

Rayat Shikshan Sanstha's

Rajarshi Chhatrapati Shahu College, Kolhapur


Department of Physics

Short term course on "Understanding of Basic Electronics Devices"

Academic Year 2022-23

Notice

All the students of B.Sc.I,II and III (Physics) are hereby informed that the Inaugural function of certificate course entitled "Understanding of Basic Electronics Devices" organized by Department of Physics for academic year 2022-23 will held on 10/04/2022 at 1:30 pm . All students should remain present in Hall No.101.


Head
Department of Physics
Rajarshi Chh. Shahu College, Kolhapur.




Principal,
Rajarshi Chh. Shahu College,
Kolhapur.

Brief Report on

Inauguration of Short Term course on Understanding of Basic Electronics Devices

Department of Physics conducts a short term certificate course entitled Understanding of Basic Electronics Devices of 30 period duration. The course for the year 2022-23 is inaugurated on 10/4/2023 with the auspicious hands of Dr. L. D. Kadam, Principal Shahu College Kolhapur. The introduction of the course was made by Prof.(Dr.) V.V.Killedar, Head Department of Physics, He also elaborated upon the importance of the course and the curriculum. Prin.Dr.L.D.Kadam in his speech said that this course will give the basic skills and basic knowledge of electronic devices and their applications to students. Students will be able to use this knowledge in designing of simple electronic control circuits and start their small business. 48 students and 4 faculties were present for this function.

Smr.Dr,Archana Patil expressed the vote of thanks. Mr.R.T.Patil, Mr.N.V.Sankpal and B.Sc.I, II, III students were present for this function.

Felicitation of Prin.Dr.L.D.Kadm by
Prof. Dr. V. V. Killedar



Introductory speech by Prof.(Dr.) V.V.Killedar



Participant students and faculty



Inaugural Speech by Prin.Dr. L. D. Kadam



Head
Department of Physics
Rajarshi Chh. Shahu College, Kolhapur.



Principal,
Rajarshi Chh. Shahu College.
Kolhapur.

Rayat Shikshan Sanstha's
Rajarshi Chhatrapati Shahu College, Kolhapur
Department of Physics
Academic Year 2022-2023
Inauguration of
Short Term Course
"Understanding of Basic Electronic Devices"

Monday, 10/04/2023

Venue: Hall No. 201

Time- 01.24 pm

Sr. No.	Name of the Student	Signature
1.	Sandhya Shamrao Gole	
2.	shubhada shazad Gavade	
3.	Sakshi Santosh Bhilare	
4.	Swapnali Pandurang Jadhav	
5.	Pradnya Manik Ganage	
6.	Aarti kiran kamble	
7.	kiati Rajendra Raut	
8.	komal Sambhaji Gavade	
9.	Sabiya Salim Shaikh	
10.	shweta Jaychand Bhosale	
11.	Suhani Anun Maggaonkar	
12.	Akshita Kumar Patil	
13.	Shreya Shashikant chavan	
14.	Vidya Vishal Waghela.	
15.	Gayatri Namdev Pawar.	
16.	Vidya Dhananjay Pawar	
17.	Yogita Sadashiv Waghmode.	
18.	Pratiksha Ankuash Yamagenikar	
19.	Aqsa. Parvej. Baqwan	
20.	Sayma Fakhruddin Khan	
21.	Masira Maudud Shaikh	
22.	Payal Nagesh Shelake.	
23.	Asmita Netaji Jadhav	
24.	Sarita popat Jadhav	
25.	Prachi Sudhik Ulaswad	
26.	Ashwini bhakt Dhami	
27.	Nutan sagar chavan	
28.	Durga Javahir chouhan	
29.	Dhanashree Vijay Nimbalkar	
30.	Sayali Sanjay Dhende	

Rayat Shikshan Sanstha's
Rajarshi Chhatrapati Shahu College, Kolhapur
Department of Physics

Short term course on "Understanding of Basic Electronics Devices"

Academic Year 2022-23

➤ **Aims & objective:**

1. To provide basic knowledge of electronic components to understand the working of electronic components.
2. To improve electronic skill among the students.
3. To provide job opportunity or self-employment to the students.

➤ **Course Fee:** Rs.200/-

➤ **Course duration:** 30 Periods of 48 Minutes

➤ **Students admitted for the course:** B.Sc.III Physics students

➤ **Syllabus:**

Unit-I: Introduction Basic electricity

6 P

Safety and precaution of instruments, soldering and disoldering technique, current, voltage, amplitude and frequency.

