# DEPARTMENT OF PHYSICS 2023-24

### 1.3.2- LIST OF STUDENTS WHO SUBMITTED THE PROJECT WORK FOR M.Sc.-4 SEM PHYSICSIN SESSION 2023-24

Program Name	Program Code	Course Name	Course Code	Year	Name Of The Student
M.Sc. Physics	M.Sc. 4th Sem. Physics	Project Work	M.Sc. 4th Sem. Physics Project Work	2023-24	Bhawesh Kumar
M.Sc. Physics	M.Sc. 4th Sem. Physics	Project Work	M.Sc. 4th Sem. Physics Project Work	2023-24	Devid Markande
M.Sc. Physics	M.Sc. 4th Sem. Physics	Project Work	M.Sc. 4th Sem. Physics Project Work	2023-24	Denis Kumar
M.Sc. Physics	M.Sc. 4th Sem. Physics	Project Work	M.Sc. 4th Sem. Physics Project Work	2023-24	Devyani Verma
M.Sc. Physics	M.Sc. 4th Sem. Physics	Project Work	M.Sc. 4th Sem. Physics Project Work	2023-24	Gauri
M.Sc. Physics	M.Sc. 4th Sem. Physics	Project Work	M.Sc. 4th Sem. Physics Project Work	2023-24	Gitanjali
M.Sc. Physics	M.Sc. 4th Sem. Physics	Project Work	M.Sc. 4th Sem. Physics Project Work	2023-24	Hiteshwari
M.Sc. Physics	M.Sc. 4th Sem. Physics	Project Work	M.Sc. 4th Sem. Physics Project Work	2023-24	Lakesh Kumar
M.Sc. Physics	M.Sc. 4th Sem. Physics	Project Work	M.Sc. 4th Sem. Physics Project Work	2023-24	Laxman
M.Sc. Physics	M.Sc. 4th Sem. Physics	Project Work	M.Sc. 4th Sem. Physics Project Work	2023-24	Leena Sahu
M.Sc. Physics	M.Sc. 4th Sem. Physics	Project Work	M.Sc. 4th Sem. Physics Project Work	2023-24	Navneet Kumar
M.Sc. Physics	M.Sc. 4th Sem. Physics	Project Work	M.Sc. 4th Sem. Physics Project Work	2023-24	Pravesh Kumar
M.Sc. Physics	M.Sc. 4th Sem. Physics	Project Work	M.Sc. 4th Sem. Physics Project Work	2023-24	Preeti Sahu
M.Sc. Physics	M.Sc. 4th Sem. Physics	Project Work	M.Sc. 4th Sem. Physics Project Work	2023-24	Priyanka Sahu
M.Sc. Physics	M.Sc. 4th Sem. Physics	Project Work	M.Sc. 4th Sem. Physics Project Work	2023-24	Rohini
M.Sc. Physics	M.Sc. 4th Sem. Physics	Project Work	M.Sc. 4th Sem. Physics Project Work	2023-24	Rubi Thakur
M.Sc. Physics	M.Sc. 4th Sem. Physics	Project Work	M.Sc. 4th Sem. Physics Project Work	2023-24	Yogesh Kumar

HOD- DR. UGENDRA KURREY PRINCIPAL

## M. Sc. - PHYSICS

M.Sc. in Physics is a full time 2-year (4-semesters course). There will be four theory papers, and two laboratory courses/project in each semester. In each semester, there will be two internal examinations/assessments. Semester-wise course structure along with distribution of marks is given below:

### Semester I

Name of the Paper		Marks						
		Theory		ernal	T . 1	Credits		
		Min	Max	Min	Total	72		
1. Mathematical Physics	80	16	20	04	100	4		
2. Classical Mechanics	80	16	20	04	100	4		
3. Electrodynamics & Plasma Physics	80	16	20	04	100	4		
4. Electronics	80	16	20	04	100	4		
A : General & Optics	-		-		100	2		
Laboratory Course I-B : Electronics	-		-		100	2		
Total Marks					600	20		

### Total Marks for Semester I = 600 & Credit = 20 Semester II

Name of the Paper							
	The	Theory		rnal	Total	Credits	
	Max	Min	Max	Min			
1. Quantum Mechanics-I	80	16	20	04	100	4	
2. Statistical Mechanics	80	16	20	04	100	4	
3. Electronic & Photonic Devices and Optical Modulators	80	16	20	04	100	4	
4. Computational Methods & Programming	80	16	20	04	100	4	
Laboratory Course II-A : Numerical Analysis & Computer Programming	-		<u>-</u>		100	2	
Laboratory Course II-B : Digital Electronics & Microprocessor	-		-		100	2	
Total Marks					600	20	

