

## 6. Faculty Profile & Research Activities (Score 100) Claimed: 85

| Sr. No. | Activity                 | Distribution of Scores                                          | Total Score | Score Claimed |
|---------|--------------------------|-----------------------------------------------------------------|-------------|---------------|
| 1.      | % of Teachers with Ph.D. | More than 70%=5,<br>61-70% = 4,<br>51-60%=3,<br>Less than 50%=2 | 5           | 2             |

| Sr. No. | Name of Teacher        | Subject   | Year of Award Degree |
|---------|------------------------|-----------|----------------------|
| 1.      | Dr. Devraj Sharma      | Music (V) | 2001                 |
| 2.      | Dr. Jagdish Chand      | Geography | 2014                 |
| 3.      | Dr. Jagpal Singh Tomar | Geography | 2022                 |

Serial No. } N° 0001762

Enrollment No. } 89-NN-196

**हिमाचल प्रदेश विश्वविद्यालय**

**विद्या-वाचस्पति-2001**

प्रमाणित किया जाता है कि "सिरमौर लोक संगीत पर सीमावर्ती क्षेत्र का प्रभाव एक बुलनात्मक अध्ययन" पर शोध प्रबन्ध स्वीकृत हो जाने के उपरान्त "देव राज" सुपुत्र/सुपुत्री श्री "मनी राम" को इस विश्वविद्यालय की विद्या-वाचस्पति की उपाधि "मन्त्रन एवं बुद्धि व्यक्तिकाय में प्रदान की गई।

**Himachal Pradesh University**

**Doctor of Philosophy-2001**

Certified that Dev Raj son/daughter of Shri Mani Ram after approval of his/her thesis on "सिरमौर लोक संगीत पर सीमावर्ती क्षेत्र का प्रभाव एक बुलनात्मक अध्ययन" has been admitted to the degree of Doctor of Philosophy in the Faculty of Performing & Musical Arts in this University.

23<sup>rd</sup> November 2001

Serial No. } N° 0003240

Enrollment No. } 99-NN-175

**हिमाचल प्रदेश विश्वविद्यालय**

**विद्या-वाचस्पति-2014**

प्रमाणित किया जाता है कि "Human-Forest Interaction in Kenauka Forest Division of Himachal Pradesh: A Geographical Analysis" पर शोध प्रबन्ध स्वीकृत हो जाने के उपरान्त "जगदीश चन्द" सुपुत्र/सुपुत्री श्री "जुण्डा राम" को इस विश्वविद्यालय की विद्या-वाचस्पति की उपाधि "मन्त्रन एवं बुद्धि व्यक्तिकाय में प्रदान की गई।

**Himachal Pradesh University**

**Doctor of Philosophy-2014**

Certified that Jagdish Chand son/daughter of Shri Junda Ram after approval of his/her thesis on "Human-Forest Interaction in Kenauka Forest Division of Himachal Pradesh: A Geographical Analysis" has been admitted to the degree of Doctor of Philosophy in the Faculty of Social Sciences (Geography) in this University.

21<sup>st</sup> September 2014

No. 2022017

Enrollment No. RS89001813373

**SURESH GYAN VIHAR UNIVERSITY**

Accredited by NAAC with 'A' Grade

We, the Chairperson, the President and the Members of the Board of Management by virtue of the authority vested by law and on recommendation of the Academic Council do hereby confer the degree of

**Doctor of Philosophy**

in the faculty of

**Humanities & Social Sciences**

(Geography)

on

**JAGPAL SINGH TOMAR**

who has successfully completed the prescribed requirements, on 2022

The title of thesis is

"FOREST FIRE HAZARDS VULNERABILITY AND RISK ASSESSMENT IN SIRMAUR DISTRICT FOREST OF HIMACHAL PRADESH (INDIA): A GEOSPATIAL APPROACH"

Awarded at Jaipur, this Day, 15 of October, 2022

Issued under the seal of the University and signature of the said Authority

President

Chairperson

|    |                                                                                                                                                                  |                                                                                          |    |    |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----|----|
| 3. | No. of Orientation Programmes, Refresher Programmes, Faculty Development Programmes and Workshops of one week or more Attended by Teachers (in last three years) | 30% of faculty = 10,<br>20% of faculty = 8,<br>10% of faculty = 6,<br>5 % of faculty = 4 | 10 | 10 |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----|----|

**Academic Session 2022-23 & 2023-24**

| Sr. No. | Name of Teacher   | Subject            | Title of the program                                                                                    | Duration (from – to) (DD-MM-YYYY) |
|---------|-------------------|--------------------|---------------------------------------------------------------------------------------------------------|-----------------------------------|
| 1.      | Dr. Devraj Sharma | Music (V)          | One Week Faculty Development Programme on "Research Methods and Research Design"                        | 14-08-2023 to 20-08-2023          |
| 2.      | Dr. Jagdish Chand | Geography          | "NEP 2020 Orientation and Sensitization Programme" under MMTT                                           | 18-03-2024 to 28-03-2024          |
|         |                   |                    | "NEP 2020 Orientation and Sensitization Programme" under MMTT                                           | 19-02-2024 to 26-02-2024          |
|         |                   |                    | Professional Development Programme on, "Implementation of NEP-2020 for University and College Teachers" | 12-06-2023 to 20-06-2023          |
|         |                   |                    | Two- Week Refresher Course in, " Geography"                                                             | 06-03-2023 to 20-03-2023          |
|         |                   |                    | Two- Week Refresher Course in, " Geography"                                                             | 30-05-2023 to 13-06-2023          |
|         |                   |                    | Workshop-NavIC-Development, Scope and Applications                                                      | 25-01-2024                        |
| 3.      | Sh. Sandeep Kumar | History            | 83rd Online Refresher Course “History and Culture”                                                      | 20-11-2023 to 03-12-2023          |
|         |                   |                    | Online Two -Week Interdisciplinary Refresher Course in, " Advanced Research Methodology"                | 22-05-2023 to 05-06-2023          |
|         |                   |                    | On Week Faculty Development Programme (FDP) On NEP-2020                                                 | 19-02-2024 to 24-02-2024          |
| 4.      | Mrs. Ambra Devi   | Hindi              | "NEP 2020 Orientation and Sensitization Programme" under MMTT                                           | 12-02-2024 to 20-02-2024          |
|         |                   |                    | One Week Faculty Development Programme on "NEP 2020"                                                    | 19-02-2024 to 24-02-2024          |
|         |                   |                    | "NEP 2020 Orientation and Sensitization Programme" under MMTT                                           | 03-06-2024 to 12-06-2024          |
|         |                   |                    | "NEP 2020 Orientation and Sensitization Programme" under MMTT                                           | 04-06-2024 to 13-06-2024          |
|         |                   |                    | "NEP 2020 Orientation and Sensitization Programme" under MMTT                                           | 19-06-2024 to 28-06-2024          |
|         |                   |                    | "NEP 2020 Orientation and Sensitization Programme" under MMTT                                           | 03-07-2024 to 13-07-2024          |
|         |                   |                    | Online two-Week Faculty Development Programme / Refresher Course in Hindi                               | 06-05-2023 to 20-05-2023          |
|         |                   |                    | "NEP 2020 Orientation and Sensitization Programme" under MMTT                                           | 20-07-2024 to 31-07-2024          |
| 5.      | Sh. Ajay Kumar    | Economics          | 83rd Online Refresher Course “Advances in Research Methodology”                                         | 21-07-2023 to 04-08-2023          |
| 6.      | Sh. Manoj Kumar   | Physical Education | Induction Training Programme of Newly appointed Professors at SECRT Solan HP                            | 21-08-2023 to 26-08-2023          |

|     |                            |                   |                                                                                                                                                                             |                          |
|-----|----------------------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
|     |                            |                   | Online Course on " Advances in Remote Sensing Techniques for Geological Applications" from GC Sangrah                                                                       | 11-03-2024 to 15-03-2024 |
|     |                            |                   | Faculty Development Programme on NEP 2020: A Paradigm Shift in Higher Education from DR. Sarvepalli Radhakrishnan GDC Dharampur Mandi (HP)                                  | 19-02-2024 to 24-02-2024 |
| 7.  | Sh. Om Prakash             | English           | Induction Training Programme of Newly appointed Professors at SECRT Solan HP                                                                                                | 11-09-2023 to 16-09-2023 |
|     |                            |                   | One Week National Level Online Workshop on "Art of Designing Question Paper on English Language Skills and Literary Texts" from Vardhaman College of Engineering Hyderabad. | 21-09-2023 to 27-09-2023 |
| 8.  | Ms. Kavita Chauhan         | Chemistry         | Induction Training Programme of Newly appointed Professors at SECRT                                                                                                         | 11-09-2023 to 16-09-2023 |
|     |                            |                   | Managing online Classes and Co-creating MOOCs from MMTT                                                                                                                     | 08-03-2024 to 22-03-2024 |
|     |                            |                   | Online course on NEP 2020 Orientation and Sensitization Programme from MMTT                                                                                                 | 18-3-2024 to 27-03-2024  |
|     |                            |                   | One Day on Line Workshop on " Soil Health: Measurement and Modelling" from GC Sangrah                                                                                       | 28-03-2024               |
|     |                            |                   | Online NEP 2020 Orientation and Sensitization Programme from MMTT                                                                                                           | 15-04-2024 to 24-04-2024 |
| 9.  | Sh. Chander Prakash Pathik | Sanskrit          | Induction Training Programme of Newly appointed Professors at SECRT Solan HP                                                                                                | 21-08-2023 to 26-08-2023 |
|     |                            |                   | Faculty Development Programme on NEP 2020: A Paradigm Shift in Higher Education from DR. Sarvepalli Radhakrishnan GDC Dharampur Mandi (HP)                                  | 19-02-2024 to 24-02-2024 |
| 10. |                            |                   | Online Course on " Advances in Remote Sensing Techniques for Geological Applications" from GC Sangrah                                                                       | 11-03-2024 to 15-03-2024 |
| 11. | Sh. Vinod Kumar            | Music (I)         | Induction Training Programme of Newly appointed Professors at SECRT Solan HP                                                                                                | 21-08-2023 to 26-08-2023 |
|     |                            |                   | Faculty Development Programme on NEP 2020: A Paradigm Shift in Higher Education from DR. Sarvepalli Radhakrishnan GDC Dharampur Mandi (HP)                                  | 19-02-2024 to 24-02-2024 |
| 12. | Ms. Poonam                 | Political Science | Induction Training Programme of Newly appointed Professors at SECRT                                                                                                         | 11-09-2023 to 16-09-2023 |
| 13. | Sh. Subhash Chand          | Asst. Librarian   | Induction Training Programme of Newly appointed Assistant Librarian                                                                                                         | 11-03-2024 to 16-03-2024 |



**Teaching Learning Centre**  
Ramanujan College, University of Delhi  
(Accredited Grade 'A++' by NAAC)

under the aegis of  
MINISTRY OF EDUCATION  
PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING

This is to certify that

**Dr. Jagdish Chand**

of  
Department of Geography, Govt. College Sangrah  
has successfully completed ONLINE TWO - WEEK REFRESHER COURSE IN  
"Geography"  
from 06 - 20 March, 2023 and obtained  
Grade A.



Blockchain Hash: [b6a6272d8b13d9711827834632174d2a6b85098c189d30a186e5a6c079](#)

*[Signature]*

Prof. S. P. Aggarwal  
(Principal & Director)  
TLC, Ramanujan College

*[Signature]*

Dr. Nikhil Kumar Rajput  
(Deputy Director)  
TLC, Ramanujan College



Teaching Learning Centre, Ramanujan College  
University of Delhi  
in collaboration with  
Department of Geography & IQAC,  
Sahakar Maharshi Shankarrao Mohite-Patil Mahavidyalaya, Natepute  
A/p. Natepute, Tal. Malshiras, Dist. Solapur Maharashtra, -413109  
under the aegis of  
MINISTRY OF EDUCATION  
PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING

This is to certify that

**Dr. Jagdish Chand**

of  
Department of Geography, Govt. College Sangrah  
has successfully attended and completed Two week Refresher Course in  
"GEOGRAPHY"  
from 30 May - 13 June, 2023 and obtained  
Grade A.



Blockchain Hash: [a3d776203d31d47d81cc79d107c93912f49601c3b0d81c7c7847f6](#)

*[Signature]*

Prof. S. P. Aggarwal  
(Principal & Director)  
TLC, Ramanujan College

*[Signature]*

Dr. Balasaheb Tukaram Nikam  
(Convenor)  
S.M.S.M.P. Mahavidyalaya

*[Signature]*

Dr. Chandrakant Bira Kolekar  
(Principal)  
S.M.S.M.P. Mahavidyalaya



INDIRA GANDHI NATIONAL OPEN UNIVERSITY  
Staff Training and Research Institute of Distance Education  
New Delhi 110068  
Control No.2230615525



**UGC-Approved Short-Term Professional Development Programme**  
Under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching

This is to certify that

**DR. JAGDISH CHAND**

**GOVT. COLLEGE SANGRAH**

participated in and successfully completed the  
Professional Development Programme on  
'Implementation of NEP-2020 for University and  
College Teachers'

**held from 12-20 June, 2023  
and obtained 'A' Grade**

*[Signature]*

Prof. Santosh Panda  
Director, STRIDE &  
Coordinator of NEP-PDP Committee,  
Indira Gandhi National Open University

New Delhi  
Date of Issue: June 26, 2023

*[Signature]*

Prof. Uma Kanjilal  
Pro-Vice Chancellor  
Indira Gandhi National Open University

No. 038



1-day online workshop on  
**NavIC: Development, Scope and Applications**  
25 January 2024



Organised by  
**Indian Radio Science Society (InRaSS)**  
Sponsored by

Commission-C, International Union of Radio Science (URSI)

This is to certify that Prof/ Er/ Dr/ Ms/ Mrs/ Ms **JAGDISH CHAND**  
has participated in the 1-day online workshop on 'NavIC: Development, Scope and Applications'  
organized by Indian Radio Science Society (InRaSS) and sponsored by Commission C of International  
Union of Radio Science (URSI) held online on 25 January 2024. Our sincere wishes.

*[Signature]*

(Anindya BOSE)  
The University of Burdwan, INDIA  
Co-Chair

*[Signature]*

(Amitava Sen Gupta)  
General Secretary, InRaSS  
Chair, Commission A, URSI

*[Signature]*

(Subramanya Ganesh T)  
ISTRAC-ISRO, INDIA  
Co-Chair



**Teaching Learning Centre**  
Ramanujan College, University of Delhi  
(Accredited Grade 'A++' by NAAC)

Sri Guru Teg Bahadur Khalsa College, Sri Anandpur Sahib, Rupnagar, Punjab  
under the aegis of  
MINISTRY OF EDUCATION  
PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING

This is to certify that

**Dr. Jagdish Chand**

of  
Department of Geography, Govt. College Sangrah, Distt. Sirmour, H.P.  
has successfully completed online Programme on  
"NEP Orientation & Sensitization Programme"  
from 19th - 26th February, 2024 and obtained  
Grade A.



Blockchain Hash: [0ab3d6ea7d1f157115370d812d608758ba3d8b23280eae42ba1175d808d6c8b](#)

*[Signature]*

Prof. S. P. Aggarwal  
(Principal & Director)  
TLC, Ramanujan College

*[Signature]*

Dr. Jaivir Singh  
(Principal)  
Sri Guru Teg Bahadur Khalsa  
College



**CERTIFICATE OF PARTICIPATION**

**NEP 2020 ORIENTATION & SENSITIZATION PROGRAMME**

This is to certify that

**Dr/Mr/Ms. Jagdish Chand, Assistant Professor**  
Govt. College Sangrah, Himachal Pradesh University Shimla

has completed the NEP 2020 Orientation & Sensitization Programme under Malaviya  
Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC)  
Organized by UGC-Malaviya Mission Teacher Training Centre, Jawaharlal Nehru  
University, New Delhi from 18<sup>th</sup> March to 28<sup>th</sup> March, 2024

*[Signature]*  
Director (MM-TTC)  
Prof. Ravi Shekhar

*[Signature]*  
Coordinator  
Prof. Anvird Kumar Mishra



## Teaching Learning Centre

Ramanujan College, University of Delhi  
(Accredited Grade 'A++' by NAAC)

under the aegis of  
MINISTRY OF EDUCATION  
PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING



This is to certify that

**Ambra Devi**

of  
Govt. Gorakhnath Sanskrit College Nahan  
has successfully completed online two-week Faculty Development Programme/Refresher

Course in  
"HINDI"

from 06 – 20 May, 2023 and obtained  
Grade A+.



Blockchain Hash : d0c7a6c0f4d0e78d999e0749f5a6e0e43449f90b0a0e0e70217939837



Prof. S. P. Aggarwal  
(Principal & Director)  
TLC, Ramanujan College

Dr. Alok Ranjan Pandey  
(Convener)  
Ramanujan College



**MALAVIYA MISSION  
TEACHER  
TRAINING PROGRAMME**



## CERTIFICATE OF PARTICIPATION

### NEP 2020 ORIENTATION & SENSITIZATION PROGRAMME

This is to certify that **Ambra Devi**, Assistant Professor  
from Govt. College, Sangrah, Himachal Pradesh University, Shimla has completed the NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC) organized by UGC-Malaviya Mission Teacher Training Centre, Patna University, Patna from 22.07.2024 to 31.07.2024.

Atul Aditya Pandey  
Director  
UGC-MMTC  
Patna University, Patna



**MALAVIYA MISSION  
TEACHER  
TRAINING PROGRAMME**

Certificate ID: MM-MMTC/NBC/July/A/2024/004



## CERTIFICATE OF PARTICIPATION

This is to certify that Prof./Dr./Mr./Ms.

**Ambra Devi**

from

**Govt. College Sangrah, Himachal Pradesh University, Shimla**

has successfully completed the  
Online Training Programme

on

**"NEP 2020 Orientation & Sensitization Programme"**  
(03<sup>rd</sup> July – 13<sup>th</sup> July, 2024)

under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC)  
organised by

Mahatma Hansraj Malaviya Mission Teacher Training Centre (MH-MMTC), Hansraj College, University of Delhi

Coordinator  
(MH-MMTC, Hansraj College)

Chairperson  
(MH-MMTC, Hansraj College)



**MALAVIYA MISSION  
TEACHER  
TRAINING PROGRAMME**



## CERTIFICATE OF PARTICIPATION

Sr.No. 9917

### NEP 2020 ORIENTATION & SENSITIZATION PROGRAMME

This is to certify that

**Ambra Devi**

Assistant Professor, Govt. College Sangrah, Himachal Pradesh University, Shimla

has completed the NEP 2020 Orientation & Sensitization Programme under "Malaviya Mission Teacher Training Programme"  
of University Grants Commission Organized by Punjabi University, Patiala held from 4<sup>th</sup> June 2024 to 13<sup>th</sup> June 2024

Director (MM-TTC)

Ref.MMTC/PUP/9842/13<sup>th</sup> June, 2024



**MALAVIYA MISSION  
TEACHER  
TRAINING PROGRAMME**



## CERTIFICATE OF PARTICIPATION

### NEP 2020 ORIENTATION & SENSITIZATION PROGRAMME

This is to certify that **Ambra Devi**, Assistant Professor  
Govt. College Sangrah, Himachal Pradesh

has completed the NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC) Organized by **Malaviya Mission Teacher Training Centre, Himachal Pradesh University, Shimla** from **12.02.2024** to **20.02.2024**.

