

CERTIFICATE COURSE IN PHYSICS 2022

ELECTRICAL APPLIANCES

SYLLABUS

UNIT-I : (6 hrs)

Voltage, Current, Resistance, Capacitance, Inductance, Electrical conductors and Insulators, Ohm's law, Series and parallel combinations of resistors, Galvanometer, Ammeter, Voltmeter, Multimeter, Transformers, Electrical energy, Power, Kilowatt hour (kWh), consumption of electrical power

UNIT-II: (10 hrs)

Direct current and alternating current, RMS and peak values, Power factor, Single phase and three phase connections, Basics of House wiring, Star and delta connection, Electric shock, First aid for electric shock, Overloading, Earthing and its necessity, Short circuiting, Fuses, MCB, ELCB, Insulation, Inverter, UPS

UNIT-III: (10 hrs)

Principles of working, parts and servicing of Electric fan, Electric Iron box, Water heater; Induction heater, Microwave oven; Refrigerator, Concept of illumination, Electric bulbs, CFL, LED lights, Energy efficiency in electrical appliances, IS codes & IE codes.

Electrical Appliances Time:

2 Hrs Max

Marks: 50

Section – A

Answer any FOUR questions. Each question carry 5 marks.

4 x 5 = 20Marks

- 1. Explain the terms (i) Voltage and (ii) Current.**
- 2. Write short notes on short circuiting?**
- 3. Write about Galvanometer**
- 4. What is the difference between Inverter and UPS?**
- 5. What is the variation of Electrical energy and Power?**
- 6. Define IS codes and IE codes**
- 7. What is the principle of Microwave oven**
- 8. Explain the parts and servicing of Electric fan**

Section – B

Answer any THREE questions. each question carry 10marks.

3x10M = 30Marks

- 9. Explain about the series and parallel combinations of resistors**

(OR)

- 10. Distinguish between Electrical conductors and Insulators**

- 11. Discuss about single phase and three phase connections**

(OR)

- 12. What is electric shock and discuss necessary steps for first aid for electric shock**

- 13. Write the concept of illumination and discuss about LED light**

(OR)

- 14. Distinguish between Water heater and Induction heater.**

List of students

S.No	Name of the Student	Reg No	Class
1	A. Jhansi Rani	201107101001	III MPC
2	B. Lakshmi Ishwarya	201107101002	III MPC
3	B. Sunitha Pavan	201107101003	III MPC
4	Ch. Nagalakashmi	201107101004	III MPC
5	Ch. Mohan Duraga	201107101005	III MPC
6	E. Anil Satish	201107101006	III MPC
7	G. Hemanth	201107101007	III MPC
8	I. Mounika	201107101008	III MPC
9	K. Vishali	201107101009	III MPC
10	K. Naga Satya Sai	201107101011	III MPC
11	K. Siva	201107101012	III MPC
12	M. Devi sri	201107101013	III MPC
13	P. Venkata Durga Prasad	201107101015	III MPC
14	S. Sai Durga	201107101018	III MPC
15	S. Venkata kanaka Durga	201107101019	III MPC
16	S. Sivarama krishna	201107101020	III MPC
17	T .Taraka	201107101021	III MPC

2022-2023

TH: 30.11.2022

gdc, seethanagara

It is to inform that a certificate course in physics would be conducted for all III yr [B.Sc, B.A & B.com] students by the department of physics in the college. The course would be conducted on "Repairing Home Electrical Appliances" from 01-12-2022 to 11-01-2023 at 5pm to 6pm everyday in the college on working days. The course would be very useful to students to enable them with the working and servicing of home Appliances. They would get self employment after successful completion of the course. So all students of III yr. are requested to get benefit and utilize the course. A certificate would be given after completion of the course.

Thanking you sir

Yours Sincerely
 G. Padma
 gdc

Principal
 GDC Seethanagara
 560022

ELIGIBILITY CRITERIA

1. Only the existing final year students are eligible for the course
2. Registration is mandatory for the admission into the course
3. The course will be completed in 30 hrs.

II syllabus & Examination pattern

1. 80% of attendance is compulsory for every student to write the examination
2. End examination carries 100 marks [theory 50 marks + seminar/practicals]
- * 50% is the minimum qualifying mark/10 pass in examination Exam would be held after completion of 30 hrs

3. Duration of exam is 3 hrs
- Students who passed in the examination would only be awarded the certificate. There will be no reputation of exam
4. Entire syllabus is divided into 4 modules. Study material and model question papers would be given to all students
6. marks grade would be as below

- 91-100 ⇒ 'O' grade
- 81-90 ⇒ 'A' grade
- 71-80 ⇒ 'B' grade
- 61-70 ⇒ 'B' grade
- 51-60 ⇒ 'C' grade
- 41-50 ⇒ 'D' grade
- less than 40 ⇒ F (Fail)

EXAM NOTICE

Seethanagar
19.01.2013

As per the vac guidelines, the certificate course classes have been come to an end. An exam [both theory and practical] would be conducted on 14.01.2013, Wednesday from 9pm to 5pm. All participants must qualify in the exam to get certificate. So, as per the instructions of the honorable principal sir, all participants are informed hereby to attend the exam on 14.01.2013 from 9pm to 5pm without fail.