Unit-II: Introduction of basic electronic components

6 P

Resistance, capacitance, inductance, transformer construction and working of transformer and its types, type of power supplies i.e. a.c. and d.c., use of multimeter and testing of components

Unit-III: Understanding of Semiconductor devices

6 P

Introduction to basic semiconductor concept, diode and its types and working, transistors and its type and working.

Unit IV: Digital IC and Timmer IC555

3P

IC pin digarms ,various digital IC's,Timmer 555 its pin diagarma,block digram and working,applications of IC 555.

Unit-IV: Building simple circuits on breadboards

2 P

Introduction to PCB, Tag board, Vero board and Breadboard and its uses.

Unit V: Practical work


6P

1. Testing of digital IC's.
2. Construction of 5V Regulated power supply.
3. Construction of astable, bistable , monostable multivibrator circuits.

References:

1. Electronic instruments Hand Book- Clyde F.Combs
2. Electronic engineers Reference Book, L.W.Tuner
3. Starting Electronics, Keith Brindley




Head
Department of Physics
Rajarshi Chh. Shahu College, Kolhapur.

Rayat Shikshan Sanstha's

Rajarshi Chhatrapati Shahu College, Kolhapur


Department of Physics

Short term course on "Understanding of Basic Electronics Devices"


Academic Year 2022-23

Notice

All the students of B.Sc.I,II and III (Physics) are hereby informed that the Department of Physics is going to run a certificate course entitled "Understanding of Basic Electronics Devices" for academic year 2022-23. All the students should make their registration for this course by paying Rs. 300/-as registration fee.


Head
Department of Physics
Rajarshi Chh. Shahu College, Kolhapur.




Principal,
Rajarshi Chh. Shahu College,
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Rayat Shikshan Sanstha's

Rajarshi Chhatrapati Shahu College, Kolhapur

Department of Physics

Short term course on "Understanding of Basic Electronics Devices"

Academic Year 2022-23

List of admitted students and fees received

Sr.No.	Roll No.	Name of the student	Mobile No.	Fee received	Sign
1	S-II 27	SHINDE SHARDUL SUNIL	7767902535	300/-	<i>SSS</i>
2	S-II 42	GANAGE PRADNYA MANIK	9579816159	300/-	<i>Pradya</i>
3	S-II 43	GAVAD KOMAL SAMBHAJI	9022577224	300/-	<i>Komal</i>
4	S-II 44	KAMBLE AARTI KIRAN	9172922003	300/-	<i>Aarti</i>
5	S-II 47	RAUT KIRTI RAJENDRA	9623737570	300/-	<i>Karti</i>
6	S-II 51	YEDGE MAYURI MILIND	8208874470	300/-	<i>M.M.Yedge</i>
7	S-III 84	ASTEKAR PRATHAMESH	8080524646	300/-	<i>Pratham</i>
8	S-III 85	SHINDE MAYURESH MANGESH	9890958687	300/-	<i>Mf</i>
9	S-III 86	PATIL RUTURAJ JANARDHAN	9423756219	300/-	<i>Rute</i>
Total Rs.				2700/-	

Receipt No. 3172 to 3180 dated on 14/06/23

Pradya
Head

Department of Physics
Rajarshi Chh. Shahu College, Kolhapur.

Rayat Shikshan Sanstha's

Rajarshi Chhatrapati Shahu College, Kolhapur

Department of Physics

Short term course on "Understanding of Basic Electronics Devices"

Academic Year 2022-23

Time Table

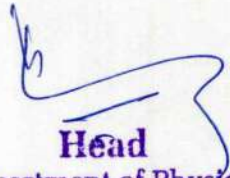
Lectures per week and Time

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
3:58 pm to 4:46 pm	1:24 pm to 2.12 pm	3:10 pm to 3:58 pm	2:22 pm to 3:10 pm	1:24 pm to 2.12 pm	3:58 pm to 4:46 pm

Lecture Dtaes

Date	Date	Date
10/4/2023	26/4/2023	13/5/2023
11/4/2023	27/4/2023	15/5/2023
12/4/2023	28/4/2023	16/5/2023
13/4/2023	2/5/2023	17/5/2023
17/4/2023	3/5/2023	18/5/2023
18/4/2023	4/5/2023	19/5/2023
20/4/2023	8/5/2023	23/5/2023
21/4/2023	9/5/2023	24/5/2023
24/4/2023	11/5/2023	25/5/2023
25/4/2023	12/5/2023	26/5/2023

Exam. Date 30/5/2023 at 1:24 pm


Head
Department of Physics
Rajarshi Chh. Shahu College, Kolhapur.