Total Marks for Semester II = 600 & Credit = 2

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### Semester III

Name of the Paper		Marks					
	The	eory	Internal		T 4 1	Credits	
	Max	Min	Max	Min	Total		
1. Quantum Mechanics-II	80	16	20	04	100	4	
2. Atomic & Molecular Physics	80	16	20	04	100	4	
3. Solid State Physics-I	80	16	20	04	100	4	
<ul> <li>4. (A) Astronomy &amp; Astrophysics-I</li> <li>(B) Electronics (Communication)-I</li> <li>(C) Physics of Nano-material-I</li> <li>(D) Space Physics-I</li> </ul>	80	16	20	04	100	4	
Laboratory Course III-A Materials Science & General					100	2	
Laboratory Course III-B: Astronomy & Astrophysics OR : Electronics (Communication) OR : Physics of Nano-material OR : Space Physics	-		-		100	2	
Total Marks					600	20	

### Total Marks for Semester III = 600 & Credit = 20

### Semester IV

Name of			Mark	S		-
the Paper	The	eory	Inte	rnal	T-4-1	Credits
	Max	Min	Max	Min	Total	
Nuclear & Particle Physics	80	16	20	04	100	4
2. Laser Physics and Applications	80	16	20	04	100	4
3. Solid State Physics -II	80	16	20	04	100	4
<ul> <li>4. (A) Astronomy &amp; Astrophysics-II</li> <li>(B) Electronics(Communication)-II</li> <li>(C) Physics of Nano-material-II</li> <li>(D) Space Physics-II</li> </ul>	80	16	20	04	100	4
Project Work		-	4		200	4
Total Marks		72			600	20

Total Marks for Semester IV = 600 & Credit = 20

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### In Each Semester

MAXIMUM MARKS	PASS P	ER
TOTAL	TH.	PR.
600	36	36

In semester IV, Project work in Solid State Physics/ Astronomy & Astrophysics/ Electronics/ Physics of Nano-materials/ Space Physics will lead to specialization in the respective area. It will be primarily based on research oriented topics. On completion of the project, student will submit project report in the form of dissertation which will be examined by an external examiner. The examination of project work shall consist of (a) Presentation and (b) comprehensive viva-voce.

### Marks-distribution for Laboratory Courses and Project Work:

(a) Laboratory courses (Semesters I-III):

Sessional

: 20Marks

Viva

: 20Marks

Experiment

: 60Marks

(b) Project Work (Semester IV):

Report-Dissertation

60 Marks

Presentation

100

Marks

Comprehensive viva-voce

20 Marks

Internal

assessment

: 20 Marks

**Note:** Paper IV of both Semesters III and IV is a major elective course. Student has to opt for any one of the courses: (A) or (B) or (C) or (D). The commencement of any one of the major elective paper is subjected to the availability of basic infrastructural facilities viz. expert faculty, laboratory etc.

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ON

"AUTOMATIC FIRE DETECTOR SYSTEM"

**SUBMITTED TO** 

HEMCHAND YADAV VISHWAVIDYALAYA, DURG (C.G.)



In the partial fulfillment of requirement for the award of degree of

**MASTER OF SCIENCE** 

IN

**PHYSICS** 



**GUIDED BY** 

Dr. UGENDRA KUMAR KURREY ASST. PROFESSOR (PHYSICS)

Mr. MANOJ KUMAR SAHU GUEST ASST. PROFESSOR (PHYSICS) SUBMITTED BY

**BHAWESH KUMAR** 

ROLL NO.-233050850001

GOVERNMENT CHANDULAL CHANDRAKAR ARTS & SCIENCE

SESSION

2023-2024

COLLEGE, PATAN, DIST- DURG [C.G.] 491111.

PROJECT WORK

ON

"SOUND SENSOR ACTIVATED DEVICE" SUBMITTED TO

HEMCHAND YADAV VISHWAVIDYALAYA, DURG



In the partial fulfillment of requirement for the award of degree of

MASTER OF SCIENCE IN PHYSICS



**GUIDED BY** Dr. UGENDRA KUMAR KURREY ASST. PROFESSOR (PHYSICS)

Mr. MANOJ KUMAR SAHU

GUEST ASST. PROFESSOR (PHYSICS)

GOVERNMENT CHANDULAL CHANDRAKAR ARTS & SCIENCE

COLLEGE, PATAN, DIST-DURG [C.G.] 491111.

