

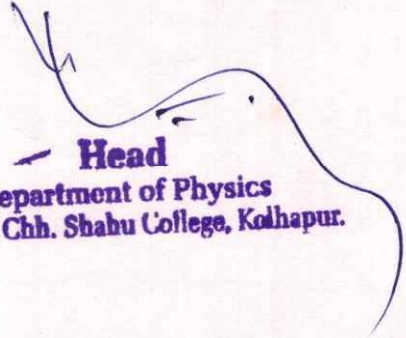
Rayat Shiksha Santha's
R.C. Shahu College Kolhapur
Department of physics
Short Term Course Report (2017-18)

Department of physics runs a short term course (COC) entitled 'Repairing of Electronic devices & Instruments' for B.Sc.-III students. The purpose of this Course is to provide basic knowledge of students related with electronic devices and their applications, soldring methods, component study 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 .

Particularly for this year this course is run for B.Sc.III Physics students so that after completion of B.Sc. Degree the students can use this knowledge for self business or in job in electronics industry. 16 students have taken admission to this course. The course fee is Rs.200/- per student.

Inauguration of the course was held on 1 Sept 2017 at 11 p.m. in Raman Laboratory department of physics. The course was inaugurated with the auspicious hands of Hon'ble Pri.C.J.Khilare.Miss Namrata Sutar student of B.Sc.III welcomes to all guest. Dr. V.V. Killedar, Head Dept. of Physics was presided the function. Dr.Killedar elaborated upon the need of the course . Chief guest Prin. Dr. C.J.Khilare has given valuable guidance to Student and motivate them to do more short term courses so that they can get better jobs. Mr.P.S.Chougule,HOD Statistics was also present during this function.At the end of this function Miss A.S.Patil given Vote of Thanks.



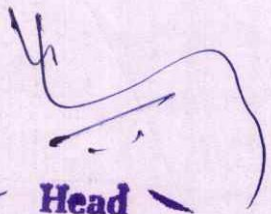

Head
Department of Physics
Rajarshi Chh. Shahu College, Kolhapur.

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

Notice

All the students of B.Sc.III Physics are hereby informed that The department of Physics is going to run the short term course entitled ' Repairing of Electronic Devices and Instruments '. So all the B.Sc.III students should pay the course fee of Rs.200/- before 29th Aug.2017.

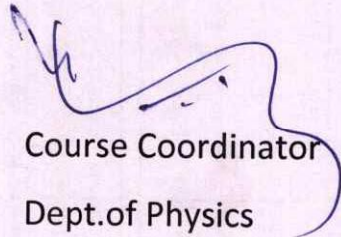




Head
Department of Physics
Rajarshi Chh. Shahu College, Kolhapur.

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

Notice

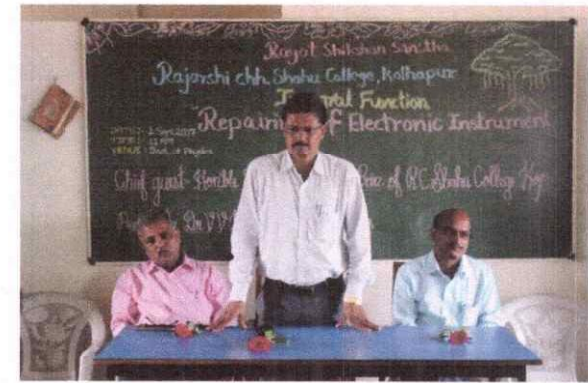
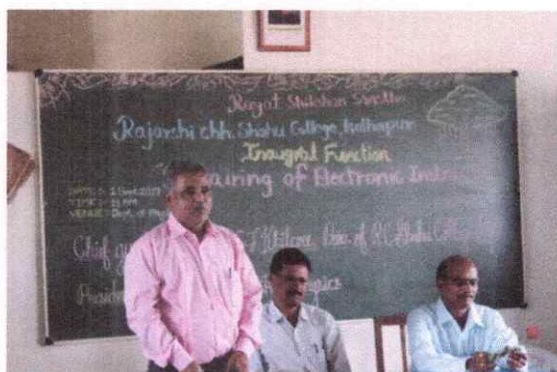
All the students of B.Sc.III Physics are hereby informed that the Inaugural Function of the short term course entitled ' Repairing of Electronic Devices and Instruments ' will held on 1st Sept.2017 at 11.00am in Raman Laboratory. So all the students should attend the function.



Course Coordinator
Dept.of Physics


Principal
R.C.Shahu college, Kolhapur



Inaugural Function- Short Term Course on 'Repairing of Electronic Devices & Instruments', 1/9/2017 Year (2017-18)




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



Lectures- Short Term Course on
'Repairing of Electronic Devices & Instruments'
Year 2017-18




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 "Repairing of Electronic Devices and Instruments"

Academic Year 2017-18

➤ **Aims & objective:**

- II) To provide basic knowledge of electronic components to understand the working of electronic components.
- III) To improve electronic skill among the students.
- IV) To provide job opportunity or self-employment to the students.

