# **Department of Physics**

# School of Sciences, Uttarakhand Open University, Haldwani Guideline for M.Sc. IV Semester (Physics) Dissertation

#### **Procedure for allotment of supervisors:**

- 1. Learners can select their supervisors from their study centers/nearby study centers/faculties of UOU/ faculties nominated by University.
- 2. For finalizing the allotment of the supervisors a zoom meeting will be held on 15-01-2025 at 11.00 AM by the link provided below.

#### **Join Zoom Meeting**

https://us02web.zoom.us/j/81354590718?pwd=l6hJ7HX9kV2SzQNSLAmYpY28TNIrpS.1

Meeting ID: 813 5459 0718

Passcode: 928768

#### **Synopsis:**

1. Learners have to submit soft copy of synopsis approved and duly signed by the supervisor in the mail id: dop@uou.ac.in

Synopsis contents following sections:

- i. Title of the Dissertation
- ii. Introduction
- iii. Plan of work and objectives
- iv. Material and method
- v. References
- 2. Synopsis should be of 2 to 4 pages. The standard font shall be Times New Roman of 12 pts with 1.5 line spacing. Synopsis must signed by Learner and supervisor.

#### **Evaluation Procedure:**

- 1. After finalizing the topic the learners have to submit soft copy of dissertation approved and duly signed by the supervisor in the mail id: dop@uou.ac.in
- **2.** Learners have to give viva/presentation after submission of dissertation, in the Uttarakhand Open University Haldwani campus for Kumaun region, and SGRR College, Dehradun for Garhwal region. [Date and time will announce by the University].

3. A hard copy of the final dissertation work have to be submitted in the department of Physics, Uttarakhand Open University Haldwani Campus.[Date will announced by the University]

#### Format for dissertation is given below:

The dissertation should be presented chapter wise. Each chapters will have a precise title as given below. A chapter can be subdivided into sections, and sub-section so as to present the content discretely and with due emphasis.

#### **Content Page**

#### **Chapter 1: Introduction:**

It shall justify and highlight the problem posed, define the topic and explain the aim and scope of the work presented in the dissertation. This chapter also include objective of the research work. It may also highlight the significant contributions from the investigation.

#### **Chapter 2: Review of Literature:**

This Chapter presents a critical appraisal of the previous work published in the literature pertaining to the topic of the investigation.

#### **Chapter 3: Material and Methods:**

This chapter deals with a detail methodology/technique/theory by which researcher used to carry out the research work.

#### **Chapter 4: Results and Discussions:**

This chapter includes a thorough evaluation of the investigation carried out and bring out the contributions from the study. The discussion shall logically lead to inferences and conclusions as well as scope for possible further future work.

#### **Chapter 5: Summary and Conclusions**

A brief report of the work carried out shall form the first part of the Chapter. Conclusions derived from the logical analysis presented in the results and discussions chapter shall be presented and clearly enumerated, each point stated separately. Scope for future work should be stated lucidly in the last part of this chapter.

#### **Chapter 6: References/Bibliography:**

The candidates shall follow the style for references as mentioned below.

#### For journal:

S. Lakhera, K. Devlal, M. Rana, V. Dhuliya, N. Pandey, Non-Linear Optical Behavior of 2,9-Dimethylquinacridone with Adsorbed Gold and Silver Nanoclusters, Optik. 286 (2023) 170983. https://doi.org/10.1016/j.ijleo.2023.170983

For book:

C. Kittel, Introduction to Solid State Physics, Wiley India (P) Ltd., New Delhi (2013).

#### **Chapter 7: Appendix:**

Detailed additional information, lengthy derivations, raw experimental observations etc. are to be presented in the separate appendices.

