



**INDIAN INSTITUTE OF REMOTE SENSING**  
Indian Space Research Organisation  
Department of Space, Govt. of India



AND

**DEPARTMENT OF GEOGRAPHY**

**PADMABHUSHAN DR. VASANTRAODADA  
PATIL MAHAVIDYALAYA, TASGAON.**

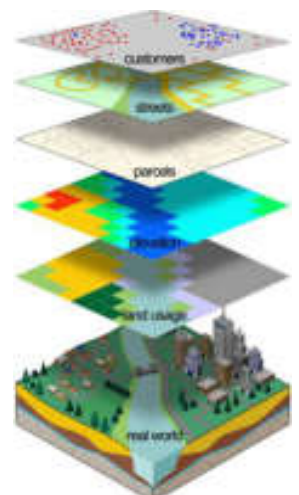
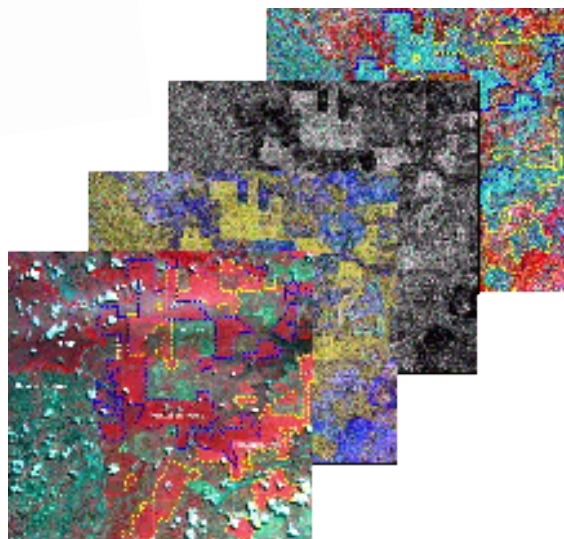
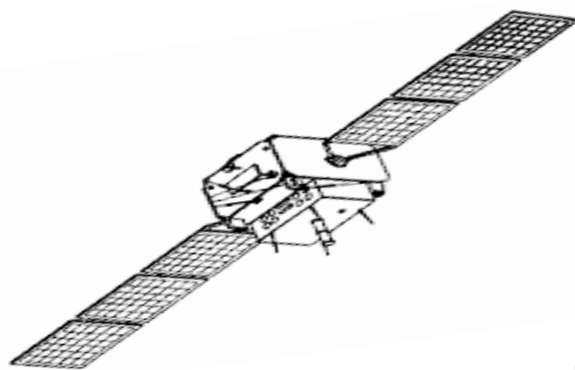
**(2018-2019)**

**IRS/ISRO**

**OUTREACH PROGRAMME**

**(Online Course)**

***Remote Sensing (RS), Geographical Information System (GIS),  
Global Navigation Satellite system (GNSS)***



**PADMABHUSHAN DR. VASANTRAODADA PATIL  
MAHAVIDYALAYA, TASGAON.  
And  
IIRS/ISRO,  
OUTREACH PROGRAMME  
(2018-19)**

Online Course Name: **Basics of Remote Sensing, Geographical Information System and Global Navigation Satellite System** Sept. 04 – Nov 26, 2018 (Duration 13Weeks)

**Date: August 25<sup>th</sup>, 2018.**

**Notice**

This is to inform all students and faculty members that, our colleges and Indian Institute of Remote Sensing (IIRS/ISRO) Dehradun, conducting 36<sup>th</sup> IIRS Outreach Programme (Online Certificate course) on “*Basic of Remote Sensing, Geographical Information System (GIS) and Global Navigation Satellite System (GNSS)*” during **04 September to 26 November, 2018**. All students and faculty members are requested to participate in this programme. To further information please contact to Department of Geography.