➤ **Course Fee:** Rs.200/-

➤ **Course duration:** 30 period of 48 min duration

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

➤ **Syllabus:**

Unit-I: Introduction of electronic Ideas

6 P

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

Unit-II: Introduction and measurement of basic electronic components

8 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: Semiconductor devices

6 P

Introduction to basic semiconductor concept, diode and its types and working, transistors and its type and working, IC's

Unit-IV: Building simple circuits on breadboards

4 P

Introduction to PCB, Tag board, Vero board and Breadboard

Unit V: Practical work


6P

1. Construction of Dark sensor using transistor, phototransistor and photodiode.
2. Construction of 5V Regulated power supply.
3. Construction of a melody generator using UM66.

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 "Repairing Of Electronic Devices and Instruments"

Year 2017-18

List of admitted students and fees received

Sr. No.	Name of the student	Fee collected Rs.	Student sign.
1	BODAKE SARDAR PANDURANG	200/-	<i>Bodake</i>
2	CHOUGULE AJINKYAJAYAWANT	200/-	<i>Chougule</i>
3	CHOUGULE VINAYAK ANANDA	200/-	<i>Chougule</i>
4	*GAYAKWAD MAMRATA NAVANATH	200/-	<i>Gayakwad</i>
5	GURAV KRISHIKESH PARASHRAM	200/-	<i>Gurav</i>
6	GURAV MANOJ MAHADEV	200/-	<i>Gurav</i>
7	JADHAV AMIT ASHOK	200/-	<i>Jadhav</i>
8	JADHAV OMKAR NARAYAN	200/-	<i>Omkar</i>
9	*KADAM PRATIKSHA JAYASINGH	200/-	<i>Kadam</i>
10	MISHRA UMESH RAMESH	200/-	<i>Mishra</i>
11	MOKASHI SAURABH B.	200/-	<i>Mokashi</i>
12	*MORE KARISHMA BHARAT	200/-	<i>More</i>
13	MULLA HAIDER SHAHAJAHAN	200/-	<i>Mulla</i>
14	*PARIT MADHURI MARUTI	200/-	<i>Parit</i>
15	SHIRKE ANIKET KIRAN	200/-	<i>Shirke</i>
16	SUTAR MANISH VILAS	200/-	<i>Sutar</i>
Total Rs.		3200/-	

Rs. 3200/- deposited in office dated 31/3/2018

Cheque No. 637414

[Signature]
Head
 Department of Physics
 Rajarshi Chh. Shahu College, Kolhapur.



Short Term Course 2017-18

Repairing of Electronic Devices & Instruments

Roll No.	Name of the student	1/9/17	8/9/17	9/9/17	15/9/17	16/9/17	22/9/17	5/11/2018	6/11/18	13/11/18	20/11/18	27/11/18	2/12/18	3/12/18	9/12/18
123	Bodake Sardar Pandurang	Bodake	Bodake	Bodake			Bodake	Bodake			Bodake	Bodake		Bodake	Bodake
124	Chandarangi Guruputra Y.														
125	Chougule Ajinkya Jaywant	Chougule	Chougule	Chougule	Chougule	Chougule	Chougule	Chougule	Chougule	Chougule	Chougule	Chougule	Chougule	Chougule	Chougule
126	Chougule Vinayak Ananda	Chougule	Chougule	Chougule	Chougule	Chougule	Chougule	Chougule	Chougule	Chougule	Chougule	Chougule	Chougule	Chougule	Chougule
127	Gayakawad Namrata Navnath	Gayakawad	Gayakawad	Gayakawad	Gayakawad	Gayakawad	Gayakawad	Gayakawad	Gayakawad	Gayakawad	Gayakawad	Gayakawad	Gayakawad	Gayakawad	Gayakawad
128	Gurav Manoj Mahadev	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav
129	Gurav Rushikesh Parashram	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav
130	Jadhav Amit Ashok	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav
131	Jadhav Omkar Narayan	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav
133	Kadam Pratiksha Jaysing	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam
134	Mishra Umesh Ramesh	Mishra	Mishra	Mishra	Mishra	Mishra	Mishra	Mishra	Mishra	Mishra	Mishra	Mishra	Mishra	Mishra	Mishra
135	Mokashi Saurabh B	Mokashi	Mokashi	Mokashi	Mokashi	Mokashi	Mokashi	Mokashi	Mokashi	Mokashi	Mokashi	Mokashi	Mokashi	Mokashi	Mokashi
136	More Kashmir Bharat	More	More	More	More	More	More	More	More	More	More	More	More	More	More
137	Mulla Haider Shahajan	Mulla	Mulla	Mulla	Mulla	Mulla	Mulla	Mulla	Mulla	Mulla	Mulla	Mulla	Mulla	Mulla	Mulla
138	Parit Madhuri Maruti	Parit	Parit	Parit	Parit	Parit	Parit	Parit	Parit	Parit	Parit	Parit	Parit	Parit	Parit
139	Shirke Aniket Kiran	Shirke	Shirke	Shirke	Shirke	Shirke	Shirke	Shirke	Shirke	Shirke	Shirke	Shirke	Shirke	Shirke	Shirke
140	Sutar Manish Vilas	Sutar	Sutar	Sutar	Sutar	Sutar	Sutar	Sutar	Sutar	Sutar	Sutar	Sutar	Sutar	Sutar	Sutar

Daily two hours.