# **Type -Setting, Text Processing and Printing**

- 1. The text shall be printed employing using a standard text processor. The standard font shall be Times New Roman of 12 pts with 1.5 line spacing.
- 2. **Binding:** Hard/Spiral Binding
- 3. **Front Covers:** The front covers shall contain the following details:
  - Full title of thesis in 6 mm/22 point's size font properly centered and positioned at the top.
  - Full name of the candidate in 4.5 mm 15 point's size font properly centered at the middle of the page.
  - A 40 mm dia replica of the University emblem followed by the name of department, name of the University and the year of submission, each in a separate line and properly centered and located at the bottom of page.
- 4. **Title Sheet:** This shall be the first printed page of the thesis and shall contain the submission statement: the dissertation submitted in partial fulfillment of the requirements of the Degree e.g. M.Sc., the name and enrollment No. of the candidate, name(s) of the Supervisor and Cosupervisor (s) (if any), Department, University and year of submission.
- 5. A Declaration of Academic Honesty and Integrity by Candidate: A declaration of Academic honesty and integrity is required to be included along with every thesis/dissertation after the Supervisor's certificate. The format of this declaration is given in Annexure `II' attached. (Annexure II)
- 6. Certificate from Candidate/Supervisor and Convener (Annexure 'III'):
- 7. **Abstract:** The 500 word (maximum) abstract shall highlight the important features of the dissertation.

#### **Annexure I: Front page**

Specimen for cover page

#### Specimen 'II'

#### CANDIDATE'S DECLARATION

I declare that this written submission represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will be cause for disciplinary action by the University and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

	(Signature)		
_	(Name of the student)		
	(Enrolment No./Roll No.)		
	Date:		

KU-SRICC-2018

# Annexure II: Specimen for declaration certificate

# **Department of Physics**

# Uttarakhan Open University, Haldwani

# **CERTIFICATE**

<u></u>						
I hereby certify that the work is being proposed in the dissertation entitled						
"" in partial fulfillment of the requirements for the award of the Degree						
of Master of Science in Physics and submitted in the Department of Physics in Uttarakhand						
Open University in an authentic record of my own work carried out during a period from						
2023 to2023 under the supervision of Dr Department of Physics						
Uttarakhand Open University, Haldwani.						
The matter presented in the thesis has not been submitted by me for the award of any other degree of this or any other University/ institution.						

Name of learner

This is to certify that the above statement made by the candidate is correct to the best of knowledge.

Name of supervisor

#### **Annexure III: Specimen of supervisor certificate**

### Themes for M. Sc. Physics Dissertation

During the course of study all the learners have to do a compulsory short term research and submit a dissertation for partial fulfillment of the requirement of the M. Sc. degree. University offers number of themes for M. Sc. dissertation from which a learner can select a research topic under the guidance of allotted supervisor. The themes for work should be decided by the supervisor after discussion with student. Some possible themes for M. Sc. Dissertation research work are proposed as follows:

- 1. Solar physics
- 2. Solar wind
- 3. Molecular Spectra
- 4. Fiber optics
- 5. Semiconductor devices
- 6. Fabrication of IC
- 7. Spectroscopy
- 8. Non Linear optical Materials
- 9. Solar cell
- 10. Computational Physics
- 11. Gravitational Waves
- 12. Nanotechnology and Nanoscience.
- 13. Quantum Dots
- 14. Physics beyond standard model
- 15. Dark Matter and Dark Energy
- 16. Quantum Field and String theory
- 17. Supersymmetry
- 18. Renewable Energy
- 19. Other topics related to Physics.