**Dr. B. T. Kanase**  
*HOD, Dept .of Geography*



**Dr. R. R. Kumbhar**  
*Principal*

## 36<sup>th</sup> IIRS Outreach Programme on “Basic of Remote Sensing, Geographical Information System (GIS) and Global Navigation Satellite System (GNSS)” Syllabus and Schedule

Module 1: Remote Sensing & Digital Image Analysis Module/ Course Coordinator: Mrs. Minakshi Kumar				
Date	Day	Time	Topic	Speaker
04 Sept 18	Tuesday	1600-1730 hrs	Course InSepturation and Introductory Lecture , Indian Space Programme	Dr. Prakash Chauhan
05 Sept 18	Tuesday	1600-1730 hrs	Basic Principles of Remote Sensing	Ms. Manu Mehta
21 Sept 18	Wednesday	1600-1730 hrs	Earth Observation Sensors and Platforms	Mr. Vinay Kumar
22 Sept 18	Thursday	1600-1730 hrs	Thermal Remote Sensing	Dr. Yogesh Kant
23 Sept 18	Friday	1600-1730 hrs	Spectral Signatures of Different Land cover Features and Visual Image interpretation	Dr. Hina Pande
<b>24 Sept 18</b>		<b>Saturday</b>		
<b>25 Sept 18</b>		<b>Sunday</b>		
26 Sept 18	Monday	1600-1730 hrs	Digital Image Processing: Basic Concepts Rectification and Registration	Ms. Minakshi Kumar
27 Sept 18	Tuesday	1600-1730 hrs	Image Enhancement techniques	Dr. Poonam S. Tiwari
28 Sept 18	Wednesday	1600-1730 hrs	Image Classification Techniques and Accuracy Assessment	Dr. Poonam S. Tiwari
29 Sept 18	Thursday	Offline (Morning Session)	RS and Image Interpretation Practical	By University Coordinator
29 Sept 18	Thursday	1600-1730 hrs	Microwave Remote Sensing	Mr. Shashi Kumar
30 Sept 18	Friday	1630-1730 hrs	Demonstration: Image Processing	Ms. Minakshi Kumar
31 Sept 18		<b>Saturday</b>		
01 Sep 18		<b>Sunday</b>		
02 Sep 18		<b>Monday</b>	<b>Vinayaka Chaturthi</b>	
03 Sep 18	Tuesday	1600-1730 hrs	Hyperspectral Remote Sensing	Mrs. Shefali Agarwal
04 Sep 18	Wednesday	1600-1730 hrs	Advance Image classifier-OBIA ,fuzzy logic	-----
05 Sep 18	Thursday	1600-1730 hrs	Image Texture	-----
05 Sep 18	Thursday	Offline - as per computer lab availability Morning Session	Image Processing Hands-on and Practical Assignment	By University Coordinator
06 Sep 18	Friday	1530-1730 hrs	Panel Discussion/Query Session	Faculty
Module- 2 Global Navigation Satellite System Module/ Course Coordinator: Shri Ashutosh Bhardwaj				
09 Sep 18	Monday	1600-1730 hrs	Introduction to GPS and GNSS	Er. Ashutosh Bhardwaj
10 Sep 18	Tuesday		Muharram	
11 Sep 18	Wednesday		Onam	
12 Sep 18	Thursday	1600-1730 hrs	GPS receivers, processing methods, errors and accuracy	Er. Ashutosh Bhardwaj
13 Sep 18	Friday	1600-1730 hrs	Satellites based Septmentation systems & GPS Aided and GEO Septmented Navigation (GAGAN)	Er. Ashutosh Bhardwaj
<b>14 Sep 18</b>			<b>Saturday</b>	
<b>15 Sep 18</b>			<b>Sunday</b>	
16 Sep 18	Monday	1600-1730 hrs	GPS signal characteristics, Data formats (broadcast, precise ephemeris)	Shri S. Raghavendra
17 Sep 18	Tuesday	1600-1730 hrs	Indian Regional Navigation Satellite System (IRNSS)	Er. Ashutosh Bhardwaj & Shri Kamal Pandey
18 Sep 18	Wednesday	1600-1730 hrs	DGPS demonstration (Pre-recorded followed by live query session)	Offline
18 Sep 18	Thursday	1600-1730 hrs	Advance GNSS processing	Shri Suresh Kannaujiya
20 Sep 18	Friday	1600-1730 hrs	Mobile Mapping	Dr. Harish Chandra Karnatak
Module- 3 Geographical Information System Module/ Course Coordinator: Shri Prasun Kumar Gupta				
23 Sep 18	Monday	1600-1730 hrs	Introduction to GIS	Dr. Sameer Saran
24 Sep 18	Tuesday	1600-1730 hrs	Geographic Phenomena, Concepts and examples	Shri Prasun Kumar Gupta
25 Sep 18	Wednesday	1600-1730 hrs	Data Inputting and Editing in GIS	Shri K. Shiva Reddy
26 Sep 18	Thursday	1600-1730 hrs	GIS Data Models (Spatial and Non spatial)	Shri Ashutosh Kumar Jha
27 Sep 18	Friday	1600-1730 hrs	Map Projection Concepts & Use in RS & GIS	Dr. Ashutosh Srivastav