Rayat Shikshan Sanstha's

Rajarshi Chhatrapati Shahu College, Kolhapur

Department of Physics

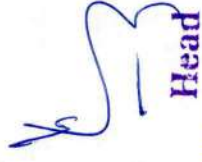
Short term course on "Understanding of Basic Electronics Devices"

Academic Year 2022-23

Student attendance sheet

Sr. No.	Name of the student	4/5	8/5	9/5	11/5	12/5	13/5	15/5	16/5	17/5	18/5	19/5	20/5	21/5	22/5	23/5	24/5	25/5	26/5
1	SHINDE SHARDUL SUNIL	4/5 20	8/5 20	9/5 20	11/5 20	12/5 20	13/5 20	15/5 20	16/5 20	17/5 20	18/5 20	19/5 20	20/5 20	21/5 20	22/5 20	23/5 20	24/5 20	25/5 20	26/5 20
2	GANAGE PRADNYA MANIK	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20
3	GAVAD KOMAL SAMBHAJI	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20
4	KAMBLE AARTI KIRAN	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20
5	RAUT KIRTI RAJENDRA	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20
6	YEDGE MAYURI MILIND	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20
7	ASTEKAR PRATHAMESH	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20
8	SHINDE MAYURESH MANGESH	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20
9	PATIL RUTURAJ JANARDHAN	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20	8/5 20

Exam Date: 30/5/2023 at 1:24 to 2:12pm.



Head

Department of Physics
Rajarshi Chh. Shahu College, Kolhapur.

Rayat Shikshan Sanstha's

Rajarshi Chhatrapati Shahu College, Kolhapur

Department of Physics

Short term course on "Understanding of Basic Electronics Devices"

Academic Year 2022-23

Student attendance sheet

Sr. No.	Name of the student	10/4	11/4	12/4	13/4	17/4	18/4	20/4	21/4	24/4	25/4	26/4	27/4	28/4	29/4	31/5
1	SHINDE SHARDUL SUNIL	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS	SSS
2	GANAGE PRADNYA MANIK	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten
3	GAVAD KOMAL SAMBHAJI	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten
4	KAMBLE AARTI KIRAN	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten
5	RAUT KIRTI RAJENDRA	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten
6	YEDGE MAYURI MILIND	M.M.Y.	M.M.Y.	M.M.Y.	M.M.Y.	M.M.Y.	M.M.Y.	M.M.Y.	M.M.Y.	M.M.Y.	M.M.Y.	M.M.Y.	M.M.Y.	M.M.Y.	M.M.Y.	M.M.Y.
7	ASTEKAR PRATHAMESH	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten
8	SHINDE MAYURESH MANGESH	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten
9	PATIL RUTURAJ JANARDHAN	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten	Handwritten

Handwritten signature

Head

Department of Physics
Rajarshi Chh. Shahu College, Kolhapur.

Rayat Shikshan Sanstha's
Rajarshi Chhatrapati Shahu College, Kolhapur

Short Term Course In Physics
Understanding of Basic Electronics Devices

Date: 29/05/2023

Maximum Marks: 50

Time: 60 Min.

Class: B.Sc.II/ III Roll No. Name of the student:

- Note: 1. All questions are compulsory
2. All questions carry equal marks
3. Each question is for 2 Marks
4 Write correct answer alphabet in rectangle

- Q.1 In photodiode its current increases with ----
a) increase in intensity of light falling on it b) current in the circuit
c) resistance in the circuit
- Q.2. In bridge rectifier the numbers of diodes used are ----
a) 4 b) 2 c) 3
- Q.3 Oscillator circuits are use to produce --- voltage
a) a.c. b) d.c. c) both a.c. and d.c.
- Q.4. To avoid shock hazards do not touch -----
a) Line wire b) neutral wire c) earth wire
- Q.5 IN0001 is ----- diode
a) rectifier b) zener c) photo
- Q.6 The law of series resistor says that the overall resistance of a number of resistor in series is the sum of the individual resistance.
True or false?
- Q.7. ----- emits light when forward biased.
a) LED b) Rectifier diode c) photo diode
- Q.8 An inductor or coil electrical energy is stored in the form of -----
a) Electric field b) magnetic field c) electro-magnetic field
- Q.9 Transistor is used in ----- circuits
a) Amplifier b) rectifier c) both (a) and (b)
- Q.10. If NPN transistor has current gain of 100 and base current of 1mA then its collector current is ---
a) 1mA b) 10mA c) 100mA