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

Rayat Shikshan Sanstha's

Rajarshi Chhatrapati Shahu College, Kolhapur

Department of Physics

B.Sc. III (2017-2018)

Attendance Of Course Test

Date & Day : 21/04/2018

Time: 12.00 to 1.00 PM

Sr. No	Roll No	Name Of Student	Sign
1	123	Sardar P. Bodake	<i>Bodake</i>
2	124	Guruputra Y. Chandargi	—
3	125	Ajinkya J. Chougule	<i>Ajinkya</i>
4	126	Vinayak A. Chougule	<i>V. Chougule</i>
5	127	Namarata N. Gaikwad	<i>N. Gaikwad</i>
6	128	Manoj M. Gurav	<i>M. Gurav</i>
7	129	Rushikesh P. Gurav	<i>R. Gurav</i>
8	130	Amit A. Jadhav	<i>A. Jadhav</i>
9	131	Omkar N. Jadhav	<i>O. Jadhav</i>
10	132	—	—
11	133	Pratiksha J. Kadam	<i>P. Kadam</i>
12	134	Umesh R. Mishra	<i>U. Mishra</i>
13	135	Sourabh B. Mokashi	<i>S. Mokashi</i>
14	136	Kashmira B. More	<i>Kash...</i>
15	137	Haider S. Mulla	—
16	138	Madhuri M. Parit	<i>M. Parit</i>
17	139	Aniket K. Shirke	<i>A. Shirke</i>
18	140	Manish V. Sutar	<i>M. Sutar</i>



[Signature]
Head
 Department of Physics
 Rajarshi Chh. Shahu College, Kolhapur.

Rayat Shikshan Sanstha's
Rajarshi Chhatrapati Shahu College, Kolhapur

Short Term Course In Physics
Repairing of Electronic Devices and Instruments

Date: 21/4/2018

Maximum Marks: 50

Time: 60 Min.

Class: B.Sc.III Roll No. 123 Name of the student: Bodake Saedag Pandurang

- 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

44
50

Q.1 For soldering of electronic components on PC ----- is used. a ✓
 a) Soldring Iron b) Electrical Geyser c) Electric heater

Q.2. 100 Coulombs of electricity flow past a point in an electrical circuit, in 20 sec. The current flowing in circuit is ----- c ✓
 a) 10A b) 2A c) 5A

Q.3. If A current of 1 A flows through a resistor of 10 Ω. Then voltage produced across resistor is -- a ✓
 a)10V b)1V c)100V

Q.4. One nano is equal to ----- c ✓
 a) $1 \times 10^{-6} \text{ A}$ b) $1 \times 10^{-8} \text{ A}$ c) $1,000 \times 10^{-12} \text{ A}$

Q.5 Five 10 k Ω resistors are in series. One 50 k Ω resistor is placed in parallel across them all. The overall resistance is ----- c ✓
 a) 50 k Ω b) 52 k Ω c) 25 k Ω

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 ✓
 True or false?

Q.7. The capacitor stores electrical energy in the form of ----- a ✓
 a) Electric field b) magnetic field c) electro-magnetic field

Q.8 An inductor or coil electrical energy is stored in the form of ----- b ✓
 a) Electric field b) magnetic field c) electro-magnetic field

Q.9 To build an electronic circuit ----- used b ✓
 a) Breadboard b) PCB c) both (a) & (b)

Q.10 Oscillator circuits are use to produce --- voltage b ✓
 a) a.c. b) d.c. c) both a.c. and d.c.

Rayat Shikshan Sanstha's
Rajarshi Chhatrapati Shahu College, Kolhapur


Department of Physics

B.Sc. III (2017-2018)

Result of short-term Course

Sr. No	Roll No	Name Of Student	Marks Obtained
1	123	Sardar P. Bodake	44
2	124	Guruputra Y. Chandargi	-
3	125	Ajinkya J. Chougule	44
4	126	Vinayak A. Chougule	42
5	127	Namarata N. Gaikwad	38
6	128	Manoj M. Gurav	40
7	129	Rushikesh P. Gurav	40
8	130	Amit A. Jadhav	42
9	131	Omkar N. Jadhav	42
10	132	-	
11	133	Pratiksha J. Kadam	38
12	134	Umesh R. Mishra	40
13	135	Sourabh B. Mokashi	38
14	136	Kashmira B. More	44
15	137	Haider S. Mulla	-
16	138	Madhuri M. Parit	46
17	139	Aniket K. Shirke	38
18	140	Manish V.Sutar	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 “ *Repairing of Electronic Devices & Instruments*” of 30 period duration conducted by Department of Physics during academic year 2017-2018.

Dr. V. V. Killedar
Coordinator

Dr. C. J. Khilare
Principal