Director/Coordinator (MM-TTC)



DPRFDP02202453

**Dr. Sarvepalli Radhakrishnan  
Govt. Degree College Dharampur Mandi (H.P.)**



## FACULTY DEVELOPMENT PROGRAM (FDP)

On  
**NEP 2020 : A Paradigm Shift in Higher Education**

Organised by

**Internal Quality Assurance Cell (IQAC)**

## CERTIFICATE OF PARTICIPATION

This is to certify that

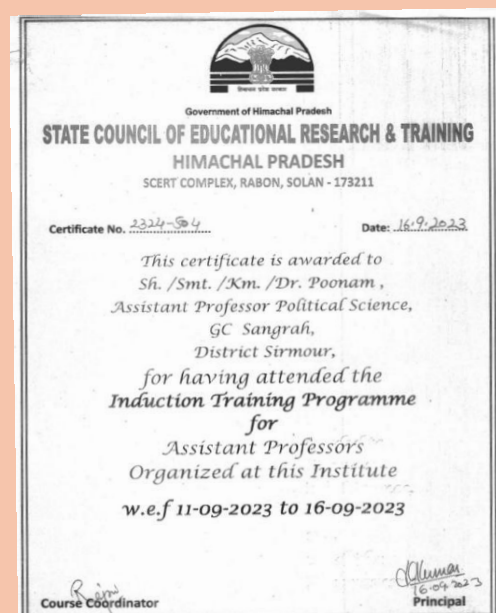
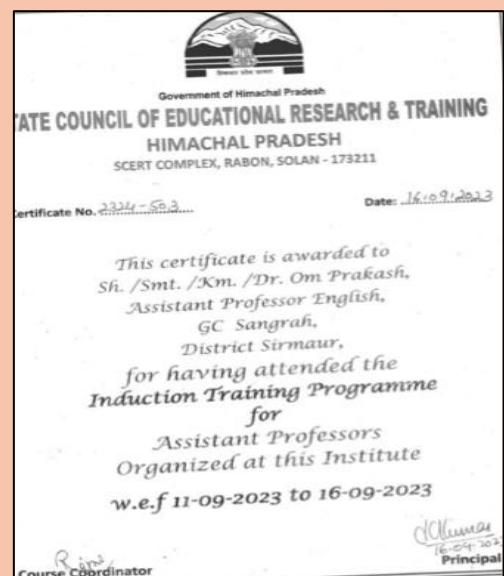
**Mr./Miss/Dr. Vinod Kumar** Department of **Music Instrument**, **Govt. Degree college Sangrah** has completed One Week Faculty Development Program (FDP) on NEP-2020 w.e.f. February 19-24, 2024.

Viveka Nand Sharma  
Organising Secretary

Ramesh Sharma  
Convener

Dr. Ramesh Dhaloria  
Patron (Principal)

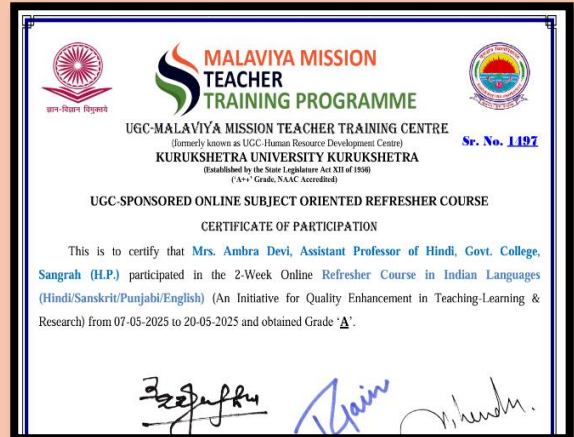
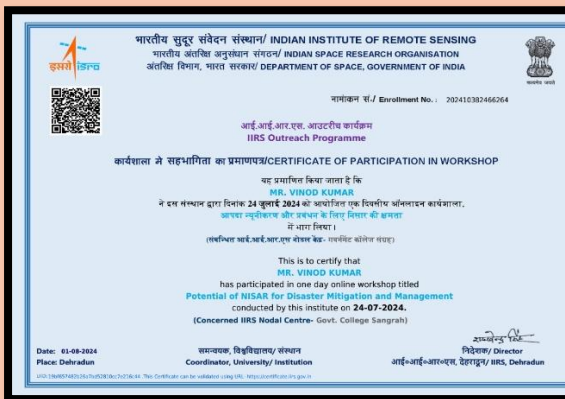




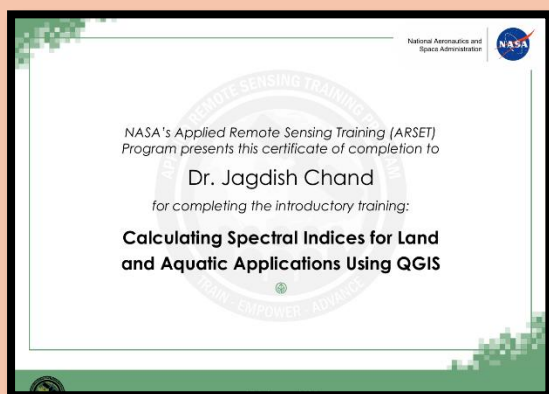
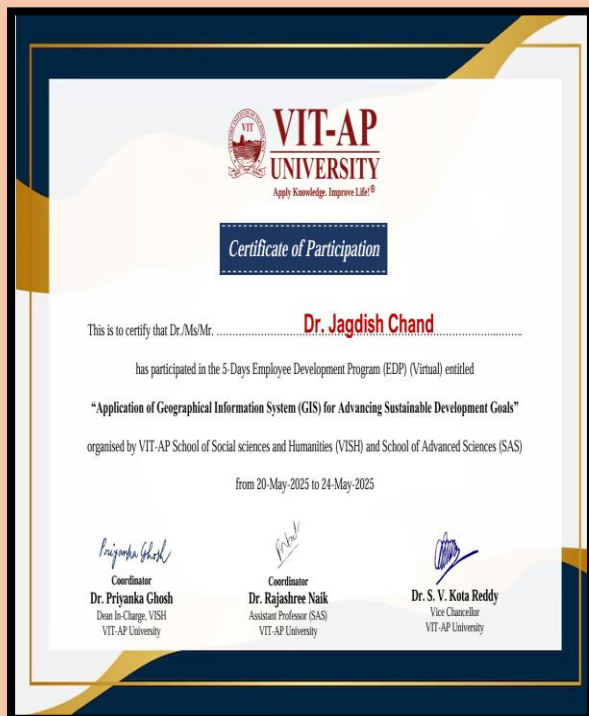


### Academic Session 2024-25

| Sr. No. | Name of Teacher                        | Subject   | Title of the program                                                                                                    | Duration (from – to) (DD-MM-YYYY)            |
|---------|----------------------------------------|-----------|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| 01.     |                                        |           |                                                                                                                         |                                              |
| 02.     | Dr. Jagdish Chand                      | Geography | 05 Days EDP from VIT-AP University                                                                                      | 20-May-2025 to 24-May-2025                   |
|         |                                        |           | 03 Days FDB: Hi Tech Eductech Institute, Karnataka                                                                      | 24,25 & 26 April 2025                        |
|         |                                        |           | International Conference: SHARADCHANDRA ARTS, COMMERCE & SCIENCE COLLEGE NAIGAON (Bz.)                                  | 11th October 2024                            |
|         |                                        |           | International Conference: Sonopant Dandekar Arts, V.S. Apte Commerce and M.H. Mehta Science College, Palghar            | 20 <sup>th</sup> March, 2025                 |
|         |                                        |           | International E-Conference: Arts and Commerce College Bhisi                                                             | 24 <sup>th</sup> May 2025                    |
|         |                                        |           | Multi-Disciplinary Intentional Conference: Matoshree Velbai Devaji Hariya College of Arts,Commerce & Science Shahad (W) | 26 <sup>th</sup> April, 2025                 |
| 03.     | Dr. Vinod                              | Music I   | FDP:Wazir Ram Singh Govt. College Dehri Kangra                                                                          | 23th-28 <sup>th</sup> June 2025              |
|         |                                        |           | FDP: Service Rule and Regulation, SCVB Govt. College Palampur, Kangra HP                                                | 01 <sup>st</sup> -07 <sup>th</sup> May, 2025 |
|         |                                        |           | Workshop: IIRS-ISRO                                                                                                     | 24 <sup>TH</sup> July 2024                   |
| 04.     | Ms. Ambra Devi                         | Hindi     | Research Methodology, Guru Ghasidas Vishwavidalaya Bilaspur.                                                            | 05.08.2024-19.08.2024                        |
|         |                                        |           | Refresher Course, Subject Oriented, Kurukshetra University.                                                             | 07.05.2025-20.05.2025                        |
|         |                                        |           | Research Methodology, MMTC Banaras Hindu University.                                                                    | 01.05.2025-07.05.2025                        |
|         |                                        |           | Workshop, Essential skills for Systematic Literature Reviews, Nuhianwali Education Society Sirsa Hariyana               | 16.12.2024-21.12.2024                        |
|         |                                        |           | Workshop, Synopsis and Thesis Writing Skills, Nuhianwali Education Society Sirsa Hariyana.                              | 14.07.2025-19.07.2025                        |
|         |                                        |           | Orientation on NEP2020, Hansraj College University of Delhi.                                                            | 03.07.2024-13.07.2024                        |
|         |                                        |           | Orientation on NEP2020, Guru Ghasidas Vishwavidalaya Bilaspur.                                                          | 20.07.2024-31.07.2024                        |
|         |                                        |           | Orientation on NEP2020, Patna University.                                                                               | 22.07.2024-31.07.2024                        |
| 4       | Mr. Sandeep Kumar, Assistant Professor | History   | FDP: Service Rule and Regulation, SCVB Govt. College Palampur, Kangra HP                                                | 01 <sup>st</sup> -07 <sup>th</sup> May, 2025 |
|         |                                        |           | Workshop: IIRS-ISRO                                                                                                     | 24 <sup>TH</sup> July 2024                   |









|    |                                                                                                                                         |                                                                   |   |   |
|----|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|---|---|
| 5. | No. of Paper Presented in Conferences/Seminars/Symposia (in last three years):<br>i. International<br>ii. National/Regional/State Level | i. 2 point per paper presented<br>ii. 1 point per paper presented | 8 | 8 |
|----|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|---|---|

### Research Papers Presented in Seminars/ Conference:

| Sr. No. | Title of the Paper Presented                                                                                            | Title of Conference/ Seminar                                                                                                                                       | Organized by                                                                                                                                                                                                                         | International/ National  | Date                  |
|---------|-------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------|
| 1.      |                                                                                                                         |                                                                                                                                                                    |                                                                                                                                                                                                                                      |                          |                       |
| 2.      | A Geographical Study of the Literacy Pattern and Gender Gap among Tribal women in Himachal Pradesh                      | Development @75 : Social, Economic and Cultural Changes                                                                                                            | Dept. of Geography, Economics and History, Govt. College, Dubaldhan, Jhajjar, Haryana                                                                                                                                                | National                 | March 16, 2023        |
| 3.      | Social Responsibility in Sustainable Development and Environmental Conservation: A Case study                           | Environmental Conservation and sustainable Development : A Pragmatic Perspective                                                                                   | Dept. of Geography, Govt. College Hisar, Haryana                                                                                                                                                                                     | National                 | March 18, 2023        |
| 4.      | GIS and Remote Sensing Application in Forest Resources- A Case study                                                    | International Conference on Climate Change, Sustainable Development & Smart Agriculture                                                                            | Department of Zoology, Faculty of Science, Kalinga University, Naya Raipur, Chhattisgarh                                                                                                                                             | International            | April 6-7, 2023       |
| 5.      | A Geographical Analysis of Development of Adventure Tourism in Himachal Pradesh                                         | One Day National Conference on The Horizon of Post Covid Tourism Sectors: Trends, Potential, Opportunities and Challenges                                          | Department of Geography and IQAC, Konkan Gyanpeeth Uran College of Commerce and Arts, Uran, New Mumbai                                                                                                                               | National                 | April 29, 2023        |
| 6.      | Water Resource Management and Development: A Geographical Study                                                         | International Conference on Multidisciplinary Research in Economic Development and Environmental Problems                                                          | Radiant Group of Institutions, Jabalpur (M.P.), India, Social Science & Management Welfare Association, International Youth Economic Association & International Society of Teachers, Administrators & Researchers Bangkok, Thailand | International            | June 4, 2023          |
| 7.      | An Overview of environmental Ethics                                                                                     | National Seminar on Ethics in Society: Issues and Challenges                                                                                                       | Govt. PG College Bilaspur, H.P.                                                                                                                                                                                                      | National                 | September 16, 2023    |
| 8.      | Water Resource Conservation and Sustainable Development: A Case study                                                   | Recent Trends in Science and Technology for Environment Conservation and Sustainable Development                                                                   | Dept. of Botany & Zoology; Sidharth Govt. Utkrisht College Nadaun, Himachal Pradesh,                                                                                                                                                 | International            | September 29-30, 2023 |
| 9.      | Geographical Study of Tribal Women's Literacy and Gender Gap in Himachal Pradesh                                        | International Conference on Tribal Identity in India: Issues, Challenges and the Road Ahead                                                                        | International Conference organized by Govt. College Pangi in collaboration with Himalayan Council for Scientific Research (HCSR)                                                                                                     | International            | October 1-2 & 4, 2023 |
| 10.     | Solid Waste Management and Environmental Awareness towards Sustainable Development: A Case Study                        | One Day Multidisciplinary International E-Conference on Natural Sciences and Environmental Awareness towards Sustainable Development                               | Abhay Yuwa Kalyan Kendra's Arts Mahila Mahavidyalaya & Department of Geography and Internal Quality Assurance Cell                                                                                                                   | International            | October 23, 2023      |
| 11.     | Utilizing Geospatial Techniques for a Geographical Study of Groundwater in Rohtak District                              | One Day Multidisciplinary International E-Conference on Science, Technology and Society: A Global Perspective (IESTSGP-2023)                                       | Shahajiraje Mahavidyalaya, Khatav & Department of Botany, Chemistry, Mathematics, Physics, Geography and Internal Quality Assurance Cell (IQAC)                                                                                      | International            | December 28, 2023     |
| 12.     | Change Detection In Land Use and Land Cover of Renuka Forest Division Of Himachal Pradesh Using Geospatial Technologies | Geoinformatics Applications in LULC Mapping and Natural Hazards                                                                                                    | National Institute of Rural Development & Panchayati Raj, North Eastern Regional Centre, Guwahati                                                                                                                                    | National                 | March 20-21, 2024     |
| 13.     | Exploring Dr. Ambedkar's Views on Indian Agriculture: An Analytical Approach                                            | One Day Interdisciplinary International E- Conference on Mahatma Phule, Rajarshi Shahu Maharaj and Dr. B. R. Ambedkar – Thoughts and works Towards Nation Building | Arts and Commerce College, Bhisli in collaboration with Global Foundation, India                                                                                                                                                     | International            | May 20, 2024          |
| 14.     | Important of Music in Minimizing Stress                                                                                 | National Conference on Culture, Science, Spirituality and Education                                                                                                | GC Bassa, Mandi                                                                                                                                                                                                                      | National Conference      | 23rd Dec. 2022        |
| 15.     | Poverty and Indian Democracy                                                                                            | International Conference on Latest Trends on Applied Science,                                                                                                      | SAI College, Sector-6, Bhilai                                                                                                                                                                                                        | International Conference | 26-27th May 2023      |

|     |                                         |                                                                                                                 |                                                                       |                          |                  |
|-----|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------|------------------|
|     |                                         | Management, Humanities and Information Technology                                                               |                                                                       |                          |                  |
| 16. | Musicology and its Wider Prospects      | National Seminar on Changes and Challenges of Post Covid-19 in India's Education System                         | GC Nihri, Mandu                                                       | National Seminar         | 24th June 2023   |
| 17. | Indian Music in Mughal Period           | International Seminar on Hindustani Shastriy Sangeet ke Badalte Swaroop, Chinta evam Chintan                    | Vishwas Sangeet Samiti and Art and Culture Affairs Department Haryana | International Seminar    | 4th March 2023   |
| 18. | Important of Music in Minimizing Stress | National Conference on Culture, Science, Spirituality and Education                                             | GC Bassa, Mandi                                                       | National Conference      | 23rd Dec. 2022   |
| 19. | Poverty and Indian Democracy            | International Conference on Latest Trends on Applied Science, Management, Humanities and Information Technology | SAI College, Sector-6, Bhilai                                         | International Conference | 26-27th May 2023 |
| 20. | Musicology and its Wider Prospects      | National Seminar on Changes and Challenges of Post Covid-19 in India's Education System                         | GC Nihri, Mandu                                                       | National Seminar         | 24th June 2023   |
| 21. | Indian Music in Mughal Period           | International Seminar on Hindustani Shastriy Sangeet ke Badalte Swaroop, Chinta evam Chintan                    | Vishwas Sangeet Samiti and Art and Culture Affairs Department Haryana | International Seminar    | 4th March 2023   |

**INTERNATIONAL E-CONFERENCE  
 Science, Technology and Society: A Global Perspective  
 (IESTSGP-2023)**

*Date: 28th December 2023 Day-Thursday*

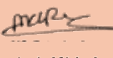
**Certificate**

This is to certify that Prof./Dr./Mr./Ms. Dr. Jagdish Chand, Department of Geography, Govt. College Sangrah, Himachal Pradesh University, Shimla, has participated in One Day Multidisciplinary International E-Conference on "Science, Technology and Society: A Global Perspective (IESTSGP-2023)" Organized by the Shahajiraje Mahavidyalaya, Khatav & Department of Botany, Chemistry, Mathematics, Physics, Geography and Internal Quality Assurance Cell (IQAC) Date- 28th December 2023, Day- Thursday

He/She has participated and presented a research paper entitled Utilizing Geospatial Techniques for a Geographical Study of Groundwater in Rohtak District

  
 Dr. Mayur N. Yelmar  
 Assistant Professor  
 Head, Dept. of Geography

  
 Dr. P. B. Kamble  
 Assistant Professor  
 Head Dept. of Botany

  
 Dr. Arvind Yelvale  
 Principal  
 Shahajiraje Mahavidyalaya, Khatav

**Multidisciplinary International E-Conference**

**NATURAL SCIENCES AND ENVIRONMENTAL AWARENESS  
 TOWARDS SUSTAINABLE DEVELOPMENT**

*Date- 20th October 2023, Day- Friday*

**Certificate**

This is to certify that Prof./Dr./Mr./Ms. Dr. Jagdish Chand, Asst. Prof., Dept. of Geography, Govt. College Sangrah, Distt. Sirmour, H.P. has participated in One Day Multidisciplinary International E-Conference on "Natural Sciences and Environmental Awareness towards Sustainable Development" Organized by the Abhay Yuwa Kalyan Kendra's Arts Mahila Mahavidyalaya & Department of Geography and Internal Quality Assurance Cell Date- 20th October 2023, Day- Friday

He/She has participated and presented a research paper entitled Solid Waste Management and Environmental Awareness towards Sustainable Development: A Case Study

  
 Dr. Laxmi L. Dhanagar  
 IQAC, Coordinator  
 Director Of Physical Education & Sports

  
 Dr. Yash L. Patil  
 Organizing Secretary  
 Professor  
 Director Of Physical Education & Sports

  
 Dr. Manisha S. Pawar  
 Convener  
 BOD, Department of Geography

  
 Dr. Shantanu C. Bhatkar  
 Chief Organizer  
 Principal

**One Day International Inter-disciplinary Conference**

**Impact of Changing Environment on Agriculture,  
 Health and Water Resources**

**Certificate**

This is to certify that Prof./Dr./Mr./Ms. Dr. Jagdish Chand of Govt. College Sangrah, Distt. Sirmour, Himachal Pradesh has participated / Presented a paper entitled A Survey of Water Quality in Himalayan Glacial Meltwater Streams : in the one day International Inter-disciplinary Implications for Hydrology and Ecology conference on "Impact of Changing Environment on Agriculture, Health and Water Resources" organized by Department of Geography, Shri Sant Damaji Mahavidyalaya, Mangalwedha, On 20th January 2024.