**SESSION** 

2023-2024



**SUBMITED BY** 

**DEEVID MARKANDEY** 

ROLL NO-233050850002

ON

"DC SWING ELECTRIC POWER GENERATOR" **SUBMITTED TO** 

HEMCHAND YADAV VISHWAVIDYALAYA, DURG (C.G.)



In the partial fulfillment of requirement for the award of degree of

**MASTER OF SCIENCE** 

IN

**PHYSICS** 



#### **GUIDED BY**

Dr. UGENDRA KUMAR KURREY ASST. PROFESSOR (PHYSICS)

SUBMITTED BY

**DENIS KUMAR** ROLL NO.-233050850003

Mr. MANOJ KUMAR SAHU **GUEST ASST. PROFESSOR (PHYSICS)** 

GOVERNMENT CHANDULAL CHANDRAKAR ARTS & SCIENCE COLLEGE, PATAN, DIST-DURG [C.G.] 491111. **SESSION** 

### PROJECT WORK

ON

### "WATER LEVEL INDICATOR"

**SUBMITTED TO** 

HEMCHAND YADAV VISHWAVIDYALAYA, DURG (C.G.)



In the partial fulfillment of requirement for the award of degree of

**MASTER OF SCIENCE** 

IN PHYSICS



**GUIDED BY** 

Dr. UGENDRA KUMAR KURREY ASST. PROFESSOR (PHYSICS)

SUBMITTED BY

**DEVYANI VERMA** ROLL NO.-233050850004

Mr. MANOJ KUMAR SAHU **GUEST ASST. PROFESSOR (PHYSICS)** 

GOVERNMENT CHANDULAL CHANDRAKAR ARTS & SCIENCE COLLEGE, PATAN, DIST- DURG [C.G.] 491111.

**SESSION** 

ON

"REMOTE CONTROL DOOR LOCK UNLOCK"

**SUBMITTED TO** 

HEMCHAND YADAV VISHWAVIDYALAYA, DURG (C.G.)



In the partial fulfillment of requirement for the award of degree of

**MASTER OF SCIENCE** 

IN

**PHYSICS** 



**GUIDED BY** 

Dr. UGENDRA KUMAR KURREY ASST. PROFESSOR (PHYSICS)

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**GAURI** 

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GOVERNMENT CHANDULAL CHANDRAKAR ARTS & SCIENCE COLLEGE, PATAN, DIST-DURG [C.G.] 491111.

**SESSION** 

ON

"SOUND SENSOR ACTIVATED DEVICE"

SUBMITTED TO

HEMCHAND YADAV VISHWAVIDYALAYA, DURG



In the partial fulfillment of requirement for the award of degree of

MASTER OF SCIENCE IN PHYSICS



**GUIDED BY** 

Dr. UGENDRA KUMAR KURREY

ASST. PROFESSOR (PHYSICS)

Mr. MANOJ KUMAR SAHU

**GUEST ASST. PROFESSOR (PHYSICS)** 

SUBMITED BY **GEETANJALI** 

ROLL NO-233050850006

GOVERNMENT CHANDULAL CHANDRAKAR ARTS & SCIENCE

COLLEGE, PATAN, DIST- DURG [C.G.] 491111.

**SESSION** 

ON

### "IN LED BULB LED LIGHT FAULT REPAIRING"

**SUBMITTED TO** 

HEMCHAND YADAV VISHWAVIDYALAYA, DURG (C.G.)



In the partial fulfillment of requirement for the award of degree of

### MASTER OF SCIENCE

IN

PHYSICS



### **GUIDED BY**

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#### SUBMITTED BY

HITESHWARI ROLL NO.-233050850009

**GOVERNMENT CHANDULAL CHANDRAKAR ARTS &** SCIENCE COLLEGE, PATAN, DIST-DURG [C.G.] 491111. **SESSION** 2023-2024

### PROJECT WORK

ON

"REMOTE CONTROL DOOR LOCK UNLOCK"

**SUBMITTED TO** 

HEMCHAND YADAV VISHWAVIDYALAYA, DURG (C.G.)