28 Sep 18		Saturday		
29 Sep 18		Sunday		
30 Sep 18	Monday	1600-1730 hrs	Spatial Analysis - Introductory Concepts and Overview	Shri Prabhkar Alok Verma
01 Oct 18	Tuesday	1600-1730 hrs	Spatial Analysis - Functionality and Tools	Shri Kapil Oberai
02 Oct 18			Mahatma Gandhi	
03 Oct 18	Thursday	1600-1730 hrs	Demo of QGIS Software – Session 01: Adding GIS Data, Attribute table & Identity tool Change symbology, Create map composers Manage plugins, CRS & EPSG Geo-referencing & Tie-points, RMSE & Rectification	Recorded Lecture
04 Oct 18	Friday	1600-1730 hrs	Demo of QGIS Software – Session 02: (Data Creation/Vector Generation) Digitization, Setting digitizing environment Adding attributes, Editing digitized layer Attribute Queries, Spatial Queries Linking spatial & non-spatial data	Recorded Lecture
05 Oct 18		Saturday		
06 Oct 18		Sunday		
07 Oct 18	Monday		Dussehra (Maha Navmi)	
08 Oct 18	Tuesday		Dussehra (Vijay Dushmi)	
09 Oct 18	Wednesday		Break	
10 Oct 18	Thursday	1530-1555hrs	Interactive Session of Demo of QGIS Software – Session 01 & Session 02	Shri Prasun Kumar Gupta
		1600-1730 hrs	Open Source Software Technology & Tools	Shri Prasun Kumar Gupta
11 Oct 18	Friday	1600-1730 hrs	Data Quality & Policies OGC, NSDI & GSDI initiatives. Discussion on Internet resources	Dr. Harish Karnatak
12 Oct 18	<b>Saturday</b>			
13 Oct 18	<b>Sunday</b>			
14 Oct 18	Monday	1600-1730 hrs	Advanced Geospatial Modeling	Shri Ashutosh Kumar Jha
15 Oct 18	Tuesday	1600-1730 hrs	Uncertainty in GIS and Error Propagation	Shri Hari Shankar
16 Oct 18	<b>Wednesday</b>	1600-1730 hrs	3D GIS, City Models and Applications	Dr. Sameer Saran
17 Oct 18	Thursday		BREAK	
18 Oct 18	Friday	1600-1730 hrs	Recent Trends in Geoinformatics	Dr. Sameer Saran
21 Oct 18		1600-1730 hrs	Panel Discussion of Module 3	All Faculty
<b>Module-4 RS &amp; GIS Applications</b> <b>Module/ Course Coordinator: Dr. C M Bhatt</b>				
<b>Date</b>	<b>Day</b>	<b>Time</b>	<b>Topic</b>	<b>Speaker</b>
23 Oct 18	Wednesday	1600-1730 hrs	Space Technology & its applications in governance	Dr. S. K Srivastav
24 Oct 18	Thursday	1600-1730 hrs	Remote Sensing and GIS Applications in Soil Resource Assessment	Dr. Suresh Kumar
25 Oct 18	Friday	1600-1730 hrs	<b>Break</b>	
26 Oct 18	<b>Saturday</b>			
27 Oct 18	<b>Sunday</b>			
28 Oct 18	Monday	1600-1730 hrs	<b>Break</b>	
29 Oct 18	Tuesday	1600-1730 hrs	Remote Sensing Applications in Agriculture- Crop Inventory & Yield Forecasting	Dr. N.R. Patel
30 Oct 18	Wednesday	1600-1730 hrs	RS & GIS Applications in Forestry and Ecology	Dr. Hitendra Padalia
31 Oct 18	Thursday	1600-1730 hrs	RS & GIS Applications to Water Resources Management	Dr. S.P Aggarwal
01 Nov 18	Friday	1600-1730 hrs	Geology and Geomorphology	Dr. R.S. Chatterjee
<b>02 Nov 18</b>	<b>Saturday</b>		<b>Break</b>	
<b>03 Nov 18</b>	<b>Sunday</b>		<b>Break</b>	
04 Nov 18	Monday	1600-1730 hrs	Space-enabled Products & Services for Disaster Management :Indian Initiatives	Dr. P.K.C.Ray
05 Nov 18	Tuesday	1600-1730 hrs	RS & GIS Application in Urban & Regional Planning	Shri. Pramod Kumar
06 Nov 18	Wednesday	1600-1730 hrs	RS applications for Planetary Studies	Dr. Prakash Chauhan
07 Nov 18	Thursday	1600-1730 hrs	RS & GIS for Coastal Zone Management	Dr. D. Mitra
08 Nov 18	Friday	1600-1730 hrs	Remote Sensing Application to Atmospheric & Marine Environment	Dr. A.K Mishra
<b>09 Nov 18</b>		<b>Saturday</b>		