  
 Dr. N. B. Fawar  
 Principal

  
 Dr. D. S. Gaikwad  
 Convener

  
 Dr. P. M. Honrao  
 IQAC Co-Ordinator

**Certificate**

This is to certify that Prof./Dr./Mr./Ms. Jagdish Chand Designation Assistant Professor (Geography) Govt. College Sangrah has participated as a Keynote Speaker/Resource Person/Invited Speaker/ Presented Paper/Poster entitled Water Resource Conservation and Sustainable Development: A Case Study in the international conference on Recent Trends in Science and Technology for Environment Conservation and Sustainable Development organized by Deptt. of Botany & Zoology, Sidharth Govt. Utkrishi College Nadaun, Himachal Pradesh, India on Sep 29-30, 2023.

He/She has been awarded with Best Oral Presentation/Poster Presentation.

  
 Dr. Sunita Saklani  
 Organizing Secretary

  
 Prof. Bhagwati P Sharma  
 Convener

  
 Dr. Anil Kumar Gautam  
 Principal-Cum-Patron

**Certificate**

This is to certify that Mr./Mrs./Miss/Prof./Dr. Jagdish Chand of Govt. College Sangrah, Distt. Sirmour H.P. has Participated and Presented His/Her research Paper entitled: Mapping of landslide Vulnerability in Himachal Pradesh: A Geospatial Perspective in One Day Multidisciplinary International Conference on "Environmental Conservation and Disaster Management" Organized by Department of Social Sciences, Mahatma Phule Mahavidyalaya, Kingaon Dist. Latur (MS). On Wednesday 13th March, 2024.

  
 Mr. Sanjay Jagtap  
 Head Department of Public Administration  
 Mahatma Phule Mahavidyalaya, Kingaon

  
 Mr. Balaji Archarya  
 Head Department of Economics  
 Mahatma Phule Mahavidyalaya, Kingaon

  
 Dr. Balram Pawar  
 Head Department of Sociology  
 Mahatma Phule Mahavidyalaya, Kingaon

  
 Dr. Yithal Chavan  
 Head Department of Geography  
 Mahatma Phule Mahavidyalaya, Kingaon

  
 Dr. Balram Bhole  
 Principal  
 Mahatma Phule Mahavidyalaya, Kingaon

This is to certify that, Dr. Jagdish Chand of Govt. College Sangrah has participated/Presented a Paper on A Geographical Analysis of Development of Adventure Tourism in Himachal Pradesh in One Day National Conference on "The Horizon of Post Covid Tourism Sectors: Trends, Potential, Opportunities and Challenges" organized by Department of Geography and IQAC, Konkan Gyanpeeth Uran College of Commerce and Arts, Uran, New Mumbai. (MS), held on 29th April, 2023.

  
 Mrs. Anupama Kamble  
 Convener

  
 Dr. Arun Chavan  
 IQAC Coordinator

  
 Prof. Dr. Baliram Gaikwad  
 Principal

## Academic Session: 2024-25

| Sr. No. | Title of the Paper Presented                                                           | Title of Conference/ Seminar                                              | Organized by                                                                      | International/ National | Date                                        |
|---------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------|---------------------------------------------|
| 01.     | Sustainable Solutions for Climate Change: Mitigation and Adaptation                    | Multidisciplinary Perspectives on Global Issues and Sustainable Solutions | Sonopant Dandekar Arts, V.S. Apte Commerce and M.H. Mehta Science College Palghar | International           | 20 <sup>th</sup> March, 2025                |
| 02.     | Navigating Environment Sustainability Progress Challenges and Future Prospects         | Sustainability Approach: Role of Science and Technology                   | Sharadchandra Arts, Commerce and Science College Naigaon                          | International           | 11 <sup>th</sup> Oct 2024                   |
| 03.     | The Digital Revolution in Education: Transforming Learning for the Future              | New Education Policy 2020: Current Status and Challenges                  | Subhash Baburao Kul Art, Commerce and Science College Kedgaon                     | National                | 7 <sup>th</sup> -8 <sup>th</sup> March 2025 |
| 04.     | Transforming Vulnerability into Resilience for Climate Adaptaiton                      | Exploring the Future: Research Resilience and Renewal                     | Matoshree Velbai Devaji Hariya College of Arts, Commerce and Science Shahad W     | International           | 26 <sup>th</sup> April 2025                 |
| 05.     | Policy to Practice: Bridging the Gap in Gender Equality                                | Gender Equality Rhetoric to Action                                        | PSR Govt. Degree College Baijnath                                                 | International           | 8 <sup>th</sup> -9 <sup>th</sup> March 2025 |
| 06.     | समकालीन हिंदी उपन्यासों में उपेक्षित किन्नर समुदाय                                     | वर्तमान दौर के विमर्श                                                     | गिरधारी लाल शोध पीठ हरियाणा के सी एम् आर्मी कॉलेज ऑफ एजुकेशन भिवानी हरियाणा       | International           | 29 <sup>th</sup> April 2025                 |
| 07.     | वर्तमान दौर के सन्दर्भ में संस्कृत साहित्य के नाटक अभिग्यांश्कुलतम में पर्यावरण विमर्श | वर्तमान दौर के विमर्श                                                     | गिरधारी लाल शोध पीठ हरियाणा के सी एम् आर्मी कॉलेज ऑफ एजुकेशन भिवानी हरियाणा       | International           | 29 <sup>th</sup> April 2025                 |







|    |                                                                            |   |   |
|----|----------------------------------------------------------------------------|---|---|
| 6. | Seminar, Workshops, Conferences and Trainings organized by the Institution | 6 | 4 |
|    | International Level                                                        | 4 |   |
|    | National Level                                                             | 3 |   |
|    | State Level                                                                |   |   |

### List of IIRS-ISRO Outreach Programmes Organized/ Coordinated at Govt. College Sangrah

| Sr. No. | Title of the Course                                                                    | From Date          | To Date            | No. of Participants |
|---------|----------------------------------------------------------------------------------------|--------------------|--------------------|---------------------|
| 1.      | Advances in Remote Sensing Techniques for Geological Applications                      | March 11, 2024     | March 15, 2024     | 81                  |
| 2.      | Aditya L1: India's First Space Based Observatory                                       | March 18, 2024     | March 22, 2024     | 56                  |
| 3.      | Soil Health: Measurement & Modelling                                                   | March 28, 2024     | March 28, 2024     | 20                  |
| 4.      | Applications of Geospatial Technology in Paleochannel Studies                          | May 20, 2024       | May 24, 2024       | 24                  |
| 5.      | Geospatial Technology for Modelling of Urban Environment                               | May 27, 2024       | May 31, 2024       | 21                  |
| 6.      | Geospatial Technology for Digital Agriculture                                          | June 24, 2024      | June 28, 2024      | 14                  |
| 7.      | Utilities of Sun-Induced Chlorophyll Fluorescence in Vegetation Studies                | July 18, 2024      | July 18, 2024      | 6                   |
| 8.      | Potential of NISAR for Disaster Mitigation and Management                              | July 24, 2024      | July 24, 2024      | 14                  |
| 9.      | LIDAR Data Processing and Applications                                                 | August 5, 2024     | August 16, 2024    | 83                  |
| 10.     | AI/ML for Geodata Analysis                                                             | August 19, 2024    | August 23, 2024    | 37                  |
| 11.     | Remote Sensing, Geographical Information System and Global Navigation Satellite System | August 27, 2024    | November 22, 2024  | 37                  |
| 12.     | Remote Sensing and Digital Image Analysis                                              | August 27, 2024    | September 20, 2024 | 39                  |
| 13.     | Understanding Cryospheric Hazards                                                      | September 6, 2024  | September 6, 2024  | 9                   |
| 14.     | अंतरिक्ष प्रौद्योगिकी का अवलोकन                                                        | September 9, 2024  | September 20, 2024 | 15                  |
| 15.     | Overview of Global Navigation Satellite System                                         | September 23, 2024 | October 4, 2024    | 16                  |
| 16.     | Overview of Geographical Information System                                            | October 14, 2024   | November 1, 2024   | 24                  |
| 17.     | Space based inputs for Village level crop assessment                                   | October 28, 2024   | October 28, 2024   | 13                  |
| 18.     | Overview of Geocomputation and Geo-web services                                        | November 4, 2024   | November 8, 2024   | 24                  |
| 19.     | Geo-data sharing and Cyber Security                                                    | December 9, 2024   | December 20, 2024  | 03                  |
| 20.     | Raman Spectroscopy and its Applications in Earth Observation                           | December 24, 2024  | December 24, 2024  | 08                  |

|     |                                                               |                  |                  |    |
|-----|---------------------------------------------------------------|------------------|------------------|----|
| 21. | Space Science and Technology awareness training (START)       | January 9, 2025  | January 29, 2025 | 11 |
| 22. | अंतरिक्ष प्रौद्योगिकी का अवलोकन                               | January 10, 2025 | January 10, 2025 | 19 |
| 23. | MARTIAN SURFACE, ANALOGUES AND ATMOSPHERE                     | March 12, 2025   | March 12, 2025   | 11 |
| 24. | Space Technology for Disaster Risk Reduction                  | March 24, 2025   | March 28, 2025   | 16 |
| 25. | AI/ML Model for Specific Crop Acreage Mapping                 | April 2, 2025    | April 2, 2025    | 02 |
| 26. | The Method of Space Science Research                          | May 5, 2025      | May 9, 2025      | 06 |
| 27. | Recent trends in Ecological Modelling & Simulation            | May 19, 2025     | May 23, 2025     | 03 |
| 28. | Geospatial technology for modelling of Urban Environment      | May 26, 2025     | May 30, 2025     | 01 |
| 29. | Remote Sensing Data Analytics for Crop Production Forecasting | June 16, 2025    | June 20, 2025    | 04 |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <br>भारतीय अंतरिक्ष अनुसंधान संगठन / INDIAN SPACE RESEARCH ORGANISATION<br>अंतरिक्ष विभाग, भारत सरकार / DEPARTMENT OF SPACE, GOVERNMENT OF INDIA                                                                                                                                                                                                                                                                                                                                                                                                                | <br><b>इसरो डिप्ट</b>                                  |
| ऑफ - CAMPUS OUTREACH CERTIFICATE PROGRAMME<br>संस्थान की सहभागिता का प्रमाण पत्र<br>CERTIFICATE OF PARTICIPATION OF INSTITUTE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                         |
| COR202413620896                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                         |
| <p>यह प्रमाणित किया जाता है कि <b>गवर्नमेंट कॉलेज संग्रह</b> ने भारतीय सुदूर संवेदन संस्थान, इसरो देहार्दुन द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम <b>उन्नत सुदूर संवेदन तकनीकों के भूवैज्ञानिक अनुप्रयोग</b> में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 2024-03-11 से 2024-03-15 तक किया गया।</p> <p>This is to certify that <b>Govt. College Sangrah</b>, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehradun on <b>Advances in Remote Sensing Techniques for Geological Applications</b>. This online programme was conducted during March 11, 2024 to March 15, 2024</p> |                                                                                                                                         |
| दिनांक/Date: 04-04-2024<br>डिप्ट/Dehradun                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | समूह मुख्यालय, भूस्थानिक प्रौद्योगिकी एवं आउटरीच कार्यक्रम समूह<br>Group Head, Geospatial Technologies & Outreach Programme Group, ISRS |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <br>भारतीय अंतरिक्ष अनुसंधान संगठन / INDIAN SPACE RESEARCH ORGANISATION<br>अंतरिक्ष विभाग, भारत सरकार / DEPARTMENT OF SPACE, GOVERNMENT OF INDIA                                                                                                                                                                                                                                                                                                                                                                                            | <br><b>इसरो डिप्ट</b>                                |
| ऑफ - CAMPUS OUTREACH CERTIFICATE PROGRAMME<br>संस्थान की सहभागिता का प्रमाण पत्र<br>CERTIFICATE OF PARTICIPATION OF INSTITUTE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                         |
| COR202413720896                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                         |
| <p>यह प्रमाणित किया जाता है कि <b>गवर्नमेंट कॉलेज संग्रह</b> ने भारतीय सुदूर संवेदन संस्थान, इसरो देहार्दुन द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम <b>आदित्य एल1: भारत की पहली अंतरिक्ष-आधारित वेधशाला</b> में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 2024-03-18 से 2024-03-22 तक किया गया।</p> <p>This is to certify that <b>Govt. College Sangrah</b>, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehradun on <b>Aditya L1: India's first space-based observatory</b>. This online programme was conducted during March 18, 2024 to March 22, 2024</p> |                                                                                                                                         |
| दिनांक/Date: 04-04-2024<br>डिप्ट/Dehradun                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | समूह मुख्यालय, भूस्थानिक प्रौद्योगिकी एवं आउटरीच कार्यक्रम समूह<br>Group Head, Geospatial Technologies & Outreach Programme Group, ISRS |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <br>भारतीय अंतरिक्ष अनुसंधान संगठन / INDIAN SPACE RESEARCH ORGANISATION<br>अंतरिक्ष विभाग, भारत सरकार / DEPARTMENT OF SPACE, GOVERNMENT OF INDIA                                                                                                                                                                                                                                                                                                                                                                   | <br><b>इसरो डिप्ट</b>                                |
| ऑफ - CAMPUS OUTREACH CERTIFICATE PROGRAMME<br>संस्थान की सहभागिता का प्रमाण पत्र<br>CERTIFICATE OF PARTICIPATION OF INSTITUTE                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                         |
| COR2024103720896                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                         |
| <p>यह प्रमाणित किया जाता है कि <b>गवर्नमेंट कॉलेज संग्रह</b> ने भारतीय सुदूर संवेदन संस्थान, इसरो देहार्दुन द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम <b>मृदा स्वास्थ्य: मापन एवं मॉडलिंग</b> में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 2024-03-28 से 2024-03-28 तक किया गया।</p> <p>This is to certify that <b>Govt. College Sangrah</b>, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehradun on <b>Soil Health : Measurement &amp; Modelling</b>. This online programme was conducted during March 28, 2024 to March 28, 2024</p> |                                                                                                                                         |
| दिनांक/Date: 24-04-2024<br>डिप्ट/Dehradun                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | समूह मुख्यालय, भूस्थानिक प्रौद्योगिकी एवं आउटरीच कार्यक्रम समूह<br>Group Head, Geospatial Technologies & Outreach Programme Group, ISRS |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <br>भारतीय अंतरिक्ष अनुसंधान संगठन / INDIAN SPACE RESEARCH ORGANISATION<br>अंतरिक्ष विभाग, भारत सरकार / DEPARTMENT OF SPACE, GOVERNMENT OF INDIA                                                                                                                                                                                                                                                                                                                                                                                                                               | <br><b>इसरो डिप्ट</b>                              |
| ऑफ - CAMPUS OUTREACH CERTIFICATE PROGRAMME<br>संस्थान की सहभागिता का प्रमाण पत्र<br>CERTIFICATE OF PARTICIPATION OF INSTITUTE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                         |
| COR202413820896                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                         |
| <p>यह प्रमाणित किया जाता है कि <b>गवर्नमेंट कॉलेज संग्रह</b> ने भारतीय सुदूर संवेदन संस्थान, इसरो देहार्दुन द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम <b>पैलियोचैनल अध्ययन में भू-स्थानिक प्रौद्योगिकी के अनुप्रयोग</b> में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 20 मई 2024 से 24 मई 2024 तक किया गया।</p> <p>This is to certify that <b>Govt. College Sangrah</b>, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehradun on <b>Applications of Geospatial Technology in Paleochannel Studies (Course in Hindi)</b>. This online programme was conducted during May 20, 2024 to May 24, 2024</p> |                                                                                                                                         |
| दिनांक/Date: 12-06-2024<br>डिप्ट/Dehradun                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | समूह मुख्यालय, भूस्थानिक प्रौद्योगिकी एवं आउटरीच कार्यक्रम समूह<br>Group Head, Geospatial Technologies & Outreach Programme Group, ISRS |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <br>भारतीय अंतरिक्ष अनुसंधान संगठन / INDIAN SPACE RESEARCH ORGANISATION<br>अंतरिक्ष विभाग, भारत सरकार / DEPARTMENT OF SPACE, GOVERNMENT OF INDIA                                                                                                                                                                                                                                                                                                                                                                                                     | <br><b>इसरो डिप्ट</b>                                |
| ऑफ - CAMPUS OUTREACH CERTIFICATE PROGRAMME<br>संस्थान की सहभागिता का प्रमाण पत्र<br>CERTIFICATE OF PARTICIPATION OF INSTITUTE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                         |
| COR202414120896                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                         |
| <p>यह प्रमाणित किया जाता है कि <b>गवर्नमेंट कॉलेज संग्रह</b> ने भारतीय सुदूर संवेदन संस्थान, इसरो देहार्दुन द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम <b>शहरी पर्यावरण के मॉडलिंग के लिए भू-स्थानिक प्रौद्योगिकी</b> में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 27 मई 2024 से 31 मई 2024 तक किया गया।</p> <p>This is to certify that <b>Govt. College Sangrah</b>, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehradun on <b>Geospatial technology for modelling of Urban Environment</b>. This online programme was conducted during May 27, 2024 to May 31, 2024</p> |                                                                                                                                         |
| दिनांक/Date: 14-06-2024<br>डिप्ट/Dehradun                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | समूह मुख्यालय, भूस्थानिक प्रौद्योगिकी एवं आउटरीच कार्यक्रम समूह<br>Group Head, Geospatial Technologies & Outreach Programme Group, ISRS |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <br>भारतीय अंतरिक्ष अनुसंधान संगठन / INDIAN SPACE RESEARCH ORGANISATION<br>अंतरिक्ष विभाग, भारत सरकार / DEPARTMENT OF SPACE, GOVERNMENT OF INDIA                                                                                                                                                                                                                                                                                                                                                                                 | <br><b>इसरो डिप्ट</b>                              |
| ऑफ - CAMPUS OUTREACH CERTIFICATE PROGRAMME<br>संस्थान की सहभागिता का प्रमाण पत्र<br>CERTIFICATE OF PARTICIPATION OF INSTITUTE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                         |
| COR202414320896                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                         |
| <p>यह प्रमाणित किया जाता है कि <b>गवर्नमेंट कॉलेज संग्रह</b> ने भारतीय सुदूर संवेदन संस्थान, इसरो देहार्दुन द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम <b>भू-स्थानिक प्रौद्योगिकी द्वारा डिजिटल कृषि</b> में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 24 जून 2024 से 28 जून 2024 तक किया गया।</p> <p>This is to certify that <b>Govt. College Sangrah</b>, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehradun on <b>Geospatial Technology for Digital Agriculture</b>. This online programme was conducted during June 24, 2024 to June 28, 2024</p> |                                                                                                                                         |
| दिनांक/Date: 16-07-2024<br>डिप्ट/Dehradun                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | समूह मुख्यालय, भूस्थानिक प्रौद्योगिकी एवं आउटरीच कार्यक्रम समूह<br>Group Head, Geospatial Technologies & Outreach Programme Group, ISRS |



भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING  
भारतीय अंतरिक्ष अनुसंधान संगठन/ INDIAN SPACE RESEARCH ORGANISATION  
अंतरिक्ष विभाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA



श्री: गैर-संस्पर्शित कार्यक्रम प्रमाण पत्र  
OFF - CAMPUS OUTREACH CERTIFICATE PROGRAMME

COR2024103920896

संस्थान की सहभागिता का प्रमाण पत्र  
CERTIFICATE OF PARTICIPATION OF INSTITUTE

यह प्रमाणित किया जाता है कि **गवर्नमेंट कॉलेज संग्रह** ने भारतीय सुदूर संवेदन संस्थान, इसरो देहरादून द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम **वनस्पति अध्ययन में सूर्य-प्रेरित क्लोरोफिल फ्लोरोसेंस की उपयोगिताएँ** में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 18 जुलाई 2024 से 18 जुलाई 2024 तक किया गया।

