

Government Degree College Razole



Certificate Course On Electrical Wiring & Appliances 2019-20

Department of Physics



GOVERNMENT DEGREE COLLEGE, RAZOLE, EGDT, AP

(NAAC Reaccredited at B grade with 2.50 CGPA)

DEPARTMENT OF PHYSICS

CERTIFICATE

This is to certify that Mr./Ms.....
of Class successfully completed Certificate
Course in Electrical Wiring & Appliances During the year 2019-20.

In-charge of the Department

Course-Coordinator

Principal

Government Degree College Razole, EGDT, AP

Department of Physics

Introduction:

Department of physics, Government Degree College Razole is proposed to organize Certificate Course in "Electrical Wiring & Appliances" to develop self-ability and self-employment opportunities in the under graduate students of our college.

Objectives:

1. To develop the concepts on the principles of electrical & electronic circuit components.
2. Troubleshooting the laboratory equipment and domestic electrical appliances.
3. To provide self-employment opportunities

Course duration: 30 hours

Topics to be covered:

S.No.	Topic	No. of periods allotted
1.	Basics of Electricity	8
2.	First Aid-Safety Precautions	3
3.	Wiring Circuits and Systems	12
4.	Earthing	3
5.	AC Starters	4
Total		30

1. Basics of Electricity:

- 1.1 Ohms law: Electric circuit-conductors –insulators. Semiconductors-electric potential-resistance - Ohms law –resistances in series and parallel simple problem.
- 1.2 Work –Power-Energy: definition of work, power and energy. Simple problems on power and Energy – problems on energy consumption and monthly billing – DC & AC powers
- 1.3 Cells: primary cells –secondary cells- lead acid cells construction and working – efficiencies of Cells- defects in cells –charging methods- maintenance

2. First aid –safety precautions:

Precautions to be taken of various stages (while handling tools, during wiring etc.,) –electric fire precautions against shocks –first aid artificial respirations

3. Wiring Circuits and system

- 3.1 Wiring Systems: Energy Distribution Systems – Distribution Board system – T System – Tree System Loop – in – System - Advantages – Disadvantages.
- 3.2 House Wiring: Selection of wiring – C.T.S. wiring casing and capping – conduit wiring (concealed and surface) – comparison of different types of wirings.
- 3.3 Wiring Circuits: Simple Lamp circuits – staircase wiring – Corridor wiring – Master circuit – Lodge Wiring – Go down wiring – Tube Light Circuit Running Light Circuit.

4. Earthing:

Necessity of Earthing – Methods of Earthing – Pipe Earthing – Plate Earthing.

5. AC Starters:

Necessity of starter – Constructions and working of D.O.L Starter, Star – Delta Starter.

Reference Books:

1. "Basic electrical Engineering" by V.K. Mehta
2. "Consumer Electronics" by Bali

NOTICE

The Department of Physics is very happy to inform you that a Certificate Course on "Electrical Wiring & Appliances" will be started in the second week of July 2019. This Course is open to all the students of this college. Those who are willing to join in this Course are requested to enroll their names and may contact Sri T.S.V. Padmanabham, In-charge of the Department of Physics before second week of July 2019.


Course Coordinator
డా. తిక్కె రామ్మోహన్
ప్రభుత్వ కళాశాల, రాజోలు

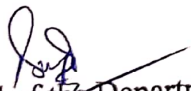

Principal
Vice Principal
Govt. Degree College
NAAC 'B' Grade
RAZOLE - E.G.Du

Student Enrollment:

S.No.	Name of the Student	Class
1	A.B. SRILEKHA	III B.Sc. MPC
2	A. KRISHNAVENI	III B.Sc. MPC
3	B. VANDANA	III B.Sc. MPC
4	D. PRASANTHI	III B.Sc. MPC
5	G.D. PRASANNA	III B.Sc. MPC
6	K. SADUKU	III B.Sc. MPC
7	K. BHAMAJI RAO	III B.Sc. MPC
8	K. PRIYANAKA	III B.Sc. MPC
9	M. AMANI	III B.Sc. MPC
10	N. ASHA	III B.Sc. MPC
11	N.D. KUMAR	III B.Sc. MPC
12	P.V.T. KISHORE	III B.Sc. MPC
13	P.B.S. TEJA	III B.Sc. MPC
14	P. HEMAVATHI	III B.Sc. MPC
15	P.U. BHAVANI	III B.Sc. MPC
16	R. JYOTHI	III B.Sc. MPC
17	S.N.D. PRASAD	III B.Sc. MPC
18	T. SURESH	III B.Sc. MPC
19	V. HARIKA	III B.Sc. MPC
20	A. TULASI	III B.Sc. MPSCS
21	B.N. LAKSHMI	III B.Sc. MPSCS
22	B.D. LAKSHMI	III B.Sc. MPSCS
23	R.S. KUMARI	III B.Sc. MPSCS
24	S.R. DEVI	III B.Sc. MPSCS
25	M.L. SWETHA	III B.Sc. MPSCS