# LIST OF SUPERVISORS FOR PHYSICS M.SC IV SEMESTER DISSERTATION (JULY 2024)

23308409	ANJALI PANDEY	ucscpt@gmail.com	Dr. S P Singh GPGC Lohaghat Mobile Number 9411130537
17101507	BABEETA	babli96bainola@gmail.com	Dr Kamal kishore Dwivedi GPGC Karnprayag Mob No 9568514700
23307921	JITENDRA SINGH	21jiten1998@gmail.com	Dr Kamal Devlal UOU Haldwani Mob No8791477949
23307143	VINEET CHAUHAN	vineetchauhan087@gmail.com	Dr Vinod Rawat Govt PG College Dakpathar 8859753118
23303171	POONAM BIJLWAN	poonamgauniyal451@gmail.com	Dr Meenakshi Rana UOU Haldwani Mob No. 9718728654
22296132	PRIY DEV RANJAN	pdevrnjn22@gmail.com	Dr Vishal Kumar Sharma UOU Haldwani Mob No. 9410725380
23306389	ABHISHEKKUMAR ABHIMANYU CHAUHAN	abhishekchauhan076@gmail.com	Dr Rajesh Mathpal UOU Haldwani Mob No. 7983713112
23307219	SAGAR THAPLIYAL	thapliyalsagar26@gmail.com	Dr Manoj Baluni SGRR PG College DEHRADUN Mob No. 9719447003
23308284	AKASH KUKRETI	akashkukretiofficialmail@gmail.com	Dr Anita Manori Dhyani SGRR PG College DEHRADUN Mob No 9568740218
23306174	VIMAL KUMAR TIWARI	vimalt177@gmail.com	Dr Arvind Nautiyal SGRR PG College DEHRADUN Mob No. 9458375455
23310108	SHIVAM BISHT	Shivambisht3@gmail.com	Dr Garima Punetha pithoragarh Campus
23306751	ARTHI	radhabisht658@gmail.com	Dr Kamal Devlal UOU Haldwani Mob No8791477949
23310098	MAYANK JOSHI	mayankjoshi7409@gmail.com	Dr Garima Punetha pithoragarh Campus
23304803	BHUPENDER KUMAR SHARMA	bksavita799@gmail.com	Dr Himanshu Gupta Gurukul Kangri University Haridwar Mob No 9410322675
23308450	SUNIL SINGH BISHT	BISHTSUNILB410@GMAIL.COM	Dr Manoj Baluni SGRR PG College DEHRADUN Mob No. 9719447003
23308087	ROSHAN SINGH NEGI	negiroshansingh7@gmail.com	Dr A S Rana SGRR PG College DEHRADUN Mob No 9412954316
23303261	AMRINDER KAUR	amrindergrewal29@gmail.com	Dr Pankaj Kumar Pal Gurukul Kangri University Haridwar Mob No. 9412072061
22293860	MAHENDER SINGH	mofficer2021@gmail.com	Dr Anita Maliyan SGRR PG College DEHRADUN Mob No 98018119929
23305059	HARSHITA MEHRA	harshimehra2018@gmail.com	Dr Vishal Kumar Sharma UOU Haldwani Mob No. 9410725380
22297152	DEEPAK PANDEY	pandeydeep1198@gmail.com	Dr Gauri UOU Haldwani Mob No. 6395863352
23310686	SAURAV JOSHI	joshisaurav22@gmail.com	Dr Gauri UOU Haldwani Mob No. 6395863352
23306851	PRANAY PANDEY	pranaypandey391@gmail.com	Dr Meenakshi Rana UOU Haldwani Mob No. 9718728654
23305034	KAVITA NEGI	kavinegi341@gmail.com	Dr Rajesh Mathpal UOU Haldwani Mob No. 7983713112
22274284	JAYANT MELKANI	Jayantmelkani@gmail.com	Dr Meenakshi Rana UOU Haldwani Mob No. 9718728654
23310415	KHUSHI JOSHI	joshikhushi667@gmail.com	Dr Vishal Kumar Sharma UOU Haldwani Mob No. 9410725380
23306332	KM. AISHA KHATOON	aasshhii@gmail.com	Dr Gauri UOU Haldwani Mob No. 6395863352
23310186	JAISHIKA AMOLI	amolijaishika@gmail.com	Dr Kamal Devlal UOU Haldwani Mob No8791477949