This is to certify that **Govt. College Sangrah**, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehradun on **Utilities of Sun-Induced Chlorophyll Fluorescence in Vegetation Studies**. This online programme was conducted during July 18, 2024 to July 18, 2024

दिनांक/Date: 01-08-2024  
देहरादून/Dehradun

ग्रुप,  
विशेष संचालन, सूचना प्रौद्योगिकी एवं दूरस्थ अधिगम विभाग  
Head, Geospatial Services, IT & Distance Learning Department, IIRS

समूह प्रमुख,  
भू-स्थानिक प्रौद्योगिकी एवं आउटरेच कार्यक्रम समूह  
Group Head, Geospatial Technologies & Outreach Programme Group, IIRS



भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING  
भारतीय अंतरिक्ष अनुसंधान संगठन/ INDIAN SPACE RESEARCH ORGANISATION  
अंतरिक्ष विभाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA



श्री: गैर-संस्पर्शित कार्यक्रम प्रमाण पत्र  
OFF - CAMPUS OUTREACH CERTIFICATE PROGRAMME

COR2024103820896

संस्थान की सहभागिता का प्रमाण पत्र  
CERTIFICATE OF PARTICIPATION OF INSTITUTE

यह प्रमाणित किया जाता है कि **गवर्नमेंट कॉलेज संग्रह** ने भारतीय सुदूर संवेदन संस्थान, इसरो देहरादून द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम **आपदा न्यूनीकरण और प्रबंधन के लिए निस्सार की क्षमता** में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 24 जुलाई 2024 से 24 जुलाई 2024 तक किया गया।

This is to certify that **Govt. College Sangrah**, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehradun on **Potential of NISAR for Disaster Mitigation and Management**. This online programme was conducted during July 24, 2024 to July 24, 2024

दिनांक/Date: 01-08-2024  
देहरादून/Dehradun

ग्रुप,  
विशेष संचालन, सूचना प्रौद्योगिकी एवं दूरस्थ अधिगम विभाग  
Head, Geospatial Services, IT & Distance Learning Department, IIRS

समूह प्रमुख,  
भू-स्थानिक प्रौद्योगिकी एवं आउटरेच कार्यक्रम समूह  
Group Head, Geospatial Technologies & Outreach Programme Group, IIRS



भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING  
भारतीय अंतरिक्ष अनुसंधान संगठन/ INDIAN SPACE RESEARCH ORGANISATION  
अंतरिक्ष विभाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA



श्री: गैर-संस्पर्शित कार्यक्रम प्रमाण पत्र  
OFF - CAMPUS OUTREACH CERTIFICATE PROGRAMME

COR202414520896

संस्थान की सहभागिता का प्रमाण पत्र  
CERTIFICATE OF PARTICIPATION OF INSTITUTE

यह प्रमाणित किया जाता है कि **गवर्नमेंट कॉलेज संग्रह** ने भारतीय सुदूर संवेदन संस्थान, इसरो देहरादून द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम **लिडार डेटा प्रोसेसिंग और उसके अनुप्रयोग** में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 2024-08-05 से 2024-08-16 तक किया गया।

This is to certify that **Govt. College Sangrah**, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehradun on **LIDAR Data Processing and Applications**. This online programme was conducted during August 05, 2024 to August 16, 2024

दिनांक/Date: 19-09-2024  
देहरादून/Dehradun

ग्रुप,  
विशेष संचालन, सूचना प्रौद्योगिकी एवं दूरस्थ अधिगम विभाग  
Head, Geospatial Services, IT & Distance Learning Department, IIRS

समूह प्रमुख,  
भू-स्थानिक प्रौद्योगिकी एवं आउटरेच कार्यक्रम समूह  
Group Head, Geospatial Technologies & Outreach Programme Group, IIRS



भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING  
भारतीय अंतरिक्ष अनुसंधान संगठन/ INDIAN SPACE RESEARCH ORGANISATION  
अंतरिक्ष विभाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA



श्री: गैर-संस्पर्शित कार्यक्रम प्रमाण पत्र  
OFF - CAMPUS OUTREACH CERTIFICATE PROGRAMME

COR202414420896

संस्थान की सहभागिता का प्रमाण पत्र  
CERTIFICATE OF PARTICIPATION OF INSTITUTE

यह प्रमाणित किया जाता है कि **गवर्नमेंट कॉलेज संग्रह** ने भारतीय सुदूर संवेदन संस्थान, इसरो देहरादून द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम **बिजोडेटा विश्लेषण के लिए एआई/एमएल का प्रयोग** में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 2024-08-19 से 2024-08-23 तक किया गया।

This is to certify that **Govt. College Sangrah**, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehradun on **AI/ML for Geodata Analysis**. This online programme was conducted during August 19, 2024 to August 23, 2024

दिनांक/Date: 09-09-2024  
देहरादून/Dehradun

ग्रुप,  
विशेष संचालन, सूचना प्रौद्योगिकी एवं दूरस्थ अधिगम विभाग  
Head, Geospatial Services, IT & Distance Learning Department, IIRS

समूह प्रमुख,  
भू-स्थानिक प्रौद्योगिकी एवं आउटरेच कार्यक्रम समूह  
Group Head, Geospatial Technologies & Outreach Programme Group, IIRS

## II. National Seminar on National Youth Day: 12<sup>th</sup> Jan. 2025

### Report on National Seminar

Theme: *Upskilling Teachers and Students for Making Bharat a Superpower*

Date: 12th January 2025

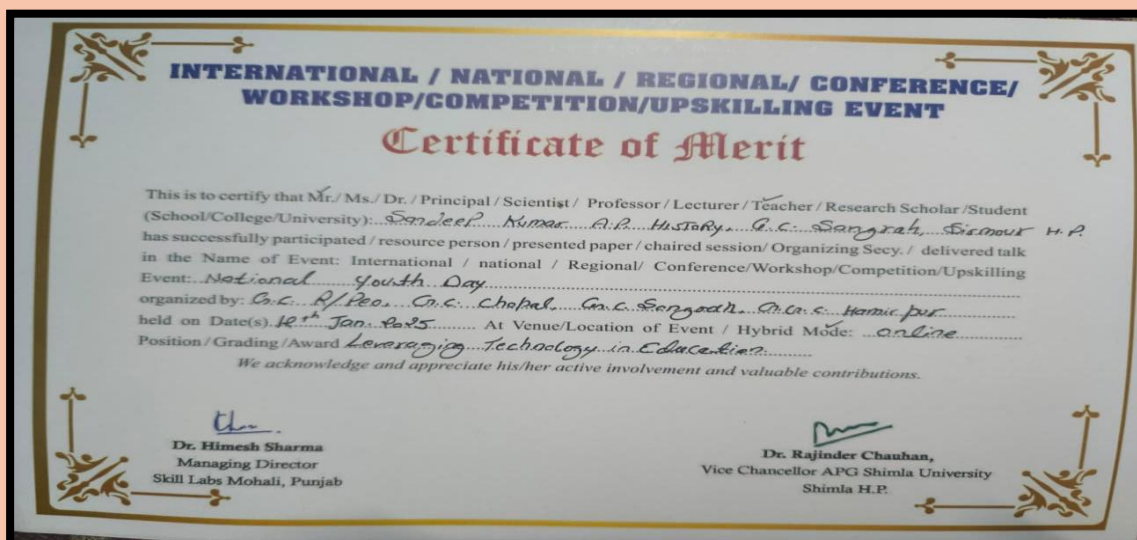
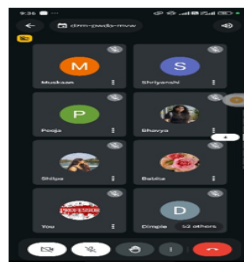
Mode: Hybrid (Offline & Online)

Collaboration: GC Sangrah, GC Chopal, GC Recong Peo, GC Kumarsain, GC Hamirpur

The National Seminar, jointly organized by five prestigious colleges, focused on the theme "Upskilling Teachers and Students for Making Bharat a Superpower" and addressed the sub-theme "Youth Issues and Solutions in the Modern World." The event provided a platform for insightful discussions on equipping educators and students with skills to meet modern challenges and contribute to India's global rise.

#### Key Speakers and Their Topics – In Detail

1. **Ms. Muskan Bhat (Clinical Psychologist, J&K):** *Topic: Issues and Solutions Related to School Students:* Ms. Muskan highlighted the psychological challenges school students face today, such as peer pressure, academic stress, bullying, and the impact of social media. She emphasized the importance of fostering open communication between students, parents, and educators to address these issues effectively. She also discussed practical coping mechanisms, such as time management, stress-relief exercises, and mindfulness techniques, while advocating for more mental health awareness in schools.
2. **Dr. Javeeta Ray (Kolkata):** *Topic: Learning Lessons for Youths from Gandhian Thoughts:* Dr. Ray explored how Gandhian principles like non-violence, self-discipline, and self-reliance can guide today's youth in leading ethical and meaningful lives. She related these principles to modern challenges such as climate change, social inequality, and



|    |                         |                            |                    |                          |    |
|----|-------------------------|----------------------------|--------------------|--------------------------|----|
| 7. | No. of Paper Published: | i.                         | 5 points per paper | 20                       | 20 |
|    | i.                      | UGC Care List Journals     | ii.                | 2 points per paper       |    |
|    | ii.                     | Non-UGC Care List Journals | iii.               | 1 point per 20 citations |    |
|    | iii.                    | Citations                  |                    |                          |    |

| Sr. No. | Name of the author/s       | Title of Paper                                                                                                                                                                                                        | Journal                                                                                  | ISSN / ISBN No                     | Whether UGC Care Listed/ Peer Reviewed | Volume No.       | Year of Publication | Page No. |
|---------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------|----------------------------------------|------------------|---------------------|----------|
| 1.      | Dr. Devraj Sharma          | हिमाचल प्रदेश के गिरिपार क्षेत्र में गाई जाने वाली गाथाओं का संगीतात्मक विश्लेषण                                                                                                                                      | International Journal of Research and Analytical Review                                  | E-ISSN 2348-1269, P-ISSN 2349-5138 | Peer Reviewed                          | Vol 12, Issue 02 | May 2025            | 151-156  |
| 2.      | Dr. Jagdish Chand          | The Transformation of Geographic Thought: Cultural Landscape and Structuralism in 20 <sup>th</sup> Cent.                                                                                                              | International Journal of World Geology, Geography, Agriculture, Forestry and Env.Science | ISSN 3065-1552                     | Peer Reviewed                          | Vol 1            | 11 Oct. 2024        | 21-      |
| 3.      | Dr. Jagdish Chand          | The Development of Geographical Thought and Trends in the Discipline                                                                                                                                                  | International Journal of Research Study of Env. Earth and Allied Sciences                | 3066-0637                          | Peer Reviewed                          | Vol 1            | 30 oct. 2025        | 27-      |
| 4.      | Dr. Jagdish Chand          | Empowering Youth for Env Sustainability: A Case study of Unnat Bharat Abhiyan initiatives, HP                                                                                                                         | International Journal of Research Study of Env. Earth and Allied Sciences                | 3066-0637                          | Peer Reviewed                          | Vi. 1            | Oct. 2024           | 01-      |
| 5.      | Dr. Jagdish Chand          | The Digital Revolution in Education: Transforming learning for the future                                                                                                                                             | International Journal of Advance and Applied Research                                    | 2347-7075                          | Peer Reviewed                          | Vol 06           | May 2025            | 85-      |
| 6.      | Dr. Jagdish Chand          | Ethical Responsibility and Climate Policy: A Comparative Analysis of Global Climate Agreements                                                                                                                        | Journal of Research and Development                                                      | 2230-9578                          | Peer Reviewed                          | Vol 17           | May 2025            | 205      |
| 7.      | Dr. Jagdish Chand          | Remote Sensing solutions for environmental challenges in the 20 <sup>th</sup> cent.                                                                                                                                   | International Journal of Research Study of Env. Earth and Allied Sciences                | 3066-0637                          | Peer Reviewed                          | Vol 2            | Feb 2025            | 154      |
| 8.      | Dr. Jagdish Chand          | Forest Fires and unscientific mining: Their environmental impact in Bilaspur district, HP                                                                                                                             | Journal of Research and Development                                                      | 2230-9578                          | Peer Reviewed                          | Vol 17           | Apr 2025            | 52-      |
| 9.      | Dr. Jagdish Chand          | Mapping Human Perceptions of land use and land cover changes in Bilaspur HP                                                                                                                                           | Journal of Research and Development                                                      | 2230-9578                          | Peer Reviewed                          | Vol 17           | Apr 2025            | 58       |
| 10.     | Ms. Kavita Chauhan         | Quaternization of guar gum with in situ generated hydroxypropyl dimethylbenzyl ammonium chloride from N,N-dimethylbenzylamine and epichlorohydrin for the effective removal of anionic dyes from simulated wastewater | International Journal of Biological Macromolecules                                       | 303 (2025) 143109                  | UGC Care List/Peer Reviewed            | -                | April 2025          | 1-17     |
| 11.     | Dr. Vinod                  | सिरमौर जनपद के गिरि-पार क्षेत्र की संस्कार गायन शैली                                                                                                                                                                  | Swar Sindhu National                                                                     | ISSN-2320-7175                     | Peer Reviewed                          | Volume 13        | June 2025           | -        |
| 12.     | Dr. Devraj Sharma          | सिरमौरी लोकगीतों का सांगीतिक अध्ययन                                                                                                                                                                                   | Swar sandhu                                                                              | 2320-7175                          | Peer Reviewed                          | Vol 12           | Aug 2024            | 16-21    |
| 13.     | Mr. Chander Prakash Pathik | वर्तमान दौर के संदर्भ में संस्कृत साहित्य के नाटक अभिज्ञानशाकुन्तल में पर्यावरण विमर्श                                                                                                                                | Research Journal Gina Shodh Sangam                                                       | ISSN NO. 2321-8037                 | Peer Reviewed                          | -                | May 2025            | -        |



## Original Article

### Mapping Human Perceptions of Land Use and Land Cover Changes in Bilaspur, Himachal Pradesh

Rajender Kumar<sup>1</sup>, Mohammad Hanif Khan<sup>2</sup>, Jagdish Chand<sup>3</sup>

<sup>1</sup> Research Scholar, Department of Geography, CPU Kota, Rajasthan.

<sup>2</sup> Assistant Professor in Geography, Department of Geography, CPU Kota, Rajasthan

<sup>3</sup> Assistant Professor in Geography, Govt College Sangrah, Distt Sirmour, H.P.,

Email: [rajender.geophu@gmail.com](mailto:rajender.geophu@gmail.com)

**Manuscript ID:** JRD-2025-170432  
**ISSN:** 2230-9578  
**Volume 17**  
**Issue 4**  
**Pp.** 58-62  
**April 2025**

**Abstract:** Land Use and Land Cover (LULC) change is a key concept in environmental studies, reflecting the dynamic interaction between human activities and natural processes. This theoretical study analyses LULC changes over a 30-year period (1989–2019) to understand patterns of landscape transformation. Using spatial tools such as change detection matrices and comparative mapping, the study reveals an increase in agricultural/horticultural land (5.16%), barren land (1.42%), and built-up areas (5.31%), indicating urban expansion and intensified land use. Simultaneously, forest cover declined by 5.31% and pasture/open land by 8.03%, raising concerns about ecological degradation. The slight increase in river/stream channels (1.28%) and sandy areas (0.08%) may reflect environmental responses to land use pressures. These trends align with theoretical models of environmental change, emphasizing the need for sustainable land management. The study underlines the role of geospatial analysis in understanding LULC transitions and guiding policies for balanced development and environmental conservation.

**Keywords:** Land use change, land cover dynamics, spatial analysis, environmental monitoring, sustainability, remote sensing, GIS

#### Introduction

Land use and land cover (LULC) change has become a central focus in environmental management and natural resource planning. The dynamic transformation of land surfaces over time and space is driven by both natural and human-induced factors. Monitoring these changes is essential for assessing, managing, and safeguarding Earth's resources. Understanding LULC dynamics helps evaluate human impact on the landscape, aiding in sustainable development and environmental conservation. Spatial analysis plays a vital role in land use planning, ensuring optimal land utilization while minimizing ecological harm. Historical and current LULC data provide crucial insights for strategic decision-making (Chaurasia et al., 1996). This study examines LULC changes over a 30-year period (1989–2019), using comparative maps and a change matrix to analyse shifts in land categories. Key findings reveal an increase in agricultural/horticultural land (5.16%), barren land (1.42%), and built-up land (5.31%), reflecting urban expansion and land intensification. Conversely, forest cover declined by 5.31%, and pasture/open land decreased by 8.03%, indicating environmental concerns. The results emphasize the need for sustainable land use planning to balance economic growth with ecological stability. Effective management strategies can mitigate negative environmental impacts while promoting responsible resource utilization.

#### Study Area

Bilaspur district is located in the southwestern part of Himachal Pradesh, lying between latitudes 31°12'30" N and 31°35'45" N, and longitudes 76°23'30" E and 76°55'40" E. The research area covers 1,167 km<sup>2</sup>, accounting for 2.10 percent of the total area of Himachal Pradesh. The location map is provided in Figure 1.1. According to the 2011 Census, the study area has a total population of 381,956, residing in 1,061 villages—953 inhabited and 108

#### Creative Commons (CC BY-NC-SA 4.0)

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International Public License, which allows others to remix, tweak, and build upon the work noncommercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

#### Address for correspondence:

Rajender Kumar, Research Scholar, Department of Geography, CPU Kota, Rajasthan,

#### How to cite this article:

Kumar, R., Khan, M. H., & Chand, J. (2025). Mapping Human Perceptions of Land Use and Land Cover Changes in Bilaspur, Himachal Pradesh. *Journal of Research & Development*, 17(4), 58–62. <https://doi.org/10.5281/zenodo.15543253>



Quick Response Code:



Website:  
<https://jrdvrb.org/>

DOI: [10.5281/zenodo.15543253](https://doi.org/10.5281/zenodo.15543253)



Access this article online  
Quick Response Code:



Website: <https://wjgges.us>

This work is licensed under a Creative Commons Attribution 4.0 International License.

**Manuscript ID:** IJWGGS-2024-010105

**DOI:** 10.5281/zenodo.14429996

**DOI Link:** <https://doi.org/10.5281/zenodo.14429996>

**Volume:** 1

**Issue:** 1

**Month:** October

**Year:** 2024

**E-ISSN:** 3066-1552

**Submitted:** 20-Aug-2024

**Revised:** 20-Aug-2024

**Accepted:** 15-Sept-2024

**Published:** 31-Oct-2024

Asst. Prof., Dept. of Geography, Govt. College Sangrah, Distt. Sirmour, Himachal Pradesh

#### Address for correspondence:

Dr. Jagdish Chand

Assistant Professor Geography,

Govt. College Sangrah, Distt. Sirmour,

Himachal Pradesh,

Pin- 173023

E-mail: [jagdishgcs@gmail.com](mailto:jagdishgcs@gmail.com)

#### How to cite this article:

Chand, J. (2024). The

Transformation of Geographic

Thought: Cultural Landscapes and

Structuralism in the 20th Century.

*International Journal of World*

*Geology, Geography, Agriculture,*

*Forestry and Environmental Sciences*, 17(1), 52–64.