In the partial fulfillment of requirement for the award of degree of

MASTER OF SCIENCE

IN

**PHYSICS** 



#### **GUIDED BY**

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> **SESSION** 2023-2024

ON

"IN LED BULB LED LIGHT FAULT REPAIRING"

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In the partial fulfillment of requirement for the award of degree of

**MASTER OF SCIENCE** 

IN

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### **GUIDED BY**

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### SUBMITTED BY

LAXMAN ROLL NO.-233050850011

**GOVERNMENT CHANDULAL CHANDRAKAR ARTS &** SCIENCE

COLLEGE, PATAN, DIST-DURG [C.G.] 491111. SESSION

PROJECT REPORT

ON

DUAL AXIS SOLAR TRACKING SYSTEM

Submitted To

HEMCHAND YADAV VISHWAVIDYALAYA, DURG



In the partial fulfilment of the requirement for the degree of

MASTER OF SCIENCE

IN

PHYSICS



**GUIDED BY** 

Dr. UGENDRA KUMAR KURREY

(H.O.D., Asst. Professor; Physics)

Mr. MANOJ KUMAR SAHU

(Guest Asst. Professor; Physics)

SUBMITTED BY

LEENA SAHU

Roll No.- 233050850012

GOVT. CHANDULAL CHANDRAKAR ARTS AND SCIENCE COLLEGE, PATAN, DURG [C.G.] 491111

**SESSION** 

**PROJECT WORK** 

ON

"AUTOMATIC DOORBELL"

**SUBMITTED TO** 

HEMCHAND YADAV VISHWAVIDYALAYA, DURG



In the partial fulfillment of requirement for the award of degree of

**MASTER OF SCIENCE** 

IN

**PHYSICS** 



**GUIDED BY** 

Dr. UGENDRA KUMAR KURREY

**ASST. PROFESSOR (PHYSICS)** 

Mr. MANOJ KUMAR SAHU

**GUEST ASST. PROFESSOR (PHYSICS)** 

SUBMITTED BY

NAVNEET KUMAR

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SESSION



ON

"REMOTE CONTROLLED CAR"

**SUBMITTED TO** 

HEMCHAND YADAV VISHWAVIDYALAYA, DURG (C.G.)



In the partial fulfillment of requirement for the award of degree of

MASTER OF SCIENCE

IN PHYSICS



**GUIDED BY** 

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**SUBMITTED BY** 

PRAVESH KUMAR ROLL NO.-233050850014

GOVERNMENT CHANDULAL CHANDRAKAR ARTS & SCIENCE COLLEGE, PATAN, DIST-DURG [C.G.] 491111. **SESSION** 

**PROJECT WORK** 

ON

"AUTOMATIC DOORBELL"

#### **SUBMITTED TO**

HEMCHAND YADAV VISHWAVIDYALAYA, DURG



In the partial fulfillment of requirement for the award of degree of

**MASTER OF SCIENCE** 

IN

**PHYSICS** 



**GUIDED BY** 

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**SESSION** 



PROJECT WORK

ON

"WATER LEVEL INDICATOR"

**SUBMITTED TO** 

HEMCHAND YADAV VISHWAVIDYALAYA, DURG (C.G.)



In the partial fulfillment of requirement for the award of degree of

**MASTER OF SCIENCE** 

IN

**PHYSICS** 



**GUIDED BY** 

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PRIYANKA SAHU ROLL NO.-233050850016

Mr. MANOJ KUMAR SAHU GUEST ASST. PROFESSOR (PHYSICS)

GOVERNMENT CHANDULAL CHANDRAKAR ARTS & SCIENCE COLLEGE, PATAN, DIST- DURG [C.G.] 491111.

**SESSION** 

ON

"AUTOMATIC FIRE DETECTOR SYSTEM"

SUBMITTED TO

HEMCHAND YADAV VISHWAVIDYALAYA, DURG (C.G.)



In the partial fulfillment of requirement for the award of degree of

MASTER OF SCIENCE

IN

PHYSICS



**GUIDED BY** 

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**ROHINI** 

ROLL NO.-233050850018

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**SESSION** 

### **PROJECT WORK**

ON

"DC SWING ELECTRIC POWER GENERATOR"

**SUBMITTED TO** 

HEMCHAND YADAV VISHWAVIDYALAYA, DURG (C.G.)



In the partial fulfillment of requirement for the award of degree of

**MASTER OF SCIENCE** 

IN

PHYSICS



### **GUIDED BY**

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**SESSION** 

PROJECT REPORT

ON

DUAL AXIS SOLAR TRACKING SYSTEM

Submitted To

HEMCHAND YADAV VISHWAVIDYALAYA, DURG



In the partial fulfilment of the requirement for the degree of

MASTER OF SCIENCE

IN

**PHYSICS** 



**GUIDED BY** 

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YOGESH KUMAR

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GOVT. CHANDULAL CHANDRAKAR ARTS AND SCIENCE COLLEGE, PATAN, DURG [C.G.] 491111

**SESSION**