22296822	JAGDISH CHANDRA JOSHI	joshijagdish727@rediffmail.com	Dr Gauri UOU Haldwani Mob No. 6395863352
23305963	JAY RAM JHA	jay7580jha@gmail.com	Dr Kamal Devlal UOU Haldwani Mob No8791477949
23305540	PREETI	preetithapliyal01@gmail.com	Dr Kamal Devlal UOU Haldwani Mob No8791477949
23306367	KHUSHHALI AGRAWAL	khushhaliagrawal4@gmail.com	Dr Kamal Devlal UOU Haldwani Mob No8791477949
23306875	NAVEEN SINGH	naveenrana3110@gmail.com	Dr Meenakshi Rana UOU Haldwani Mob No. 9718728654
22290231	RITIK BALONI	rbaloni99@gmail.com	Dr Kamal Devlal UOU Haldwani Mob No8791477949
23308477	PUNEET SINGH	MANISHRDR3003@GMAIL.COM	Dr Rajesh Mathpal UOU Haldwani Mob No. 7983713112
22286303	SANDEEP SHARMA	sandysharmasrj4889@gmail.com	Dr Meenakshi Rana UOU Haldwani Mob No. 9718728654
23309045	KM NIDHI	nidhinaithani4@gmail.com	Dr Arvind Rawat GPGC UTTARKASHI Mob No 9759709193
23307083	KULBHUSHAN	neelamghildiyal2013@gmail.com	Dr Arvind Nautiyal SGRR PG College DEHRADUN Mob No. 9458375455
23305808	SILACE DISUZA	silacedisuza@gmail.com	Dr Rajesh Mathpal UOU Haldwani Mob No. 7983713112
23310676	DEVASHISH RATHOUR	devashishrathour07@gmail.com	Dr Vishal Kumar Sharma UOU Haldwani Mob No. 9410725380
23309505	ARCHANA	rwtarchana1995@gmail.com	Dr Rajesh Mathpal UOU Haldwani Mob No. 7983713112
23308589	ALKA YADAV	yadav.alka229@gmail.com	Dr Gauri UOU Haldwani Mob No. 6395863352
23305474	JYOTI RAWAT	jyotirawat9068@gmail.com	Dr Anita Manori Dhyani SGRR PG College DEHRADUN Mob No 9568740218
22296893	SAPNA KARKI	sna140201@gmail.com	Dr Nandan Bisht SSJU Almora Mob No 7579209780
23304471	PRANJAL SHARMA	divsskapri@gmail.com	Dr Garima Punetha pithoragarh Campus
23307838	SHIV KUMAR	shivgangwar98@gmail.com	Dr Kamal Devlal UOU Haldwani Mob No8791477949
23303915	AKSHANSH NEGI	akshunegiak47@gmail.com	Dr Gauri UOU Haldwani Mob No. 6395863352
22273011	MANISHA ADHIKARI	manishabsadhikari@gmail.com	Dr Vishal Kumar Sharma UOU Haldwani Mob No. 9410725380
23310522	MEGHA BORA	meghabora1004@gmail.com	Dr Vishal Kumar Sharma UOU Haldwani Mob No. 9410725380
23307523	ABHISHEK SINGH RAWAT	abhishekrawat0007@gmail.com	Dr Anita Maliyan SGRR PG College DEHRADUN Mob No 98018119929
23309789	DEEPAK SHARMA	deepek4444@gmail.com	Dr A S Rana SGRR PG College DEHRADUN Mob No 9412954316
		BACK ST	CUDENTS
21255793	KANHAIYA LAL	kanha2221@gmail.com	Dr Vishal Kumar Sharma UOU Haldwani Mob No. 9410725380
22276550	RAHUL TOMAR	rahultomar.mail@gmail.com	Dr Gauri UOU Haldwani Mob No. 6395863352
22277395	SHIPRA SRIVASTAVA	8868840128s@gmail.com	Dr Vishal Kumar Sharma UOU Haldwani Mob No. 9410725380
22276536	SAGAR	ps7620@outlook.com	Dr Gauri UOU Haldwani Mob No. 6395863352
22277830	ANSHUL PAL	anshulpal57@gmail.com	Dr Vishal Kumar Sharma UOU Haldwani Mob No. 9410725380
21257465	PUSHPANKAR SOOD	maavaishno139@gmail.com	Dr Gauri UOU Haldwani Mob No. 6395863352
22295253	ANSHUL SAINI	sainianshul9690@gmail.com	Dr Kamal Devlal UOU Haldwani Mob No8791477949
22301205	GAYATRI	gayatripanwar564@gmail.com	Dr Kamal Devlal UOU Haldwani Mob No8791477949
22273496	KUSUM LATA	vijaykusum17@gmail.com	Dr Vishal Kumar Sharma UOU Haldwani Mob No. 9410725380
18139838	ANKUR KUMAR	ankurkumar7830@gmail.com	Dr Gauri UOU Haldwani Mob No. 6395863352