<https://doi.org/10.5281/zenodo.14429996>

## The Transformation of Geographic Thought: Cultural Landscapes and Structuralism in the 20th Century

Dr. Jagdish Chand

#### Abstract:

Geographic philosophy has evolved significantly during the last century, reflecting broader epistemological and methodological advances. This paper investigates the evolution of geographic traditions, starting with the early forms of environmental determinism and possibilism, which established the groundwork for the cultural landscape and traditional regional geography methods. These traditions were later challenged by the rise of spatial science, which aimed to build a more scientific and quantitative foundation for geography. The primary goal of this research is to critically evaluate and contrast the spatial scientific tradition to the previous cultural landscape and traditional regional geography methodologies. This comparison illustrates the fundamental contrasts in their epistemological foundations, techniques, and spatial concepts. Second, the paper investigates the emergence of behavioral and humanistic geography in the 1970s, examining the elements that influenced their growth. This part looks into the growing realization of human complexity and behavior, and how these viewpoints provided a vital critique and expansion of the previous spatial scientific paradigm. Finally, the paper looks critically at the evolution of structuralist and structurationist approaches to geography. By contrasting these frameworks, the debate highlights their contributions to understanding the interplay of structure and agency in spatial study. To achieve these goals, the study gives a thorough overview and examination of the epistemological, methodological, and spatial concepts inherent in each tradition. These transformations and their repercussions are illustrated using contemporary literature and geographical examples.

**Key Words:** Geographic thought, cultural landscape, traditional regional geography, spatial science, behavioral geography, humanistic geography, structuralism, structuration, epistemology, methodology, space.

#### Introduction

Geographic thought evolved during the twentieth century, with substantial alterations in its underlying concepts. This section compares and contrasts the spatial science tradition to prior cultural landscape and traditional regional geography approaches. To provide a thorough understanding, we will first present an introduction of each subject, along with pertinent examples, before critically comparing and contrasting them in a final discussion section. Cultural landscape geography, which emerged in the early twentieth century, stresses the evident impact of human activities on the natural environment. It focuses on how people interact with their surroundings, resulting in landscapes that reflect cultural beliefs, customs, and socioeconomic activity. Traditional regional geography, which emerged about the same time, seeks to characterize and analyze the unique characteristics of individual regions. This approach combines physical, cultural, and economic components to create a comprehensive understanding of various topics. In contrast, the spatial science tradition, which emerged in the mid-twentieth century, promotes a more scientific and quantitative approach to geography. This paradigm shift sought to improve the rigor and objectivity of geographic research by employing statistical tools, models, and ideas derived from the natural sciences. Spatial science investigates patterns, processes, and relationships within spatial distributions, using methods like Geographic Information Systems (GIS) to examine spatial data. The next sections will provide thorough descriptions and examples of cultural landscape geography, traditional regional geography, and spatial science. The final debate will critically explore their epistemological and methodological distinctions, as well as their conceptualizations of space and place, to better understand the paradigmatic alterations that have influenced the discipline of geography.

#### Cultural Landscape: An Overview

The cultural landscape tradition in geography arose in opposition to environmental determinism and possibilism, emphasizing culture's role as a transformative agent of nature.

International Journal of Research Studies on Environment, Earth, and Allied Sciences (IJRESAS)

Access the article online  
Quick Response Code

Website: <https://www.ijresas.in>

This work is licensed under a Creative Commons Attribution 4.0 International License

Manuscript ID: IJRESAS-2024-010185

DOI: 10.5281/zenodo.14399946

DOI Link: <https://doi.org/10.5281/zenodo.14399946>

Volume: 1

Issue: 1

Month: October

Year: 2024

E-ISSN: 2666-0637

Submitted: 18-Aug-2024

Revised: 10-Aug-2024

Accepted: 15-Sep-2024

Published: 31-Oct-2024

Assistant Professor Geography Govt. College Sangrah, Himachal Pradesh

Address for correspondence: Dr. Jagdish Chand Assistant Professor Geography Govt. College Sangrah, Himachal Pradesh Email: [jagdishgogoi@gmail.com](mailto:jagdishgogoi@gmail.com)

How to cite this article: Chand, J. (2024). The Development of Geographical Thought and Trends in the Discipline. International Journal of Research Studies on Environment, Earth, and Allied Sciences, 1(1), 1-29. <https://doi.org/10.5281/zenodo.14399946>

International Journal of Research Studies on Environment, Earth, and Allied Sciences (IJRESAS) Volume 1 Issue 1 Oct 2024 | ISSN: 2666-0637 | Website: <https://www.ijresas.in> 27

### The Development of Geographical Thought and Trends in the Discipline

Dr. Jagdish Chand

**Abstract:** The development of geographical thought is a continuous process that has seen major upheavals brought about by advances in technology, societal transformation, and growing human comprehension. Beginning with the philosophical reflections of ancient societies, geography has evolved throughout ages, adopting a variety of approaches to become a vibrant academic discipline. This research examines how geographical thinking evolved across the ancient, medieval, and modern periods, each of which made a distinct contribution to the field's advancement. By using descriptive, observational methods and an exploratory and early cartographic perspective, ancient geographers established the foundation. During the Middle Ages, geography was entwined with religious ideas and discoveries, which expanded the field's breadth and added a variety of cultural insights. The modern age introduced analytical techniques and scientific rigor, with a focus on empirical facts. Modern geography incorporates new methods and instruments to tackle complicated problems like resource scarcity, urbanization, and climate change. It also reflects and responds to urgent global issues. The field's adaptability and significance are demonstrated by trends like environmental studies, GIS technologies, and regional planning. In particular, geospatial technology have revolutionized data collection, mapping, and analysis, allowing for more accurate and significant research. With an emphasis on sustainable solutions that strike a balance between development and conservation, environmental research and regional planning have become increasingly important. This flexibility highlights how important geography is to creating multidisciplinary answers to global issues. In the end, the study confirms that geography is still an essential discipline for tackling the problems of our globalized society because of its ability to innovate and evolve.

**Key Words:** Geographical Thought, Technological Advances, Societal Shifts, Environmental Studies, Geospatial Technologies, Regional Planning, Spatial Analysis, Climate Change.

**Introduction**

Geography is a social and natural-sciences subject that studies geographical patterns, landscapes, and the dynamic relationships that humans have with their surroundings. It seeks to understand how physical processes shape the Earth and how human activities affect these systems, resulting in a complex web of interdependence. Geography's emphasis on space, place, and the environment makes it an important topic for solving global issues ranging from climate change and natural resource management to urban growth and sustainability.

Geographical thought has evolved throughout ages, influenced by intellectual, social, and technological progress. Early geography sprang from a fundamental human need to discover, navigate, and comprehend the natural world. Ancient civilizations in Mesopotamia, Greece, India, and China pioneered geography through cartography, environmental observation, and the identification of natural features such as rivers, mountains, and coastlines. Philosophers such as Herodotus, Ptolemy, and Strabo established the groundwork for understanding the relationship between humans and their surroundings, with a focus on exploration, trade, and territorial boundaries.

The modern age marked a trend toward scientific inquiry and methodological observation. Thinkers such as Alexander von Humboldt and Carl Ritter established frameworks emphasizing the interconnection of natural and human systems, establishing the groundwork for regional geography. Physical and human geography emerged as independent branches in the nineteenth and twentieth centuries, with each focusing on specialized issues.

International Journal of Research Studies on Environment, Earth, and Allied Sciences (IJRESAS)

Access the article online  
Quick Response Code

Website: <https://www.ijresas.in>

This work is licensed under a Creative Commons Attribution 4.0 International License

Manuscript ID: IJRESAS-2024-010181

DOI: 10.5281/zenodo.14399410

DOI Link: <https://doi.org/10.5281/zenodo.14399410>

Volume: 1

Issue: 1

Month: October

Year: 2024

E-ISSN: 2666-0637

Submitted: 16-Aug-2024

Revised: 10-Aug-2024

Accepted: 15-Sep-2024

Published: 31-Oct-2024

Assistant Professor Geography Govt. College Sangrah, Himachal Pradesh

Address for correspondence: Dr. Jagdish Chand Assistant Professor Geography Govt. College Sangrah, Himachal Pradesh Email: [jagdishgogoi@gmail.com](mailto:jagdishgogoi@gmail.com)

How to cite this article: Chand, J. (2024). Empowering Youth for Environmental Sustainability: A Case Study of Unnat Bharat Abhiyan Initiatives, Himachal Pradesh. International Journal of Research Studies on Environment, Earth, and Allied Sciences, 1(1), 1-4. <https://doi.org/10.5281/zenodo.14399410>

International Journal of Research Studies on Environment, Earth, and Allied Sciences (IJRESAS) Volume 1 Issue 1 Oct 2024 | ISSN: 2666-0637 | Website: <https://www.ijresas.in> 1

### Empowering Youth for Environmental Sustainability: A Case Study of Unnat Bharat Abhiyan Initiatives, Himachal Pradesh

Dr. Jagdish Chand

**Abstract:** The Unnat Bharat Abhiyan (UBA) program promotes sustainable development throughout India by acting as a transformative bridge between rural people and universities. This study looks at how Government College Sangrah students significantly contribute to environmental sustainability through UBA efforts in the Himachal Pradesh villages of Sangrah, Rerli, Rori, Luthiana, and Mendoli. Students cultivate a culture of ecological responsibility by actively interacting with these communities and promoting sustainable behaviors and environmental awareness. Afforestation projects, plastic eradication efforts, cleanliness drives, and water body conservation are some of the main operations carried out. The students want to lessen garbage and its detrimental effects on the environment by organizing cleanliness campaigns and reducing the use of plastic. Afforestation initiatives seek to increase biodiversity and combat deforestation, while water conservation efforts focus on protecting priceless water supplies in the face of growing scarcity. This study evaluates the approaches and effects of these programs, emphasizing the results and difficulties faced. Notwithstanding many challenges, such as scarce resources and early opposition from the community, the students' dedication and creative problem-solving have produced notable advancements and stronger ties within the community. The results stimulate further UBA efforts and offer insightful information about the contribution of youth-led programs to environmental conservation and the development of a common sense of environmental responsibility. According to this case study, ongoing stakeholder involvement in sustainability initiatives can benefit local livelihoods and rural ecosystems in the long run.

**Key Words:** Environmental sustainability, Unnat Bharat Abhiyan, Plastic eradication, Water conservation, Afforestation, Community engagement, Youth empowerment, Sustainable development.

**Introduction:**

The necessity of sustainable practices at the local level has been highlighted by the growing problem of resource depletion, environmental degradation, and climate change. In order to advance sustainability, programs such as the Unnat Bharat Abhiyan (UBA) foster cooperation between academic institutions and rural communities. Himachal Pradesh's Government College Sangrah is actively advancing this goal by giving students the authority to spearhead a range of environmental initiatives.



Fig. 1.1 Geospatial Overview of the Study Area: Mapping UBA-Adopted Villages

This essay looks at four major areas where Government College Sangrah students have had a big influence: planting efforts, conservation of nearby water supplies, cleanliness and plastic eradication programs, and sustainable community involvement. The goal is to evaluate the success of these youth-led programs and determine how much they have contributed to the development of resilient and ecologically conscious rural communities.

International Journal of Advance and Applied Research  
[www.ijaar.co.in](http://www.ijaar.co.in)

ISSN - 2347-7075 Impact Factor - 8.141

Peer Reviewed Bi-Monthly Vol.6 No.20 Mar-Apr 2025

### The Digital Revolution in Education: Transforming Learning for the Future

Dr. Jagdish Chand  
Assistant Professor Geography  
Govt. College Sangrah, Himachal Pradesh  
Corresponding Author: Dr. Jagdish Chand  
Email: [jagdishgogoi@gmail.com](mailto:jagdishgogoi@gmail.com)

**Abstract:** The rapid advancement of digital technology has transformed the educational landscape, redefining the way knowledge is imparted and acquired. This paper explores the significance of technology-driven education, its impact on learning methodologies, and its potential in shaping the future of education. It examines the integration of digital tools such as e-learning platforms, artificial intelligence (AI), virtual reality (VR), and augmented reality (AR) in education. The study also evaluates the benefits and challenges associated with digital learning, including accessibility, engagement, and the digital divide. By analyzing relevant literature and case studies, the paper highlights how technology can foster an inclusive, efficient, and adaptive learning environment. The future prospects of digital learning are also discussed, emphasizing the role of emerging technologies in personalizing education and enhancing the learning experience.

**Keywords:** Digital Learning, Technology-Driven Education, Artificial Intelligence (AI), Virtual Reality (VR), E-Learning Platforms, Digital Divide, Personalized Learning

**Introduction:**

Technology has revolutionized education, making learning more dynamic and interactive. The integration of digital tools, including artificial intelligence, virtual reality, and online learning platforms, has transformed traditional teaching methodologies, allowing for more personalized and adaptive learning experiences. Digital learning has not only expanded access to quality education but has also enhanced engagement through interactive content and innovative instructional techniques. The shift towards technology-driven education has been accelerated by global events such as the COVID-19 pandemic, which underscored the importance of digital learning tools and remote learning solutions. Educational institutions worldwide rapidly adopted digital platforms to continue delivering instruction, highlighting the resilience and adaptability of modern education systems. This digital transformation has led to the emergence of blended learning models that combine online and offline learning methods, offering flexibility and accessibility to a diverse range of learners.

Despite its advantages, technology-driven education also presents challenges such as the digital divide, cybersecurity concerns, and the need for digital literacy among both educators and students. This paper explores the various dimensions of digital learning, the impact of technology on education, and the future of learning in a digitally connected world, providing insights into how

technology can be leveraged to create more inclusive and efficient educational environments.

**Literature Review:**

Several studies have highlighted the transformative potential of digital learning. According to Siemens (2005), the concept of connectivism emphasizes the role of technology in facilitating knowledge acquisition. This theory suggests that learning occurs through networks and digital platforms, where information is continuously updated and shared. Anderson and Dron (2011) examined how digital learning models, including online courses and blended learning, have reshaped education by offering flexibility, accessibility, and collaborative opportunities for students worldwide. Their research emphasizes the importance of adapting pedagogical strategies to suit online learning environments.

Research by Bates (2019) highlights the benefits of integrating artificial intelligence into education, particularly in fostering personalized learning experiences. AI-driven educational systems can adapt to individual learning styles, providing customized feedback and recommendations to enhance student engagement and performance. Additionally, studies by Means et al. (2013) suggest that blended learning, which combines traditional and digital methodologies, leads to improved learning outcomes compared to purely face-to-face instruction.

However, other studies focus on the challenges of digital learning. Selwyn (2016) discusses the digital divide, emphasizing that

Journal of Research and Development

Peer Reviewed International, Open Access Journal.  
ISSN : 2230-9578 | Website: <https://jrdvrb.org> Volume-17, Issue-5(1) May - 2025

Original Article

### Ethical Responsibility and Climate Policy: A Comparative Analysis of Global Climate Agreements

Dr. Jagdish Chand  
Assistant Professor Geography Govt. College Sangrah, Himachal Pradesh  
Email: [jagdishgogoi@gmail.com](mailto:jagdishgogoi@gmail.com)

**Abstract:** Climate change poses not only an environmental crisis but also a profound ethical challenge, raising questions of fairness, justice, and global responsibility. As nations grapple with rising temperatures and climate-induced disasters, international agreements serve as key instruments for collective action. This study examines how ethical responsibility is embedded—or at times neglected—in three major climate agreements: the Kyoto Protocol, the Paris Agreement, and the Glasgow Climate Pact. Using a qualitative comparative analysis, the research evaluates how these treaties address issues such as historical accountability, equity, and intergenerational justice. Findings reveal a gradual shift from rigid obligations to voluntary, equity-framed commitments, often lacking enforceability. While ethical language has become more prominent, significant gaps remain in translating ethical principles into binding policy. The paper concludes with recommendations for integrating clearer ethical standards into future climate governance.

**Keywords:** Climate change, environmental ethics, global justice, equity, climate policy, international agreements, responsibility.

**Introduction**

The global climate crisis stands as one of the most formidable challenges of the 21st century, threatening not only environmental stability but also social and economic well-being across the planet. Manifested in rising global temperatures, melting glaciers, sea-level rise, frequent and intense natural disasters, and the collapse of biodiversity, the impacts of climate change are both profound and far-reaching. Crucially, these effects are not experienced equally. Vulnerable populations—particularly those in the Global South—bear the brunt of climate impacts despite contributing the least to the accumulation of greenhouse gases in the atmosphere. This disparity highlights the ethical dimensions of climate change and the urgent need for justice-oriented solutions. In response, the international community has adopted a series of climate agreements designed to facilitate cooperation among nations and guide global climate action. Key among these are the Kyoto Protocol (1997), which introduced binding targets for developed countries; the Paris Agreement (2015), which promoted voluntary, nationally determined contributions by all nations; and the Glasgow Climate Pact (2021), which focused on transparency, loss and damage, and the urgency of deep emissions cuts. These agreements have helped shape national policies, mobilize financial resources, and enhance public awareness of climate issues. However, beyond their technical and legal mechanisms, these climate treaties are inherently ethical instruments. They reflect how the world understands fairness, responsibility, and the rights of present and future generations. Ethical questions emerge:

**Creative Commons (CC BY-NC-SA 4.0)**

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International Public License, which allows others to remix, tweak, and build upon the work noncommercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

**Address for correspondence:** Dr. Jagdish Chand, Assistant Professor Geography Govt. College Sangrah, Himachal Pradesh

Chand, J. (2025). Ethical Responsibility and Climate Policy: A Comparative Analysis of Global Climate Agreements. Journal of Research and Development, 205-208.

**International Journal of Research Studies on Environment, Earth, and Allied Sciences (IJREAS)**  
 Volume 2, Issue 4 | Feb-2025 | ISSN: 2250-9578 | Website: <https://www.ijreas.in>

**Remote Sensing Solutions for Environmental Challenges in the 21st Century**

Dr. Jagdish Chaud  
 Assistant Professor Geography, Govt. College Sangrah, Himachal Pradesh

**Abstract**  
 Climate change, deforestation, water scarcity, and natural disasters are among the most pressing environmental issues of the twenty-first century. These challenges pose serious threats to ecosystems, biodiversity, and human well-being. In response, remote sensing technologies have emerged as vital tools for monitoring, assessing, and addressing these concerns at local, regional, and global scales. Satellite-based remote sensing provides accurate, real-time data that is essential for climate modelling, disaster management, land use planning, and conservation of natural resources. This study explores the role of modern remote sensing platforms in tracking environmental changes and supporting sustainable development goals. It highlights key applications in sectors such as agriculture, forestry, water resource management, and urban planning. Technological advancements—such as high-resolution imagery, hyperspectral sensors, drones, and the integration of artificial intelligence and machine learning—have significantly enhanced data collection, analysis, and interpretation capabilities. These innovations allow for early warning systems, improved resource allocation, and better decision-making. However, despite these advancements, challenges such as high operational costs, limited data accessibility in some regions, cloud cover interference, and the need for specialized expertise in data analysis persist. Nevertheless, remote sensing remains an indispensable tool in enhancing resilience, supporting evidence-based policymaking, and promoting efficient environmental governance. A global environmental pressure intensifies, integrating these technologies is crucial for achieving sustainability and protecting ecosystems for future generations.

**Keywords:** Remote Sensing, Environmental Monitoring, Climate Change, Disaster Management, Land Use Planning, Ecosystem Conservation, Sustainability, Satellite Technology.

**Introduction**  
 Climate change, deforestation, urbanization, water scarcity, and natural disasters have all increased at unprecedented rates in the twenty-first century. These concerns endanger not only ecosystems, but also human livelihoods and global efforts to achieve sustainable development. Rapid industrialization, population increase, and unsustainable resource extraction have exacerbated environmental challenges, necessitating new and effective monitoring and management strategies. Remote sensing technologies have developed as important tools for studying and resolving environmental issues. Remote sensing, which provides rapid, accurate, and large-scale data, allows scientists, policymakers, and conservationists to monitor changes in land use, vegetation cover, atmospheric conditions, and disaster-affected areas with unparalleled precision. From satellite observations to drone-assisted surveys, these technologies provide dynamic insights into Earth's changing systems, assisting with climate modelling, resource management, and disaster risk reduction. This study will investigate the role of remote sensing in addressing important environmental concerns in the twenty-first century. It looks at technology breakthroughs in remote sensing platforms, highlights major applications in many sectors, addresses data interpretation and accessibility difficulties, and underlines remote sensing's role in fostering sustainable development. By examining these characteristics, the research emphasizes the critical role of remote sensing in creating a resilient and sustainable future.