Rayat Shikshan Sanstha's

Rajarshi Chhatrapati Shahu College, Kolhapur

Department of Physics

Short term course on "Understanding of Basic Electronics Devices "

Academic Year 2022-23

Answer Sheet of exam

Question No	Answer
1	A
2	A
3	B
4	A
5	A
6	A
7	B
8	B
9	A
10	C
11	C
12	B
13	A
14	A
15	B
16	A
17	B
18	A
19	C
20	C
21	A
22	C
23	C
24	A
25	A

Head

Department of Physics
Rajarshi Chh. Shahu College, Kolhapur,

Rayat Shikshan Sanstha's

Rajarshi Chhatrapati Shahu College, Kolhapur

Department of Physics



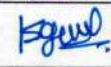

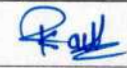
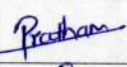


Short term course on "Understanding of Basic Electronics Devices"

Academic Year 2022-23

Attendance Sheet of exam

Day : Monday
Date: 30/05/2023

Time : 1.24 to 2.24 pm

Sr.No.	Roll No.	Name of the student	Sign
1	S-II 27	SHINDE SHARDUL SUNIL	
2	S-II 42	GANAGE PRADNYA MANIK	
3	S-II 43	GAVAD KOMAL SAMBHAJI	
4	S-II 44	KAMBLE AARTI KIRAN	
5	S-II 47	RAUT KIRTI RAJENDRA	
6	S-II 51	YEDGE MAYURI MILIND	M.M.Yedge
7	S-III 84	ASTEKAR PRATHAMESH	
8	S-III 85	SHINDE MAYURESH MANGESH	
9	S-III 86	PATIL RUTURAJ JANARDHAN	


Head

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Rayat Shikshan Sanstha's

Rajarshi Chhatrapati Shahu College, Kolhapur

Department of Physics

Short term course on "Understanding of Basic Electronics Devices"

Academic Year 2022-23

Result sheet

Sr.No.	Roll No.	Name of the student	Marks obtained out of 50
1	S-II 27	SHINDE SHARDUL SUNIL	46
2	S-II 42	GANAGE PRADNYA MANIK	44
3	S-II 43	GAVAD KOMAL SAMBHAJI	40
4	S-II 44	KAMBLE AARTI KIRAN	42
5	S-II 47	RAUT KIRTI RAJENDRA	38
6	S-II 51	YEDGE MAYURI MILIND	42
7	S-III 84	ASTEKAR PRATHAMESH	36
8	S-III 85	SHINDE MAYURESH MANGESH	34
9	S-III 86	PATIL RUTURAJ JANARDHAN	40


Head

Department of Physics
Rajarshi Chh. Shahu College, Kolhapur.



“Education through self-help is our motto”- Karmaveer

Rayat Shikshan Sanstha's

Rajarshi Chhatrapati Shahu College, Kolhapur

(Reaccredited 3rd Cycle by NAAC at 'A' Grade with CGPA 3.07)

DEPARTMENT OF PHYSICS

CERTIFICATE OF PARTICIPATION

This is to certify that, Mr./Miss. _____
has successfully completed the certificate course on “ **Understanding of Basic Electronics Devices**” of 30 period duration conducted by Department of Physics during academic year 2022-23.

Coordinator



Principal



Rayat Shikshan Sanstha's

Rajarshi Chhatrapati Shahu College, Kolhapur

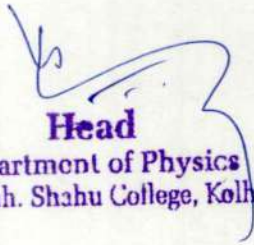
Department of Physics

Short term course on "Understanding of Basic Electronics Devices"

Short Term Course Report 2022-23

Department of physics runs a short term course (COC) entitled "**Understanding of Basic Electronics Devices**" for B.Sc.-II,III students. The purpose of this Course is to provide basic knowledge of students related with electronic devices and their applications, soldering methods, component study, assembling of circuits and testing etc. The duration of this short term course is of 30 hour. Dr.V.V.Killedar, HoD physics working as the coordinator of the course.

The students of B.Sc.II,III Physics are admitted for this course so that after completion of B.Sc. degree the students can use this knowledge for self business or in job in electronics industry. 9 students have taken admission to this course. The course fee is Rs.300/- per student. The lectures of this course were taken by preparing course Time Table. After curriculum completion, the multiple choice test of 50 marks is conducted. The course completion certificates was given to successful students.


Head
Department of Physics
Rajarshi Chh. Shahu College, Kolhapur.