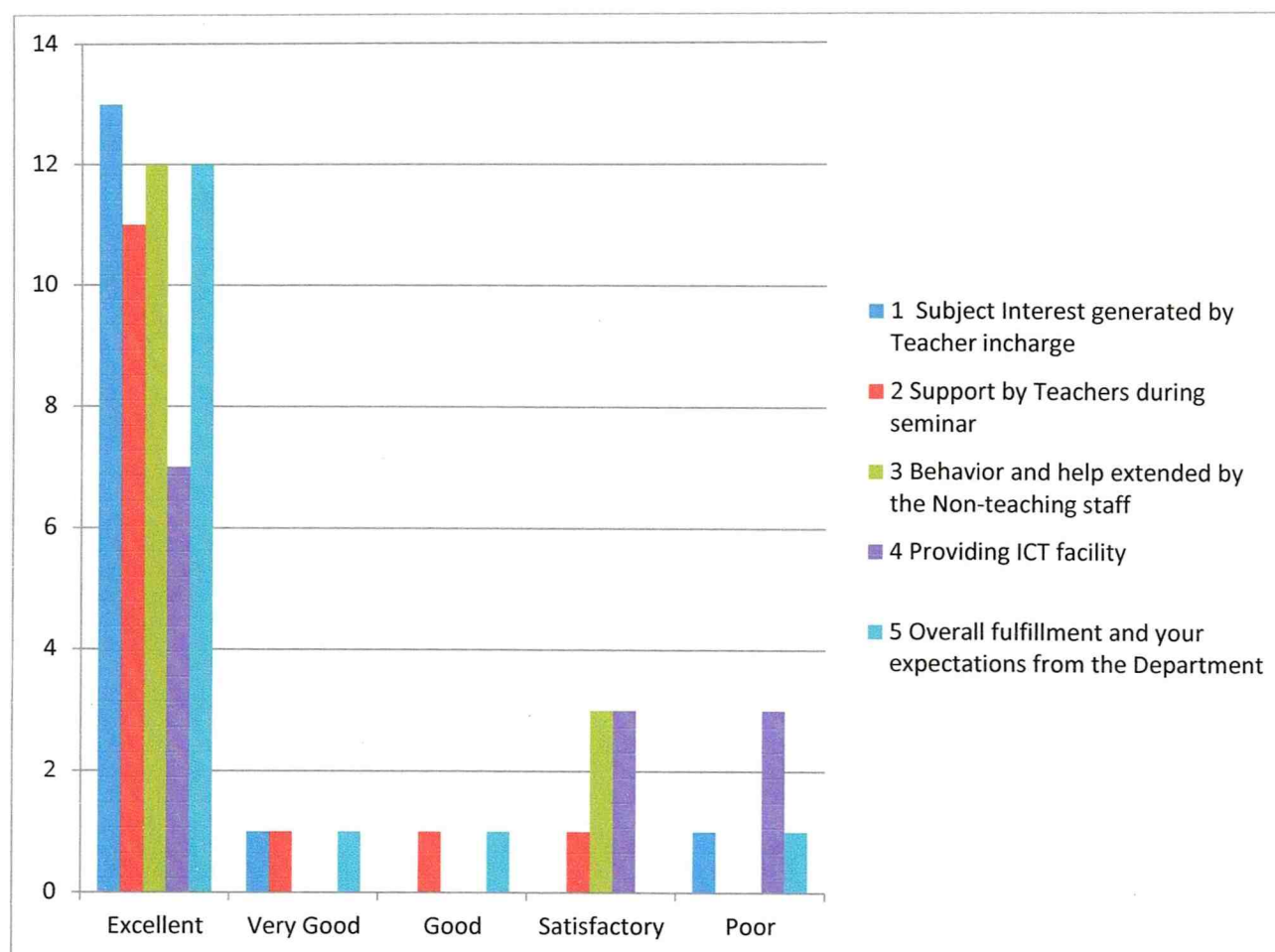
Sign. Chahne



Name of the Activity– Students Seminar B.Sc. II (2019-20)

No. of student - 14

		Excellent	Very Good	Good	Satisfactory	Poor
1	Subject Interest generated by Teacher incharge	13	1			1
2	Support by Teachers during seminar	11	1	1	1	
3	Behavior and help extended by the Non-teaching staff	12			3	
4	Providing ICT facility	7			3	3
5	Overall fulfillment and your expectations from the Department	12	1	1		1



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