**Review of Literature**  
 Remote sensing has become an essential tool for environmental monitoring and management. Jensen (2007) and Lillesand et al. (2015) did pioneering work in digital picture interpretation, which is crucial for understanding land use and ecosystem changes. Townsend and Justice (2009), as well as Tucker et al. (2005), stressed the importance of satellite data in monitoring deforestation and vegetation changes. Pettorelli et al. (2014) demonstrated how remote sensing can aid biodiversity conservation efforts. Joyce et al. (2009) highlighted the use of remote sensing in disaster management, namely in estimating damage and recovery. Li and Shao (2014) conducted an excellent study of urbanization impacts using high-resolution satellite images.

**How to cite this article:**  
 Chaud, J. (2025). Remote Sensing Solutions for Environmental Challenges in the 21st Century. *International Journal of Research Studies on Environment, Earth, and Allied Sciences*, 2(2): 154-157. <https://doi.org/10.22521/ijreass.15719679>

**Manuscript ID:** IJREAS-NC-2025-037  
**Quick Response Code:**   
**Website:** <https://www.ijreas.in>  
**DOI Link:** <https://doi.org/10.22521/ijreass.15719679>  
**Volume:** 2  
**Issue:** 4  
**Pages:** 154-157  
**Month:** February  
**Year:** 2025  
**E-ISSN:** 2250-9578  
**Submitted:** 19 Dec 2024  
**Reviewed:** 27 Jan 2025  
**Accepted:** 28 Feb 2025  
**Published:** 28 Feb 2025

**Address for correspondence:**  
 Dr. Jagdish Chaud  
 Assistant Professor Geography  
 Govt. College Sangrah, Himachal Pradesh  
 Email: [jagdishg@gmail.com](mailto:jagdishg@gmail.com)

**Journal of Research and Development**  
 Peer Reviewed International, Open Access Journal  
 ISSN : 2230-9578 | Website: <https://jrdv.org> | Volume-17, Issue-4 | April - 2025

**Original Article**

**Forest Fires and Unscientific Mining: Their Environmental Impact in Bilaspur District, Himachal Pradesh**

Rajender Kumar<sup>1</sup>, Mohammad Hanif Khan<sup>2</sup>, Jagdish Chaud<sup>3</sup>  
<sup>1</sup>Research Scholar, Department of Geography, CPU Kota, Rajasthan,  
<sup>2</sup>Assistant Professor in Geography, Department of Geography, CPU Kota, Rajasthan  
<sup>3</sup>Assistant Professor in Geography, Govt College Sangrah, Distt Simmour, H.P.,  
 Email: [rajender.geophug@gmail.com](mailto:rajender.geophug@gmail.com)

**Abstract :**  
 Human-induced alterations to ecosystems have significantly reduced the output of essential ecosystem services, affecting biodiversity and environmental stability. Rapid population growth has led to extensive land conversion for agriculture, industry, and urban expansion, increasing the demand for critical resources such as fresh water, fiber, and soil fertility. Activities like deforestation, large-scale agribusiness, illegal fishing and hunting, unregulated tourism, and pesticide contamination have further contributed to environmental degradation. This study focuses on the most prominent anthropogenic impacts in the study area, particularly forest fires and unscientific mining. These activities have caused severe ecological damage, leading to habitat destruction, soil erosion, water pollution, and loss of biodiversity. The study examines the spatial, temporal, and socio-economic dimensions of these impacts, highlighting the urgent need for sustainable environmental management. By understanding these challenges, policymakers and stakeholders can develop strategies to mitigate environmental damage and promote ecosystem resilience.

**Keywords:** Anthropogenic impact, ecosystem services, biodiversity loss, deforestation, forest fire, unscientific mining, environmental degradation, sustainability

**Introduction**  
 Human actions have dramatically impacted the earth's surface, seas, and atmosphere, particularly in the last 200 years. (Turner 1990). This reminds the current generation of Malthus' warning that unchecked population increase will eventually be restricted by fixed natural resources. (Malthus 1798). Factors other than climate change are predicted to have a dynamic and negative impact on the functioning of protected areas. Growing human population densities, intensified land use, and invasive species, all of which are typically connected to changes in habitat variability, increased habitat fragmentation, and reduced dispersion capabilities, are endangering ecosystems across the world, and protected areas are frequently the safe refuge for endangered species. Indeed, changing climate conditions can exacerbate the consequences of these variables on protected places. (Vos et al, 2008 and Beaumont et al, 2009). Compared to the global average of 1 hectare, India's per capita forest land has decreased to 0.1 hectares. Given that deforestation causes around 1% of India's land area to become barren each year, the situation appears dire (Sharma, 1998). A yearly occurrence in the State is forest fires. All forest types have the potential to catch fire, with even temperate forests experiencing ground fires in the event of a dry winter. However, the sub-tropical pine forests, or chir forests, which cover 1258.85 km (3.4% of the State's total forest area) are the most common site of annual forest fires, occurring primarily during the dry months of March through June.

**Creative Commons (CC BY-NC-SA 4.0)**  
 This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution NonCommercial-ShareAlike 4.0 International Public License, which allows others to remix, tweak, and build upon the work noncommercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

**Address for correspondence:**  
 Rajender Kumar, Research Scholar, Department of Geography, CPU Kota, Rajasthan  
**How to cite this article:**  
 Kumar, R., Khan, M. H., & Chaud, J. (2025). Forest Fires and Unscientific Mining: Their Environmental Impact in Bilaspur District, Himachal Pradesh. *Journal of Research & Development*, 17(4), 52-57. <https://doi.org/10.22521/jrdv.15543159>

**Manuscript ID:** JRD-2025-170411  
**ISSN:** 2230-9578  
**Volume:** 17  
**Issue:** 4  
**Pages:** 52-57  
**Month:** April  
**Year:** 2025  
**Submitted:** 03 Mar 2025  
**Reviewed:** 09 Mar 2025  
**Accepted:** 24 Apr 2025  
**Published:** 30 Apr 2025

**Quick Response Code:**   
**Website:** <https://jrdv.org/>  
**DOI Link:** <https://doi.org/10.22521/jrdv.15543159>

**International Journal of Biological Macromolecules** 309 (2025) 143109

Contents lists available at ScienceDirect

**International Journal of Biological Macromolecules**

journal homepage: [www.elsevier.com/locate/ijbiomac](http://www.elsevier.com/locate/ijbiomac)

**Quaternization of guar gum with in situ generated hydroxypropyl dimethylbenzyl ammonium chloride from N,N-dimethylbenzylamine and epichlorohydrin for the effective removal of anionic dyes from simulated wastewater**

Kavita Chauhan<sup>a</sup>, Sandeep Chauhan<sup>a</sup>, Kiran Kumar<sup>a</sup>, Ghanshyam S. Chauhan<sup>a</sup>

<sup>a</sup>Department of Chemistry, Himachal Pradesh University, Summerhill, Shimla, Himachal Pradesh 171005, India

**ARTICLE INFO**

**Keywords:**  
 Adsorption  
 Congo red  
 Methyl orange  
 Guar gum  
 Dimethylbenzyl amine  
 Quaternized guar gum

**ABSTRACT**  
 We report a quaternized guar gum (QGG) by grafting hydroxypropyl dimethylbenzyl ammonium chloride (HPDMBC) onto guar gum (GG). HPDMBC was obtained in situ from N,N-dimethylbenzyl amine and epichlorohydrin. The as-synthesized QGG was characterized by FTIR, XRD, FESEM, BET, EDX, zeta potential, and surface charge analysis. The QGG is a rapid and efficient adsorbent for the anionic dyes, Congo red (CR) and methyl orange (MO), from simulated wastewater with respective %removal of 96.16 % for CR and MO, respectively. The adsorption followed pseudo-second order kinetics with the highest value of correlation coefficient and the lowest values of error function ( $\chi^2$ ), root mean square error (RMSE) and normalized standard deviation ( $\Delta q/q$ ) for both the dyes. The Langmuir isotherm showed the better fitting of adsorption data with high maximum adsorption capacity of 213.30 and 305.44  $\text{mg g}^{-1}$  for CR and MO, respectively. Additionally, the small value of  $\chi^2$ , RMSE and  $\Delta q/q$  for Langmuir isotherm revealed its best fitting for both the dyes. Furthermore, the QGG demonstrated significant reusability for both the dyes studied for 15th adsorption-desorption cycles. Thus, QGG has a palpable potential as a cost-effective and sustainable adsorbent for removal of anionic dyes from wastewater.

**1. Introduction**  
 The water contamination resulting from discharge of the untreated effluents from industries has become a major global environmental issue

chemical treatment of dyes, which may also be associated to the sludge removal procedure. Among a number of well-known chemical and physical approaches used, the adsorption process is one of the efficient methods that has been used to adsorb dyes from wastewater owing to its

© 2025 IJRAR May 2025, Volume 12, Issue 2 [www.ijrar.org](http://www.ijrar.org) (E-ISSN 2348-1269, P-ISSN 2349-5138)

**IJRAR.ORG** **E-ISSN: 2348-1269, P-ISSN: 2349-5138**

**INTERNATIONAL JOURNAL OF RESEARCH AND ANALYTICAL REVIEWS (IJRAR) | IJRAR.ORG**  
 An International Open Access, Peer-reviewed, Refereed Journal

**हिमाचल प्रदेश के गिरिपार क्षेत्र में गार्ड जाने वाली गाथाओं का संगीतात्मक विश्लेषण**

डॉ. देवराज शर्मा  
 एसोसिएट प्रोफेसर  
 राजकीय महाविद्यालय  
 संगडाह।

**सार संक्षेप**  
 हिमाचल प्रदेश भारत का खूबसूरत राज्य है जो अपनी प्राकृतिक सौंदर्यता के साथ-साथ अपनी कला और शिल्प के लिए भी जाना जाता है। यह प्रदेश परिचयन समता के प्रभाव से काफी हद तक सुरक्षित रहा है। स्थानीय लोक संगीत और नृत्य यहाँ की सांस्कृतिक धरोहर की पहचान कराता है। इसी प्रदेश का एक जिला सिरमौर है जो इसके दक्षिण में स्थित है। इस जिले की पुरातन संस्कृति एवं सभ्यता पूरे प्रदेश में प्रसिद्ध है। जिला सिरमौर में लोक गाथाओं लोक कथाओं एवं लोक साहित्य का अपार भण्डार है। इसी जिले का गिरिपार क्षेत्र अपनी प्राचीन संस्कृति की अलग पहचान रखता है। इस क्षेत्र में लोक गाथाओं को हार, हारत, पोवाड़ा या वीर गाथा या बुढ़ीत के नाम से भी जाना जाता है। यहाँ पर वीर गाथाएँ मौखिक रूप में गाई जाती हैं जो पीढ़ी दर पीढ़ी हस्तांतरित होती रहती हैं। इन गाथाओं में आपसी वैमनस्य, भूमि सम्बन्धित युद्ध, प्रेम प्रसंग एवं राजाओं की दमनकारी नीतियों का वर्णन दृष्टिगोचर होता है। प्रेमालोक गाथाओं में कथानक के अंतर्गत विरोध के भावों को व्यक्त किया जाता है। यहाँ के गाथाकारों ने अपने गाथाओं में समाज के अनेक

## सिरमौरी लोक गीतों का सांगीतिक अध्ययन

DR. DEV RAJ SHARMA

Associate Professor, Govt. Drgree College Sangrah, Himachal Pradesh

### सार संक्षेपिका

किसी भी देश की संस्कृति उस देश की अमूल्य विरासत होती है। संस्कृति का इतिहास उतना ही पुराना है जितना कि मानव सभ्यता का इतिहास। हिमाचल प्रदेश अपनी ऐतिहासिक, धार्मिक एवं सांस्कृतिक पहचान में पूरे विश्व में प्रसिद्ध है। हिमाचल का एक जिला सिरमौर जो इसके दक्षिण में स्थित है अपनी सांस्कृतिक विरासत के लिए विशिष्ट पहचान रखता है। स्वतन्त्रता से पूर्व यह जिला एक रियासत थी जो बाहरी संस्कृति के प्रभाव से मुक्त रही है। यहाँ का लोक संगीत मानस की आंतरिक भावनाओं का प्रतीक है जिससे आंचलित लोक परम्पराओं की सुगंध महक उठती है। यहाँ की सांस्कृतिक विरासत लोक गीतों के रूप में मुखरित हुई है। विभिन्न उत्सवों, त्योहारों, मेलों एवं ऋतुओं से सम्बंधित अनेक लोक गीत इस क्षेत्र में गाये जाते हैं। यहाँ के लोक गीतों में प्रेम, उत्साह, शोक, आशा-निराशा, हर्ष-विवाद, जीवन-मरण, एवं घटनाओं का उल्लेख रहता है। यहाँ के लोक गीत शास्त्रीय नियमों के बन्धन से स्वतन्त्र हैं। इस अमूल्य विधि को यहाँ के लोगों ने उत्तरोत्तर सुरक्षित रखा है। इस क्षेत्र के लोक गीतों को सुविधानुसार निम्न भागों में बांटा गया है-संस्कार गीत और परिवार विषयक, श्रृंगार एवं प्रेम विषयक, पर्व गीत, ऋतु गीत, नृत्य गीत तथा धार्मिक एवं ऐतिहासिक गीत। जन्म से लेकर मृत्यु तक के संस्कार गीत यहाँ पर गाये जाते हैं। लोक गाथाओं में छीछा, कोमना, होकु, मोदना, नेगी मोतीराम, ठुंडु कमरोऊ, आदि प्रमुख हैं। इन गाथाओं को हार या हारुल के नाम से पुकारा जाता है। यहाँ की हारें, वारे, पवाड़े, साके, गंगी, झूरी गीह, नाटी, रासा, हारुल आदि प्राचीन संस्कृति के परिचायक हैं। सिरमौर के लोक गीतों का सांगीतात्मक अध्ययन से यह बात स्पष्ट हो जाती है कि इनमें शास्त्रीय रागों की स्पष्ट एवं अपुष्ट छाया दृष्टिगोचर होती है साथ ही लोक तालों का भी शास्त्रीय तालों से सम्बंध दृष्टिगोचर होता है।

**मुख्य शब्द:-** लोक, हार, गीह, संस्कृति, गाथा।

### भूमिका

लोक संगीत किसी भी राष्ट्र की एक विशिष्ट पहचान होती है। यह किसी भी देश की जीवन शैली, जीवन मूल्यों, उसके चिन्तन और चरित्र का सर्वोत्कृष्ट दर्पण होती है। यह वस्तुतः जनसामान्य में प्रचलित संगीत है जो परम्परागत रूप से चलता रहता है। भारत के उत्तरी क्षेत्र में हिमाचल राज्य स्थित है जो अपनी ऐतिहासिक, धार्मिक एवं सांस्कृतिक पहचान में पूरे विश्व में प्रसिद्ध है। यहाँ के मेहनती और भोले-भाले लोगों में अपनी सांस्कृतिक विरासत को उत्तरोत्तर सुरक्षित रखा है। हिमाचल के बाहर जनपदों में भाषा धर्म कला संस्कृति लोक संगीत

|    |                                                               |   |   |   |
|----|---------------------------------------------------------------|---|---|---|
| 8. | Teacher' Special Innovative Ideas (Brief description thereof) | 5 | 5 | 5 |
|----|---------------------------------------------------------------|---|---|---|

### Teacher's Special Innovative Ideas – Dr. Jagdish Chand (Geography Department)

Dr. Jagdish Chand, from the Geography Department, has implemented two pioneering initiatives that have significantly enriched the learning experiences of college students:

#### 1. IIRS-ISRO Outreach Programme

- **Innovation:** This initiative brings advanced geospatial technology like Remote Sensing, Geographic Information Systems (GIS), and Global Positioning Systems (GPS) directly into the classroom. Through the IIRS-ISRO Outreach Programme, geography students receive hands-on training and direct exposure to cutting-edge technology from ISRO scientists.
- **Impact:** The program provides students with the opportunity to engage in scientific ventures and explore real-world applications of geospatial technology. It bridges the gap between theory and practice, equipping students with industry-relevant skills.

### Teacher's Special Innovative Ideas – Mr. Sandeep Kumar (Assistant Professor of History and NSS Programme Officer)

#### 2. Revive Dying Culture

- **Initiative:** A special and innovative initiative was taken by Mr. Sandeep Kumar, Assistant Professor of History and NSS Programme officer of the college to promote and revive the rich tradition and culture of the Sangrah region by introducing **Traditional Modelling** within the campus. Through this initiative, students actively presented the dying cultural heritage of the region by showcasing traditional dresses, indigenous jewellery, folk ornaments, and age-old food practices. The models also reflected the social and rural life of earlier times, including traditional household settings, agricultural lifestyle, festivals, and community values. This activity aimed to reconnect students with their roots and to keep alive those cultural practices that are gradually disappearing in the modern era.
- **Impact:** The initiative created a strong cultural awareness and sense of pride among students towards their regional heritage. It encouraged intergenerational learning by motivating students to interact with elders and local communities to understand traditional life and customs. The program significantly enhanced students' creativity, confidence, and understanding of local history, while also strengthening the college's role in cultural preservation and community engagement. Overall, the initiative proved to be a meaningful effort to revive and sustain the traditional identity of the Sangrah region for future generations.

These initiatives not only provide academic learning but also develop practical skills, social responsibility, and real-world exposure, making them exemplary in innovative teaching.