<b>10 Nov 18</b>		<b>Sunday</b>		
11 Nov 18	Monday	1600-1730 hrs	Engineering Geology with emphasis on landslide studies	Dr. Shovan Chatteraj
<b>12 Nov 18</b>			<b>Break</b>	
13 Nov 18	Tuesday	1600-1730 hrs	Geospatial Technology for climate change studies	Dr. Arijit Roy
14 Nov 18	Thursday	1530-1630 hrs	Applications of Geo-web Services and mobile GIS in governance	Dr. Harish Karnatak
26 Nov 18	Thursday	1630 – 1730 hrs	Panel Discussion Module-3	All speakers

**PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYLAYA,  
TASGAON.  
IIRS/ISRO**

**OUTREACH PROGRAMME (2018-19)**

Online Course Name: **Basics of Remote Sensing, Geographical Information System and  
Global Navigation Satellite System Sept. 04 – Nov 26, 2018 (Duration 13Weeks)**

**-: Student Enrollment List:-**

Sr.No	Reg-Number	Name	Mobile Number	E-mail
1	20183657735	Gajanan Shivaji Yadav	9503062717	gajanyadav0@gmail.com
2	20183656873	Nayana Ashok Navale	7588824308	snehalmajale108@gmail.com
3	20183655625	Sushant Dwitambar Soundade	9673174876	sushantgeo4876@gmail.com
4	20183655607	Ajit Baban Jadhav	7028127479	ajitjadhav306@gmail.com
5	20183655598	Diksha Sunil Landage	9665772966	dikshalandage201700@gmail.com
6	20183655567	Deepali Gorakhnath Jagtap	7218301464	jagtapdeepali7896@gmail.com
7	20183655564	Deepali Bapurao Kadam	8317246161	jagtapdeepali7896@gmail.com
8	20183654834	Sneha Suresh Patil	9766159213	snehapatil937@gmail.com
9	20183654827	Vidya Vishwanath Jadhav	9822929427	vidyamudade@gmail.com
10	20183654821	Sneha Jineshwar Patil	7507213499	Nil
11	20183654813	Rohini Hanamant Shinde	9921766239	rhshinde2@gmail.com
12	20183654805	Vishal Dattatrya Mane	9665438455	manev6747@gmail.com

Male : 04  
Female : 08  
Total Students : 12



**Coordinator**

**PADMABHUSHAN DR. VASANTRODADA PATIL  
MAHAVIDYALAYA, TASGAON.**

**And**

***IIRS/ISRO,***

**OUTREACH PROGRAMME (2018-19)**

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### **Attendance Report**

Attendance Record for Course on Basics of Remote Sensing, Geographical Information System and Global Navigation Satellite System					
Registration Number	Name	Total Sessions	No. of sessions attended	%ge of Attendance	Eligibility for Examination/Certificate
20183654826	VIDYA	45	1	2.22	No
20183654827	VIDYA	45	29	64.44	No
20183655598	DIKSHA	45	34	75.56	Yes
20183654790	VISHAL	45	34	75.56	Yes
20183655607	AJIT	45	34	75.56	Yes
20183654805	VISHAL	45	34	75.56	Yes
20183654834	SNEHA	45	34	75.56	Yes
20183655625	SUSHANT	45	34	75.56	Yes
20183654813	ROHINI	45	34	75.56	Yes
20183655564	DEEPALI	45	34	75.56	Yes
20183656873	NAYANA	45	34	75.56	Yes
20183654821	SNEHA	45	34	75.56	Yes
20183655567	DEEPALI	45	34	75.56	Yes
20183657735	GAJANAN	45	34	75.56	Yes