Time Table:

Day	Time: 9AM to 10 AM	Day	Time: 9AM to 10 AM
MON	T.S.V.P.	THU	T.S.V.P.
TUE	G.S.R.	FRI	G.S.R.


 Head of the Department
 ప్రభుత్వ పాఠశాల, గుంటూరు


 Principal
 Vice Principal
 Govt. Degree College
 NAAC 'B' Grade
 RAZOLE - E.G.Dt.

Student Attendance:

S.No.	Name of the Student	Class III BSc	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	A.B. SRILEKHA	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2	A. KRISHNAVENI	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3	B. VANDANA	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4	D. PRASANTHI	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
5	G.D. PRASANNA	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6	K. SADUKU	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7	K. BHAMAJI RAO	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
8	K. PRIYANAKA	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
9	M. AMANI	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
10	N. ASHA	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
11	N.D. KUMAR	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
12	P.V.T. KISHORE	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
13	P.B.S. TEJA	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
14	P. HEMAVATHI	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
15	P.U. BHAVANI	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
16	R. JYOTHI	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
17	S.N.D. PRASAD	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
18	T. SURESH	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
19	V. HARIKA	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
20	A. TULASI	MPCS	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
21	B.N. LAKSHMI	MPCS	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
22	B.D. LAKSHMI	MPCS	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
23	R.S. KUMARI	MPCS	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
24	S.R. DEVI	MPCS	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
25	M.L. SWETHA	MPCS	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

S.No.	Name of the Student	Class III BSc	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	A.B. SRILEKHA	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2	A. KRISHNAVENI	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3	B. VANDANA	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4	D. PRASANTHI	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
5	G.D. PRASANNA	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6	K. SADUKU	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7	K. BHAMAJI RAO	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
8	K. PRIYANAKA	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
9	M. AMANI	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
10	N. ASHA	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
11	N.D. KUMAR	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
12	P.V.T. KISHORE	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
13	P.B.S. TEJA	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
14	P. HEMAVATHI	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

15	P.U. BHAVANI	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
16	R. JYOTHI	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
17	S.N.D. PRASAD	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
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19	V. HARIKA	MPC	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
20	A. TULASI	MPCS	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
21	B.N. LAKSHMI	MPCS	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
22	B.D. LAKSHMI	MPCS	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
23	R.S. KUMARI	MPCS	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
24	S.R. DEVI	MPCS	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
25	M.L. SWETHA	MPCS	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

[Signature]
Head of the Department.

దాతక నామ సంకేతం
ప్రభుత్వ కళాశాల, రాజోలు

[Signature]
Principal

Vice Principal
Govt. Degree College
NAAC 'B' Grade
RAZOLE - E.G.D.I.

GOVERNMENT DEGREE COLLEGE, RAZOLE, E.G.Dt., AP

Department of Physics Certificate Course

Paper: ELECTRICAL WIRING & APPLIANCES

Time: 2 Hrs

Max.Marks: 50

Answer all the following questions each question carries 10 marks i.e., $5 \times 10 = 50M$

1. Define Ohms law. Derive expression for effective Resistance in series combination

(OR)

What are primary and secondary Cells. Write about construction and working lead acid cells

2. Write about precautions to taken in various stages while handling tools during wiring

(OR)

Write about electric fire precautions against shocks and first aid artificial respirations

3. Write about Energy distribution in different wiring systems : Board system, T.system, Tree system

(OR)

Write about the methods or procedures adopted in House wiring

4. What is the necessity of earthing and write about different methods of earthing

(OR)

Describe the methods of Pipe Earthing and Plate Earthing

5. Explain the necessity of starter. Write about construction & working of D.O.L starter

(OR)

Write briefly about Star and Delta starters