## IIRS-ISRO Programme Certificate



**भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING**  
भारतीय अंतरिक्ष अनुसंधान संगठन/ INDIAN SPACE RESEARCH ORGANISATION  
अंतरिक्ष विभाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA



संस्थान की सहभागिता का प्रमाण पत्र  
CERTIFICATE OF PARTICIPATION OF INSTITUTE

COR202413620896

ऑफ - CAMPUS OUTREACH CERTIFICATE PROGRAMME

यह प्रमाणित किया जाता है कि **गवर्नमेंट कॉलेज संग्रह** ने भारतीय सुदूर संवेदन संस्थान, इसरो देह्रादून द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम **उन्नत सुदूर संवेदन तकनीकों के भूवैज्ञानिक अनुप्रयोग** में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 2024-03-11 से 2024-03-15 तक किया गया।

This is to certify that **Govt. College Sangraha**, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehradun on **Advances in Remote Sensing Techniques for Geological Applications**. This online programme was conducted during March 11, 2024 to March 15, 2024

दिनांक/ Date: 04-04-2024  
 डिप्टी/ Deputy  
 हेड, कौशल सेवाएं, IT & दूरस्थ शिक्षण विभाग  
 Head, Geospatial Services, IT & Distance Learning Department, IIRS

सह समूह  
 भू-स्थानिक प्रौद्योगिकी एवं आउटरीच प्रोग्राम ग्रुप  
 Group Head, Geospatial Technologies & Outreach Programme Group, IIRS



**भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING**  
भारतीय अंतरिक्ष अनुसंधान संगठन/ INDIAN SPACE RESEARCH ORGANISATION  
अंतरिक्ष विभाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA



संस्थान की सहभागिता का प्रमाण पत्र  
CERTIFICATE OF PARTICIPATION OF INSTITUTE

COR202413720896

ऑफ - CAMPUS OUTREACH CERTIFICATE PROGRAMME

यह प्रमाणित किया जाता है कि **गवर्नमेंट कॉलेज संग्रह** ने भारतीय सुदूर संवेदन संस्थान, इसरो देह्रादून द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम **आदित्य एल 1: भारत की पहली अंतरिक्ष-आधारित वेधशाला** में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 2024-03-18 से 2024-03-22 तक किया गया।

This is to certify that **Govt. College Sangraha**, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehradun on **Aditya L1: India's first space-based observatory**. This online programme was conducted during March 18, 2024 to March 22, 2024

दिनांक/ Date: 04-04-2024  
 डिप्टी/ Deputy  
 हेड, कौशल सेवाएं, IT & दूरस्थ शिक्षण विभाग  
 Head, Geospatial Services, IT & Distance Learning Department, IIRS

सह समूह  
 भू-स्थानिक प्रौद्योगिकी एवं आउटरीच प्रोग्राम ग्रुप  
 Group Head, Geospatial Technologies & Outreach Programme Group, IIRS



**भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING**  
भारतीय अंतरिक्ष अनुसंधान संगठन/ INDIAN SPACE RESEARCH ORGANISATION  
अंतरिक्ष विभाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA



संस्थान की सहभागिता का प्रमाण पत्र  
CERTIFICATE OF PARTICIPATION OF INSTITUTE

COR2024103720896

ऑफ - CAMPUS OUTREACH CERTIFICATE PROGRAMME

यह प्रमाणित किया जाता है कि **गवर्नमेंट कॉलेज संग्रह** ने भारतीय सुदूर संवेदन संस्थान, इसरो देह्रादून द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम **भूदा स्वास्थ्य: मापन एवं मॉडलिंग** में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 2024-03-28 से 2024-03-28 तक किया गया।

This is to certify that **Govt. College Sangraha**, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehradun on **Soil Health : Measurement & Modelling**. This online programme was conducted during March 28, 2024 to March 28, 2024

दिनांक/ Date: 24-04-2024  
 डिप्टी/ Deputy  
 हेड, कौशल सेवाएं, IT & दूरस्थ शिक्षण विभाग  
 Head, Geospatial Services, IT & Distance Learning Department, IIRS

सह समूह  
 भू-स्थानिक प्रौद्योगिकी एवं आउटरीच प्रोग्राम ग्रुप  
 Group Head, Geospatial Technologies & Outreach Programme Group, IIRS



**भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING**  
भारतीय अंतरिक्ष अनुसंधान संगठन/ INDIAN SPACE RESEARCH ORGANISATION  
अंतरिक्ष विभाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA



संस्थान की सहभागिता का प्रमाण पत्र  
CERTIFICATE OF PARTICIPATION OF INSTITUTE

COR202413820896

ऑफ - CAMPUS OUTREACH CERTIFICATE PROGRAMME

यह प्रमाणित किया जाता है कि **गवर्नमेंट कॉलेज संग्रह** ने भारतीय सुदूर संवेदन संस्थान, इसरो देह्रादून द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम **पैलेचैनल स्टडीज (हिंदी में) - भू-स्थानिक प्रौद्योगिकी के अनुप्रयोग** में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 20 मई 2024 से 24 मई 2024 तक किया गया।

This is to certify that **Govt. College Sangraha**, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehradun on **Applications of Geospatial Technology in Paleochannel Studies (Course in Hindi)**. This online programme was conducted during May 20, 2024 to May 24, 2024

दिनांक/ Date: 12-06-2024  
 डिप्टी/ Deputy  
 हेड, कौशल सेवाएं, IT & दूरस्थ शिक्षण विभाग  
 Head, Geospatial Services, IT & Distance Learning Department, IIRS

सह समूह  
 भू-स्थानिक प्रौद्योगिकी एवं आउटरीच प्रोग्राम ग्रुप  
 Group Head, Geospatial Technologies & Outreach Programme Group, IIRS



**भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING**  
भारतीय अंतरिक्ष अनुसंधान संगठन/ INDIAN SPACE RESEARCH ORGANISATION  
अंतरिक्ष विभाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA



संस्थान की सहभागिता का प्रमाण पत्र  
CERTIFICATE OF PARTICIPATION OF INSTITUTE

COR202414120896

ऑफ - CAMPUS OUTREACH CERTIFICATE PROGRAMME

यह प्रमाणित किया जाता है कि **गवर्नमेंट कॉलेज संग्रह** ने भारतीय सुदूर संवेदन संस्थान, इसरो देह्रादून द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम **शहरी पर्यावरण के मॉडलिंग के लिए भू-स्थानिक प्रौद्योगिकी** में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 27 मई 2024 से 31 मई 2024 तक किया गया।

This is to certify that **Govt. College Sangraha**, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehradun on **Geospatial technology for modelling of Urban Environment**. This online programme was conducted during May 27, 2024 to May 31, 2024

दिनांक/ Date: 14-06-2024  
 डिप्टी/ Deputy  
 हेड, कौशल सेवाएं, IT & दूरस्थ शिक्षण विभाग  
 Head, Geospatial Services, IT & Distance Learning Department, IIRS

सह समूह  
 भू-स्थानिक प्रौद्योगिकी एवं आउटरीच प्रोग्राम ग्रुप  
 Group Head, Geospatial Technologies & Outreach Programme Group, IIRS



**भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING**  
भारतीय अंतरिक्ष अनुसंधान संगठन/ INDIAN SPACE RESEARCH ORGANISATION  
अंतरिक्ष विभाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA



संस्थान की सहभागिता का प्रमाण पत्र  
CERTIFICATE OF PARTICIPATION OF INSTITUTE

COR202414320896

ऑफ - CAMPUS OUTREACH CERTIFICATE PROGRAMME

यह प्रमाणित किया जाता है कि **गवर्नमेंट कॉलेज संग्रह** ने भारतीय सुदूर संवेदन संस्थान, इसरो देह्रादून द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम **भू-स्थानिक प्रौद्योगिकी द्वारा डिजिटल कृषि** में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 24 जून 2024 से 28 जून 2024 तक किया गया।

This is to certify that **Govt. College Sangraha**, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehradun on **Geospatial Technology for Digital Agriculture**. This online programme was conducted during June 24, 2024 to June 28, 2024

दिनांक/ Date: 18-07-2024  
 डिप्टी/ Deputy  
 हेड, कौशल सेवाएं, IT & दूरस्थ शिक्षण विभाग  
 Head, Geospatial Services, IT & Distance Learning Department, IIRS

सह समूह  
 भू-स्थानिक प्रौद्योगिकी एवं आउटरीच प्रोग्राम ग्रुप  
 Group Head, Geospatial Technologies & Outreach Programme Group, IIRS



भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING  
भारतीय अंतरिक्ष अनुसंधान संगठन/ INDIAN SPACE RESEARCH ORGANISATION  
अंतरिक्ष विभाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA



श्री: "निसा: संकेत: सिलसाला कार्यक्रम" का  
OFF - CAMPUS OUTREACH CERTIFICATE PROGRAMME

COR2024103920896

संस्थान की सहभागिता का प्रमाण पत्र  
CERTIFICATE OF PARTICIPATION OF INSTITUTE

यह प्रमाणित किया जाता है कि **गवर्नमेंट कॉलेज संग्रह** ने भारतीय सुदूर संवेदन संस्थान, इसरो देहार्दुन द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम **वनस्पति अध्ययन में सूर्य-अपेक्षित क्लोरोफिल फ्लोरोसेंस की उपयोगिताएँ** में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 18 जुलाई 2024 से 18 जुलाई 2024 तक किया गया।

This is to certify that **Govt. College Sangrah**, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehardun on **Utilities of Sun-Induced Chlorophyll Fluorescence in Vegetation Studies**. This online programme was conducted during July 18, 2024 to July 18, 2024

दिनांक Date: 01-08-2024  
केन्द्र Dehradun

मुख्य,  
विशेष संचालन, सूचना प्रौद्योगिकी एवं दूरस्थ अधिगम विभाग  
Head, Geosweb Services, IT & Distance Learning Department, IIRS

सह मुख्य,  
भूस्थानिक प्रौद्योगिकी एवं अंतरिक्ष कार्यक्रम समूह  
Group Head, Geospatial Technologies & Outreach Programme Group, IIRS



भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING  
भारतीय अंतरिक्ष अनुसंधान संगठन/ INDIAN SPACE RESEARCH ORGANISATION  
अंतरिक्ष विभाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA



श्री: "निसा: संकेत: सिलसाला कार्यक्रम" का  
OFF - CAMPUS OUTREACH CERTIFICATE PROGRAMME

COR2024103820896

संस्थान की सहभागिता का प्रमाण पत्र  
CERTIFICATE OF PARTICIPATION OF INSTITUTE

यह प्रमाणित किया जाता है कि **गवर्नमेंट कॉलेज संग्रह** ने भारतीय सुदूर संवेदन संस्थान, इसरो देहार्दुन द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम **आपदा न्यूनीकरण और प्रबंधन के लिए निसार की क्षमता** में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 24 जुलाई 2024 से 24 जुलाई 2024 तक किया गया।

This is to certify that **Govt. College Sangrah**, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehardun on **Potential of NISAR for Disaster Mitigation and Management**. This online programme was conducted during July 24, 2024 to July 24, 2024

दिनांक Date: 01-08-2024  
केन्द्र Dehradun

मुख्य,  
विशेष संचालन, सूचना प्रौद्योगिकी एवं दूरस्थ अधिगम विभाग  
Head, Geosweb Services, IT & Distance Learning Department, IIRS

सह मुख्य,  
भूस्थानिक प्रौद्योगिकी एवं अंतरिक्ष कार्यक्रम समूह  
Group Head, Geospatial Technologies & Outreach Programme Group, IIRS



भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING  
भारतीय अंतरिक्ष अनुसंधान संगठन/ INDIAN SPACE RESEARCH ORGANISATION  
अंतरिक्ष विभाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA



श्री: "निसा: संकेत: सिलसाला कार्यक्रम" का  
OFF - CAMPUS OUTREACH CERTIFICATE PROGRAMME

COR202414520896

संस्थान की सहभागिता का प्रमाण पत्र  
CERTIFICATE OF PARTICIPATION OF INSTITUTE

यह प्रमाणित किया जाता है कि **गवर्नमेंट कॉलेज संग्रह** ने भारतीय सुदूर संवेदन संस्थान, इसरो देहार्दुन द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम **लिडार डेटा प्रोसेसिंग और उसके अनुप्रयोग** में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 2024-08-05 से 2024-08-16 तक किया गया।

This is to certify that **Govt. College Sangrah**, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehardun on **LIDAR Data Processing and Applications**. This online programme was conducted during August 05, 2024 to August 16, 2024

दिनांक Date: 19-09-2024  
केन्द्र Dehradun

मुख्य,  
विशेष संचालन, सूचना प्रौद्योगिकी एवं दूरस्थ अधिगम विभाग  
Head, Geosweb Services, IT & Distance Learning Department, IIRS

सह मुख्य,  
भूस्थानिक प्रौद्योगिकी एवं अंतरिक्ष कार्यक्रम समूह  
Group Head, Geospatial Technologies & Outreach Programme Group, IIRS



भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING  
भारतीय अंतरिक्ष अनुसंधान संगठन/ INDIAN SPACE RESEARCH ORGANISATION  
अंतरिक्ष विभाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA



श्री: "निसा: संकेत: सिलसाला कार्यक्रम" का  
OFF - CAMPUS OUTREACH CERTIFICATE PROGRAMME

COR202414420896

संस्थान की सहभागिता का प्रमाण पत्र  
CERTIFICATE OF PARTICIPATION OF INSTITUTE

यह प्रमाणित किया जाता है कि **गवर्नमेंट कॉलेज संग्रह** ने भारतीय सुदूर संवेदन संस्थान, इसरो देहार्दुन द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम **जियोडेटा विश्लेषण के लिए एआई/एमएल का प्रयोग** में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 2024-08-19 से 2024-08-23 तक किया गया।

This is to certify that **Govt. College Sangrah**, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehardun on **AI/ML for Geodata Analysis**. This online programme was conducted during August 19, 2024 to August 23, 2024

दिनांक Date: 09-09-2024  
केन्द्र Dehradun

मुख्य,  
विशेष संचालन, सूचना प्रौद्योगिकी एवं दूरस्थ अधिगम विभाग  
Head, Geosweb Services, IT & Distance Learning Department, IIRS

सह मुख्य,  
भूस्थानिक प्रौद्योगिकी एवं अंतरिक्ष कार्यक्रम समूह  
Group Head, Geospatial Technologies & Outreach Programme Group, IIRS

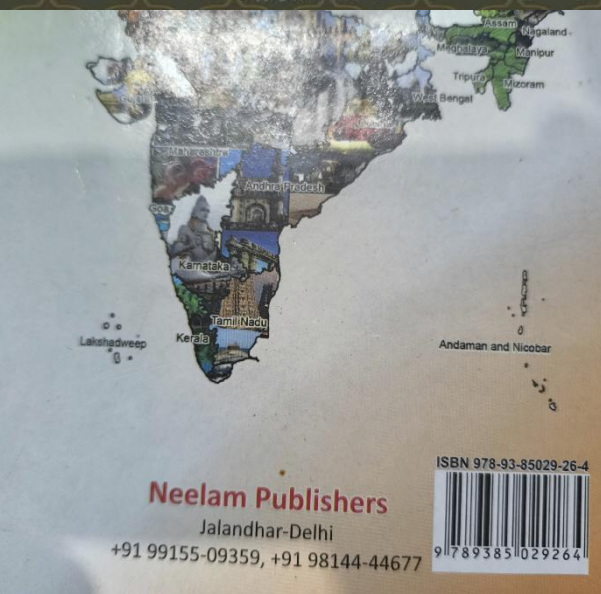
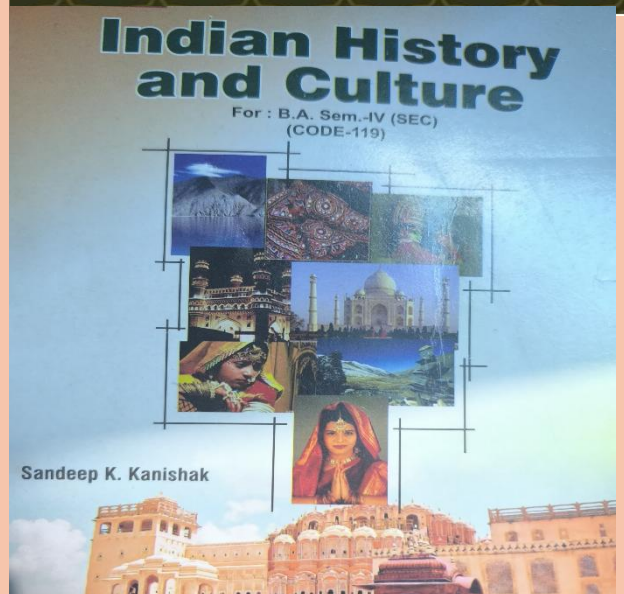
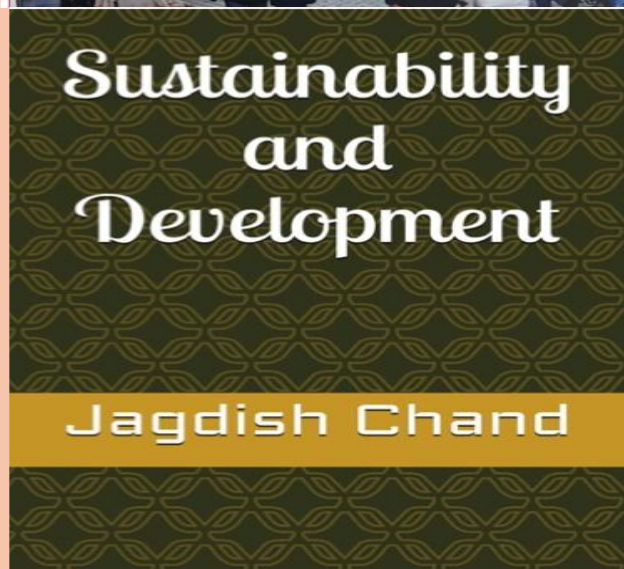
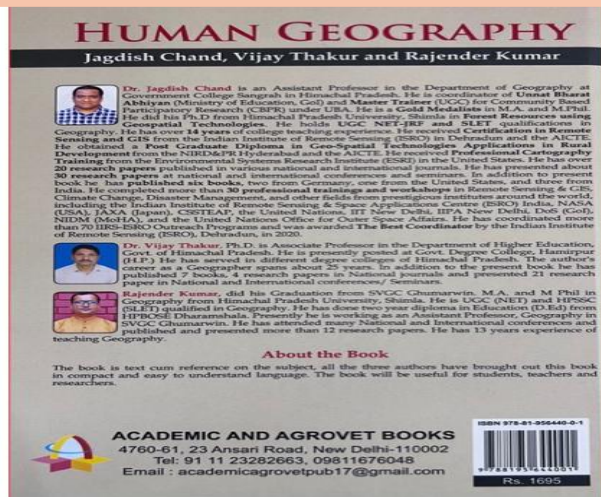
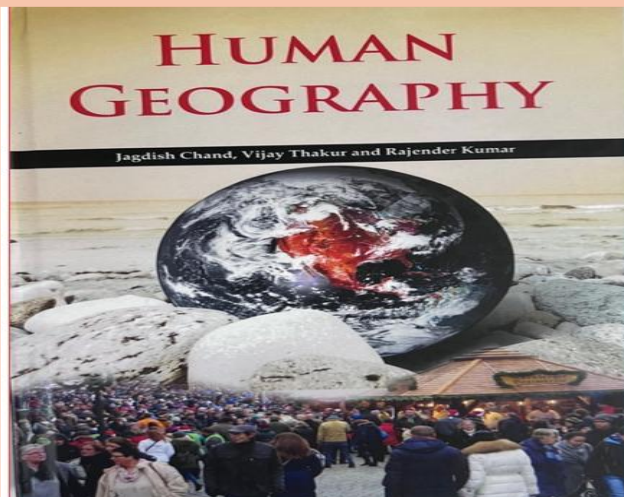
## Traditional Modeling





|    |                                          |                                            |    |    |
|----|------------------------------------------|--------------------------------------------|----|----|
| 9. | No. of Books Published /Chapter in Books | 5 points per book and 2 points per chapter | 10 | 10 |
|----|------------------------------------------|--------------------------------------------|----|----|

| Sr. No. | Name of the Teacher | Title of Book                  | ISBN No.          | Name of Publisher                                | Year of Publication | National / International |
|---------|---------------------|--------------------------------|-------------------|--------------------------------------------------|---------------------|--------------------------|
| 1.      | Dr. Jagdish Chand   | Human Geography                | 978-81-956440-0-1 | Academic and Agrovet Books, New Delhi            | 2022                | National                 |
| 2.      | Dr. Jagdish Chand   | Sustainability and Development | 9798329101737     | CreateSpace Independent Publishing Platform, USA | 2024                | International            |
| 3.      | Sh. Sandeep Kumar   | Indian History and Culture     | 978-93-85029-26-4 | Neelam Publication, Jalandhar                    | 2024                | National                 |



## Chapters in the Books

| Sr. No. | Name of Chapter                                                                                                                  | Title of Book Name                                                          | ISBN No.             | Name of Publisher                     | Year of Publication | Page No. |
|---------|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|----------------------|---------------------------------------|---------------------|----------|
| 1.      | Navigating Environmental Sustainability: Progress, Challenges and Future Prospects                                               | Sustainability Approach: Role of Science and Technology                     | 978-93-48403-22-3    | Fern International Publication Pune   | Oct 2024            | 38-      |
| 2.      | Global Climate Change: Impacts, Adaptations Strategies and Sustainable Mitigation                                                | Science, Social Science, Arts, Business and Education: A Global Perspective | 978-81-97-974540-0-4 | Fern International Publication Pune   | Sept 2024           | 24-      |
| 3.      | Journey through the Hills: Exploring Tribal Dynamics in Himachal Pradesh                                                         | Tribal Identity in India Issues, Challenges and the Road Ahead              | 978-91-9664-40-6-3   | Academic and Agrovet Books, New Delhi | 2024                | 101-106  |
| 4.      | Preserving Tribal Identity in India; Navigating Challenges and Future Pathways                                                   | Tribal Identity in India Issues, Challenges and the Road Ahead              | 978-91-9664-40-6-3   | Academic and Agrovet Books, New Delhi | 2024                | 146-150  |
| 5.      | Mapping of Landslide Vulnerability in Himachal Pradesh: A Geospatial Perspective                                                 | Environmental Conservation & Disaster Management                            | 978-81-971567-6-2    | Sanskriti Publication                 | 2024                | 41-46    |
| 6.      | Change Detection in Land Use and Land Cover of Renuka Forest Division of Himachal Pradesh using Geospatial Technologies, 301-316 | Geoinformatics Applications in LULC Mapping and Natural Hazards             | 978-81-972483-5-1    | Akansha Publishing House              | 2024                | 301-316  |