Source: IIRS Website (<https://eclasscms.iirs.gov.in>)

**Date: Dec, 01<sup>th</sup>, 2018**

## **Notice**

This is to inform all students and faculty members that, Examination of 50<sup>th</sup> IIRS Outreach Programme on “**Basic of RS, GIS & GNSS** is scheduled to 06<sup>th</sup> December 2018. **All students and faculty members are requested to attend the exam. To further information please contact to Department of Geography.**

**Timings: 1000 Hrs to 1600 Hrs**

**Total Marks: 100 Marks & 100 Questions (MCQ/True or False/Match the Followings/etc.)**

**Duration: 90 Minutes**

**Mode of Examination: ONLINE Only (No Negative marking)**



**Mr. Amit Mali**  
*Coordinator*



**Dr. B. T. Kanase**  
*HOD, Dept .of Geography*

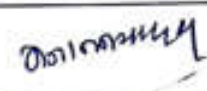

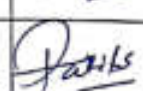
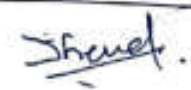


PADMABHUSHAN DR. VASANTRAODADA PATIL MAHAVIDYALAYA,  
TASGAON.  
IIRS/ISRO

OUTREACH PROGRAMME (2018-19)

Online Course Name: Basics of Remote Sensing, Geographical Information System and  
Global Navigation Satellite System Sept. 04 – Nov 26, 2018 (Duration 13Weeks)

**-: Exam Attendance:-** Date: 06<sup>th</sup> Dec 2018

Sr.No	Reg-Number	Name	Mobile Number	Signature
1	20183657735	Gajanan Shivaji Yadav	9503062717	
2	20183656873	Nayana Ashok Navale	7588824308	Navale. N.A.
3	20183655625	Sushant Dwitambar Soundade	9673174876	Soundade.
4	20183655607	Ajit Baban Jadhav	7028127479	
5	20183655598	Diksha Sunil Landage	9665772966	Landage D.S.
6	20183655567	Deepali Gorakhnath Jagtap	7218301464	Jagtap D.
7	20183655564	Deepali Bapurao Kadam	8317246161	Kadam D.B.
8	20183654834	Sneha Suresh Patil	9766159213	
9	20183654827	Vidya Vishwanath Jadhav	9822929427	<del>Absent</del>
10	20183654821	Sneha Jineshwar Patil	7507213499	Patil S.
11	20183654813	Rohini Hanamant Shinde	9921766239	
12	20183654805	Vishal Dattatrya Mane	9665438455	Mane.V.D.

  
Coordinator

*Evaluation Report*

*The 36<sup>th</sup> outreach programme* (run by Indian Institute of Remote Sensing and ISRO) on Basic of Remote Sensing , GIS and Global Navigation Satellite System (GNSS) successfully conducted by Department of Geography during 04<sup>th</sup> September 2018 to 26<sup>th</sup> November 2018 . For this online Course, total 12 students are enrolled and 11 students were appearing for final examination. The final examination held on 27<sup>th</sup> December 2018.



**Mr. Amit Mali**  
*Coordinator*



**Dr. B. T. Kanase**  
*HOD, Dept .of Geography*



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



नामांकन सं०/ Enrollment No. : 20183655567

बहिःपरिसर संपर्क/विस्तार कार्यक्रम प्रमाण पत्र  
OFF - CAMPUS OUTREACH CERTIFICATE PROGRAMME

## सहभागिता प्रमाणपत्र/CERTIFICATE OF PARTICIPATION

यह प्रमाणित किया जाता है कि कु० दिपाली गोरखनाथ जगताप को यह प्रमाण पत्र “ रिमोट सेन्सिंग, जीआईएस और जीएनएसएस के मूलभूत सिद्धांत ” में ऑनलाइन पाठ्यक्रम पूर्ण करने पर प्रदान किया जाता है। इस पाठ्यक्रम का आयोजन भारतीय सुदूर संवेदन संस्थान (आईआईआरएस) द्वारा 04 सितम्बर, 2018 से 26 नवंबर, 2018 के दौरान किया गया। प्रतिभागी ने आईआईआरएस आउटरीच नेटवर्क सेंटर, पद्मभूषण डॉ० वसंतरावदा पाटिल महाविद्यालय, तसगांव से इस पाठ्यक्रम में भाग लिया है।

This is to certify that **MS. DEEPALI GORAKHNATH JAGTAP** has been awarded this certificate on having completed the online course on “**Basics of Remote Sensing, Geographical Information System and Global Navigation Satellite System**”. The course was conducted by Indian Institute of Remote Sensing (IIRS), during September 04, 2018 to November 26, 2018. The participant has attended the course at IIRS outreach network centre, **Padmabhushan Dr. Vasantraodada Patil Mahavidyalaya, Tasgaon**.