~~Signature~~
your sincerely
G. Radman
of to Physio

PRINCIPAL
Government Degree College
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E.G.O.I.V.R.I





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Department of Physics

CERTIFICATE COURSE

This is to certify that Mr/Miss Kotada Siva Class III B.Sc (MP) has Successfully
s/o. do. Kotada Rambabu Completed his/her Certificate Course in Repairing Home Electrical Appliances
during the Academic year 2022 - 23, He/She has secured Grade A.

Udave
COURSE CO-ORDINATOR

Ravi
IQAC CO-ORDINATOR

D. Srinivas
PRINCIPAL

Government Degree College
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E.G.O., 560027



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CERTIFICATE COURSE

This is to certify that Mr/Miss Kondapalle Nagu Jayya Sai has Successfully
s/o. K. Kumaraswamy Class II.B.Sc(Physics)
Completed his/her Certificate Course in Repairing Home Electrical Appliances
during the Academic year 20 22 - 23. He/She has secured Grade A.

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2022-23



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CERTIFICATE COURSE

This is to certify that Mr/Miss Venagalla Jai Durga
s/o. d/o. Venagalla Musthy Class III B, sc (m p c) has Successfully
Completed his/her Certificate Course in Repairing Home Electrical Appliances
during the Academic year 2022 - 23. He/She has secured Grade B+.

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This is to certify that Mr/Miss Shundaru Mohan Durgan has Successfully
s/o. of: Sh. Prasad Class III B.sc (mpc)
Completed his/her Certificate Course in Repairing Home Electrical Appliances
during the Academic year 2022 - 23. He/She has secured Grade A⁺.

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CERTIFICATE COURSE

This is to certify that Mr/Miss Allam Thansi Ravi

s/o. d/o. A. Venkata Rao

Class III B.Sc (m.Pc) has Successfully

Completed his/her Certificate Course in

during the Academic year 2022 - 23, He/She has secured Grade A.


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CERTIFICATE COURSE

This is to certify that Mr/Miss Chinthapalle Naga Lakshmi

s/o. d/o. Ch. Abbulu

Class III B.Sc (MPD) has Successfully

Completed his/her Certificate Course in Repairing Home Electrical Appliances
during the Academic year 2022 - 23. He/She has secured Grade A.



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This is to certify that Mr/Miss Indigimilli Nounika Class III B, se (mpc) has Successfully
s/o. d/o. S. Venkateswara
Completed his/her Certificate Course in Repairing Home Electrical Appliances
during the Academic year 2022 - 23. He/She has secured Grade A.


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This is to certify that Mr/Miss Kandukuri Visali

s/o. d/o. K. Venkateswara Rao Class III B.sc (m.p.c) has Successfully

Completed his/her Certificate Course in Repairing Home Electrical Appliances

during the Academic year 20 22 - 23. He/She has secured Grade, A.

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This is to certify that Mr/Miss Battula Suneetha Javan Class III B.sc (mpc) has Successfully
s/o. d/o. B. Satyanarayana
Completed his/her Certificate Course in Repairing Home Electrical Appliances
during the Academic year 2022 - 23, He/She has secured Grade B+.


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This is to certify that Mr/Miss Sidda Venkata Tranakka Durgas
s/o. d/o. S. Veera Krishna Class III B.Sc (mpc) has successfully
Completed his/her Certificate Course in Repairing Home Electrical Appliances
during the Academic year 2022 - 23, He/She has secured Grade B+.

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This is to certify that Mr/Miss Meelapalli Devi Sri Class III B.Sc (MP2) has Successfully
s/o. d/o. M. Jaiminasa Rao Completed this/her Certificate Course in Repairing Home Electrical Appliances
during the Academic year 2022 - 23. He/She has secured Grade A+.

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CERTIFICATE COURSE

This is to certify that Mr/Miss Bandila Lakshmi Sathuraya Class III B & Impd has Successfully
s/e. d/o. B Venkata Rama Rao Completed his/her Certificate Course in Repairing Home Electrical Appliances
during the Academic year 20 22 - 23 He/She has secured Grade B+

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This is to certify that Mr/Miss Junikara Jiva Rama Krishna
s/o. of J. Ramana Class III B.Sc (mpc) has Successfully
Completed his/her Certificate Course in Repairing Home Electrical Appliances
during the Academic year 20 22 - 23. He/She has secured Grade A.

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This is to certify that Mr/Miss Pallu Pradu Venkata Durga Prasad
s/o. of P. Saivirasa Class III B, Se (mpc) has Successfully
Completed his/her Certificate Course in Repairing Home Electrical Appliances
during the Academic year 20 22 - 23, He/She has secured Grade 'O'.

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This is to certify that Mr/Miss geddam Sheemant s/o. d/o. geddam Krishna Class III B.sc (mpc) has Successfully Completed his/her Certificate Course in Repairing the Electrical Appliances during the Academic year 2022 - 23, He/She has secured Grade A.

[Signature]
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This is to certify that Mr/Miss Seelala Anil Fatish
s/o. Se. Jothyanarayana Class III B sem I has Successfully
Completed his/her Certificate Course in Repairing Home Electrical Appliances
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