### Navigating Environmental Sustainability: Progress, Challenges, and Future Prospects

Dr. Jagdish Chand

Assistant Professor Geography,

Govt. College Sangrah, Himachal Pradesh

DOI- 10.5281/zenodo.14096200

Article DOI- <https://journals.org/records/14096201>



Received: 25.08.2024 Accepted: 07.09.2024 Published: 11.10.2024

#### Abstract:

*Environmental sustainability is central to the survival of the planet and the future well-being of societies. As global challenges such as climate change, resource depletion, and biodiversity loss intensify, sustainability has become a crucial area of focus in policymaking, business strategy, and grassroots movements. This paper explores the evolution of environmental sustainability, analysing the key trends, challenges, and future prospects. By reviewing relevant literature, case studies, and current data, this study highlights the progress made in renewable energy, circular economies, and policy frameworks. It also identifies significant obstacles to sustainability, including political inertia, economic disparities, and technological barriers. Ultimately, the paper emphasizes the need for systemic change at multiple levels to achieve long-term environmental sustainability.*

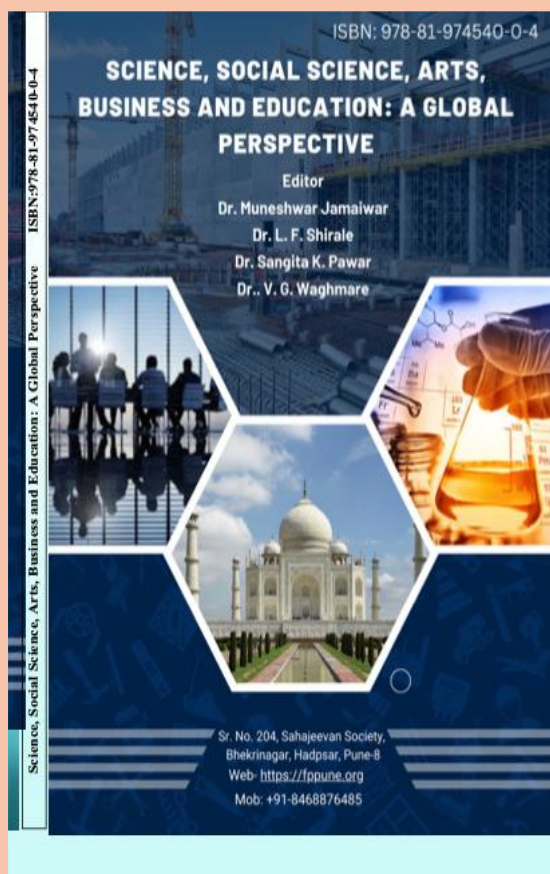
**Keywords:** Environmental sustainability, climate change, renewable energy, circular economy, policy, challenges, future prospects, green technology

#### Introduction:

The concept of environmental sustainability has gained significant prominence over the past few decades, driven by growing concerns over climate change, habitat destruction, and resource depletion. It emphasizes the need for development that meets the present's needs without compromising future generations' ability to do the same. However, achieving environmental sustainability is a multifaceted challenge, requiring cooperation between governments, industries, and civil societies. Despite the progress made in areas like renewable energy adoption and environmental policy reforms, significant challenges persist. Environmental degradation continues unabated in many parts of the world, while political, economic, and social barriers limit the implementation of sustainable practices. This paper examines the current state of environmental sustainability by reviewing global trends, challenges, and the prospects for a sustainable future.

#### Review of Literature:

The academic and policy-related discourse on environmental sustainability has evolved significantly over time. The early works of *The Limits to Growth* (Meadows et al., 1972) argued that unchecked economic growth would inevitably lead to environmental collapse. This landmark



## Global Climate Change: Impacts, Adaptation Strategies, and Sustainable Mitigation

Dr. Jagdish Chand  
Assistant Professor Geography  
Govt. College Sangrah, Himachal Pradesh



Received: 17.07.2024 Accepted: 21.08.2024 Published: 28.09.2024

### Abstract

Climate change is an undeniable global challenge that threatens ecosystems, human societies, and economies. This paper provides a detailed review of the global impacts of climate change, focusing on the alterations in weather patterns, rising temperatures, and the increasing frequency of extreme events. The review also explores the adaptation strategies employed by various countries and communities to cope with these challenges, highlighting the role of sustainable mitigation measures like transitioning to renewable energy, improving energy efficiency, and reforestation efforts. The paper discusses the effectiveness of these strategies, the significance of international climate agreements, and concludes by emphasizing the need for collective action toward climate resilience.

**Keywords:** Climate change; Ecosystems; Adaptation strategies; Renewable energy; Mitigation measures; Extreme events; Climate resilience

### Introduction

The issue of climate change has emerged as one of the most urgent and far-reaching challenges of the 21st century. Over the past century, the planet has experienced rapid environmental changes driven primarily by human activities such as deforestation, industrial emissions, and the excessive consumption of fossil fuels. These activities have significantly increased the levels of greenhouse gases (GHGs) in the atmosphere, trapping heat and leading to a rise in global temperatures. The consequences of climate change are becoming more evident with each passing year. Rising sea levels, changing weather patterns, more frequent extreme weather events, and disruptions to ecosystems are now affecting billions of people worldwide. Regions already facing environmental challenges, such as low-income countries and coastal areas, are particularly vulnerable. These impacts have far-reaching implications for food security, water resources, biodiversity, and economic development. While efforts are being made globally to mitigate the effects of climate change, the complexity and scale of the problem require a coordinated approach. Adaptation strategies and sustainable mitigation measures are critical to ensure environmental resilience and long-term sustainability. This paper aims to review the global impacts of climate change, assess current adaptation strategies, and explore mitigation measures that can help stabilize the climate system.

Science, Social Science, Arts, Business and Education: A Global Perspective, Pub. Date: 28/09/2024, ISBN 978-81-974540-0-4  
Web: <https://fppune.org>

24

|     |                                             |                                                                                                                             |    |    |
|-----|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|----|----|
| 10. | Teachers Academic and Extension Activities: | i. 2 point each activity<br>ii. 4 point each activity<br>iii. 2 point each activity<br>(Max. 10 points from all categories) | 10 | 10 |
|-----|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|----|----|

## FDPs/Seminars/Conferences/Refresher Courses/Training/ Workshops (as a resource person)

| Sr. No. | Title of the Paper Presented                                                                           | Title of Conference/ Seminar                                                             | Organized by                                 | Date                        |
|---------|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------|-----------------------------|
| 1.      | Tribal Society and Environmental Sustainability in Focus: Progress, Hurdles and Vision for the Future  | Resilient Women Innovative Solution and Sustainable Environment                          | WGRC-IQAC Govt College Bhoranj, Hamirpur, HP | 25-26 Nov. 2025             |
| 2.      | Geologic Hazard Profile of the State, Climatic Hazard Profile of the State and Earthquake Preparedness | In Service Teacher Training Programme for School Lecturer/DEPs Under Disaster Management | SCERT, Solan                                 | 21 <sup>st</sup> Jan, -2025 |
| 3.      | Overview of Disaster Policy in India and Mitigation an Resiliencies in Disaster                        | Training of Higher and Elementary Teachers                                               | DIET Solan                                   | 20 <sup>th</sup> Jan, 2025  |
| 4.      | Geologic and Climate Hazard of HP and Remote Sensing and GIS in Disaster Management                    | In Service Teacher Training Programme on School Safety Under Disaster Management         | SCERT, Solan                                 | June 18, 2024               |

|    |                                                                                                               |                                                                                  |                                                    |                                              |
|----|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------|
| 5. | Geo-spatial Technologies and Geological Hazards of HP and Applications of GPS and DGPS in Disaster Management | In Service Teacher Training Programme on School Safety Under Disaster Management | SCERT, Solan                                       | June 29, 2024                                |
| 6. | Inter College Volleyball (Men) Championship                                                                   | Trainer/Coach                                                                    | Govt. College Seema, Rohroo Shimla                 | 23 <sup>rd</sup> -26 <sup>th</sup> Oct. 2024 |
| 7. | North Zone Inter University Volleyball (Men) Championship                                                     | Trainer/Coach                                                                    | Gurukul Kangrai, Deemed to be University, Haridwar | 22 <sup>nd</sup> -26 <sup>th</sup> Nov. 2024 |
| 8. | Annual Athletic Meet                                                                                          | Trainer/ Coach                                                                   | GC Dadahu, Sirmour HP                              | 11 <sup>th</sup> Feb 2025``                  |
| 9. | Inter College Volleyball (W) championship                                                                     | Trainer/ Coach                                                                   | GC Bhoranj                                         | 14 <sup>th</sup> -18 <sup>th</sup> oct 2024  |


**STATE COUNCIL OF EDUCATIONAL RESEARCH & TRAINING**  
 HIMACHAL PRADESH  
 SCERT COMPLEX, RABON, SOLAN - 173211 (H.P.)

Ref.No.: **EDN-SCERT-SLN-DM-25-RP-6000** Dated: **21-01-2025**

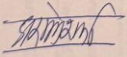
**TO WHOM IT MAY CONCERN**

It is certified that Dr. Jagdish Chand, Assistant Professor Geography, Govt. Degree College -Sangrah, District Sirmour (H.P.) was the Resource Person on 21-01-2025 (E) in the "In Service School Safety Training Programme for School Lecturers/DPEs Under Disaster Management" organized by SCERT Himachal Pradesh, at Solan w.e.f. 21-01-2025 to 24-01-2025.

He delivered Two lectures on:

- Geological hazards profile of the State
- Climatic hazard profile of the State & Earthquake Preparedness

The Council wishes him success in future endeavors.

  
 PROGRAMME COORDINATOR

  
 PRINCIPAL  
 SCERT SOLAN (H.P.)  
 S.C.E.R.T. Solan (H.P.)

Tel. 01792-228135 Fax: 01792-228135  
 Email : scert-hp@nic.in Website : admis.hp.nic.in/himachal/scert/

DISTRICT INSTITUTE OF EDUCATION AND TRAINING  
 SOLAN, HIMACHAL PRADESH




**Certificate of Appreciation**

Ref.No.EDN/SLN/DIET/Trg.-School Safety / Disaster Mgt./2024-25/2127-2191 Dated: **20-01-2025**

This is to certify that Mr./Ms Dr. Jagdish Chand Designation Assistant Professor Geography working at Govt. College Sangrah District Sirmour has actively rendered his services as an Key Resource Person for Training of Higher & Elementary Teachers on Overview of Disaster Policy in India & Mitigation and Resilience in Disaster Organised at DIET Solan, on 20th of Jan, 2025

  
 Dr. Rajinder Verma  
 Dy. Director (Quality)  
 -Cum-District Project Officer (SS)  
 DIET, Solan (H.P.)



# INTERNATIONAL CONFERENCE on Resilient Women, Innovative Solutions & Sustainable Environment

**RISE-2024**  
(HYBRID MODE)  
organized by

**WGRC & IQAC**

**GOVERNMENT COLLEGE BHORANJ (TARKWARI)**

Accredited by NAAC with grade 'B'  
District Hamirpur, Himachal Pradesh, India  
(November 25-26, 2024)

## CERTIFICATE

This is to certify that **DR. JAGDISH CHAND, ASSISTANT PROFESSOR GEOGRAPHY** of **GOVERNMENT COLLEGE SANGRAH, DISTRICT SIRMAUR, HIMACHAL PRADESH** delivered an Invited Talk on **Environmental Sustainability in Focus: Progress, Hurdles and Vision for the Future** in the Two-Day International Conference on 25-26 November 2024.

*Pooja*  
MS. POOJA  
Organizing Secretary

*DR. MOHINDER GULERIA*  
DR. MOHINDER GULERIA  
Convener

*DR. ASHA DEVI*  
DR. ASHA DEVI  
Coordinator

*DR. RAJAY THAKUR*  
DR. RAJAY THAKUR  
Principal & Patron



## STATE COUNCIL OF EDUCATIONAL RESEARCH & TRAINING

HIMACHAL PRADESH  
SCERT COMPLEX, RABON, SOLAN - 173211 (H.P.)

Ref.No.: EDN-SCERT-3m/RP-2024-36

Dated: 08.04.2024

This is to certify that **Dr. Jagdish Chand**, Assistant Professor, Department of Geography, Government College Sangraha, H.P. acted as a Resource Person in the **In-service Teacher Training Programme on School Safety (Disaster Management)** organized at S.C.E.R.T. Solan w.e.f. 03.04.2024 to 06.04.2024. He has delivered two lectures on following topics.

1. Geologic hazard profile of the State.
2. Climatic hazard profile of the state & Earthquake Preparedness on dated 03.04.2024.

*Programme Co-ordinator*  
Programme Co-ordinator

*Principal*  
Principal  
SCERT, Solan

Tel. 01792-228135 Fax: 01792-228135  
Email : scert-hp@nic.in Website : admis.hp.nic.in/himachal/scert/



## STATE COUNCIL OF EDUCATIONAL RESEARCH & TRAINING

HIMACHAL PRADESH  
SCERT COMPLEX, RABON, SOLAN - 173211 (H.P.)

Ref.No.: He-SCERT/SOLAN/SCERT/3m/RP/2024 -

Dated: 11.06.2024

This is to certify that **Dr. Jagdish Chand**, Assistant Professor, Government College Sangraha, H.P. acted as a Resource Person in the **In-service Training Programme of Teachers for School Safety programme**, organized at S.C.E.R.T. Solan w.e.f. 11.06.2024 to 14.06.2024. He has delivered two lectures on following topics.

1. Geologic hazard profile of the State.
2. Climatic hazard profile of the state & Earthquake Preparedness on dated 11.06.2024.

*Programme Co-ordinator*  
Programme Co-ordinator

*Principal*  
Principal  
SCERT, Solan

Tel. 01792-228135 Fax: 01792-228135  
Email : scert-hp@nic.in Website : admis.hp.nic.in/himachal/scert/



## STATE COUNCIL OF EDUCATIONAL RESEARCH & TRAINING

HIMACHAL PRADESH  
SCERT COMPLEX, RABON, SOLAN - 173211 (H.P.)

Ref.No.: EDN-SCERT/3m/RP/2024 -

**TO WHOM IT MAY CONCERN**

Dated: 24.06.2024

It is certified that **Dr. Jagdish Chand**, Assistant Professor, Department of Geography, Govt. Degree college Sangraha District Sirmour was the Resource Person on 18-06-2024 in the **"In Service Teacher Training Programme on School Safety Under Disaster Management"** organized by SCERT Himachal Pradesh at Solan w.e.f. 18-06-2024 to 21-06-2024.

He has delivered 02 lectures on the following topics:

1. "Geologic and Climate Hazard of H.P."
2. "Remote Sensing and GIS in Disaster Management"

The Council wishes him success in his future endeavors.

*Programme Co-ordinator*  
Programme Co-ordinator

*Principal*  
Principal  
SCERT, Solan, H.P.

Tel. 01792-228135 Fax: 01792-228135  
Email : scert-hp@nic.in Website : admis.hp.nic.in/himachal/scert/



## STATE COUNCIL OF EDUCATIONAL RESEARCH & TRAINING

HIMACHAL PRADESH  
SCERT COMPLEX, RABON, SOLAN - 173211 (H.P.)

Ref.No.: SCERT/SOLAN/DM-24-RP/2024

Dated: 29.6.24

It is certified that **Dr. Jagdish Chand**, Assistant Professor Geography, Govt. Degree College Sangraha, District Sirmour H.P. was the Resource Person on 29-06-2024 in the **"In Service Teacher Training Programme on School Safety Under Disaster Management"** organized by SCERT Himachal Pradesh, at Solan w.e.f. 26-06-2024 to 29-06-2024.

He has delivered Two lecture on:

- "Geo-spatial Technologies and Geological Hazards of H.P."
- "Applications of GPS and DGPS in Disaster Management"

The Council wishes him success in his future endeavors.

*Programme Co-ordinator*  
PROGRAMME COORDINATOR

*Principal*  
Principal  
SCERT, Solan

Tel. 01792-228135 Fax: 01792-228135  
Email : scert-hp@nic.in Website : admis.hp.nic.in/himachal/scert/

**i. Member of Board of Studies/Subject experts etc./Popular articles**

| Name              | Board/Institution          | Topic                                                                           | Date            | Position                             |
|-------------------|----------------------------|---------------------------------------------------------------------------------|-----------------|--------------------------------------|
| Dr. Jagdish Chand | SCERT, Solan               | State Disaster Management Plan Under School Safety Project, DM Cell SCERT Solan | 18-19 Nov. 2025 | Member of State Evaluation Committee |
| Kavita Chauhan    | Journal of Porous Material | Reviewer of Manuscripts                                                         | June, 2025      | Reviewer/Member                      |
| Kavita Chauhan    | Polymer Bulletin           | Reviewer of Manuscripts                                                         | June, 2025      | Reviewer/Member                      |
|                   |                            |                                                                                 |                 |                                      |



**STATE COUNCIL OF EDUCATIONAL RESEARCH & TRAINING**  
HIMACHAL PRADESH  
SCERT COMPLEX, RABON, SOLAN - 173211 (H.P.)

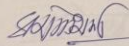
Ref.No.: EDN-SLN-SCERT/DM-4761 Dated: 19-11-2024

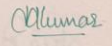
TO WHOM IT MAY CONCERN

It is certified that Dr. Jagdish Chand, Assistant Professor Geography, Govt. Degree College Sangrah, Distt. Sirmour (H.P.) acted as Member of State Level Evaluation Committee constituted by SCERT Solan under the Chairmanship of Principal SCERT Solan for Evaluation of State Disaster Management Plan under School Safety Project, DM Cell, SCERT Solan.

It was conducted on 18-11-2024 to 19-11-2024 at SCERT Solan.

The Council wishes him success in future endeavors.

  
Member Secretary  
DM Cell, SCERT -Solan

  
PRINCIPAL  
SCERT SOLAN (H.P.)

Tel. 01792-228135 Fax: 01792-228135  
Email : scert-hp@nic.in Website : admis.hp.nic.in/himachal/scert/

**SPRINGER NATURE**

**REVIEWER CERTIFICATE**

This certificate is awarded to  
**Ms. Kavita Chauhan (AP of Chemistry)**

in recognition of their contribution to  
1 manuscript in 2025 for  
**Polymer Bulletin**

25 June 2025

**SPRINGER NATURE**

**REVIEWER CERTIFICATE**

This certificate is awarded to  
**Ms. Kavita Chauhan (AP of Chemistry)**

in recognition of their contribution to  
1 manuscript in 2025 for  
**Journal of Porous Materials**

24 June 2025

|    |                                                |                                                                |   |   |
|----|------------------------------------------------|----------------------------------------------------------------|---|---|
| 11 | Awards by Recognized & Reputed Organization:   | i. 8<br>ii. 6<br>iii. 4<br>(Max. 8 points from all categories) | 8 | 6 |
|    | i. International<br>ii. National<br>iii. State |                                                                |   |   |