दिनांक/ Date 30-01-2019  
देहरादून/ Dehradun

समन्वयक,  
विश्वविद्यालय/ संस्थान  
Coordinator  
University/ Institution

  
प्रमुख,  
जियोवेब सर्विसेस, सूचना प्रौद्योगिकी एवं दूरस्थ अधिगम विभाग  
Head, Geoweb Services, IT & Distance  
Learning Department, IIRS

  
समूह प्रमुख,  
भू-स्थानिक प्रौद्योगिकी एवं आउटरीच  
कार्यक्रम समूह, आईआईआरएस  
Group Head, Geospatial  
Technology and Outreach  
Programme Group, IIRS

  
निदेशक,  
आईआईआरएस  
Director, 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



बहिःपरिसर संपर्क/विस्तार कार्यक्रम प्रमाण पत्र  
OFF - CAMPUS OUTREACH CERTIFICATE PROGRAMME

COR3611252019

समन्वय का प्रमाणपत्र  
CERTIFICATE OF COORDINATION

यह प्रमाणित किया जाता है कि पद्मभूषण डॉ० वसंतरावदा पाटिल महाविद्यालय, तसगांव में कार्यरत श्री अमित महादेव माळी, ने “रिमोट सेन्सिंग, जीआईएस और जीएनएसएस के मूलभूत सिद्धांत” विषय पर इस संस्थान द्वारा दिनांक 04 सितम्बर, 2018 से 26 नवंबर, 2018 तक संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम को समन्वित किया।

This is to certify that **MR. AMIT MAHADEV MALI**, working with **Padmabhushan Dr. Vasanttraodada Patil Mahavidyalaya, Tasgaon**, has coordinated the online training course on “**Basics of Remote Sensing, Geographical Information System and Global Navigation Satellite System**” conducted by this institute during September 04, 2018 to November 26, 2018.

दिनांक/ Date: 30-01-2019  
देहरादून/ Dehradun

प्रमुख,  
जियोवेब सर्विसेस, सूचना प्रौद्योगिकी एवं दूरस्थ अधिगम विभाग  
Head, Geoweb Services, IT & Distance Learning Department, IIRS

समूह प्रमुख,  
भू-स्थानिक प्रौद्योगिकी एवं आउटरीच 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



COR3611252019

बहिः परिसर संपर्क/ विस्तार कार्यक्रम प्रमाण पत्र  
OFF - CAMPUS OUTREACH CERTIFICATE PROGRAMME

संस्थान की सहभागिता का प्रमाण पत्र  
CERTIFICATE OF PARTICIPATION OF INSTITUTE

यह प्रमाणित किया जाता है कि **पद्मभूषण डॉ० वसंतरावदा पाटिल महाविद्यालय, तसगांव** ने भारतीय सुदूर संवेदन संस्थान, इसरो देहारादून द्वारा संचालित ऑनलाइन प्रशिक्षण पाठ्यक्रम **“रिमोट सेन्सिंग, जीआईएस और जीएनएसएस के मूलभूत सिद्धांत”** में भाग लिया। इस ऑनलाइन पाठ्यक्रम का संचालन दिनांक 04 सितम्बर, 2018 से 26 नवंबर, 2018 तक किया गया।

This is to certify that **Padmabhushan Dr. Vasantraodada Patil Mahavidyalaya, Tasgaon**, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehradun on **“Basics of Remote Sensing, Geographical Information System and Global Navigation Satellite System”**. This online programme was conducted during September 04, 2018 to November 26, 2018.

दिनांक/ Date: 30-01-2019  
देहारादून/ Dehradun

प्रमुख,  
जियोवेब सर्विसेस, सूचना प्रौद्योगिकी एवं दूरस्थ अधिगम विभाग  
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