



Rayat Shikshan Sanstha's

Annasaheb Awate Arts , Commerce & Hutatma Babu Genu Science College, Manchar, Pune

Department of Physics

SHORT TERM COURSE

2022-2023



Rayat Shikshan Sanstha's

Annasaheb Awate Arts, Commerce & Hutatma Babu Genu Science College, Manchar

Department of Physics

Short Term Course-GIS and Remote Sensing Report:2022-23

Date: 24/04/2023
Venue: Computer Room(Physics Dept.)
Number of beneficiary :10 students
Class: F.Y.B.Sc.
Mode of the Program: Offline
Program Co-ordinator: Prof. P.V.Kurkute
Introduction:

Geographic Information Systems (GIS) and remote sensing technologies have revolutionized the way we gather, analyse, and visualize spatial data. This report provides an overview of GIS applications and remote sensing technologies, highlighting their significance across various sectors.

Objectives:

1) Provide efficient means for data distribution and handling.
2) To improve the efficiency of decision making processes and planning.
3) Eradication of the duplicated data,
4) Integration of information from many sources.
5) Analysis of queries involving geographical reference data for generation of new information, Update data quickly and at the minimum cost.

GIS Applications:

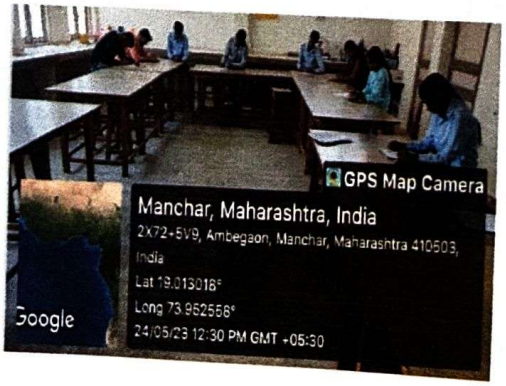
1) Environmental Conservation
2) Disaster Management
3) Urban Planning and Management
4) Natural Resource Management
4) Traffic or any other Emergency management

Remote Sensing Applications:

1) Earth Observation Satellites:
2) Agriculture and Forestry:
3) Environmental Monitoring:
4) Infrastructure Development:

Conclusion:

GIS applications and remote sensing technologies continue to play a pivotal role in addressing complex spatial challenges across diverse sectors. Their integration enables informed decision-making, resource optimization, and sustainable development. As these technologies evolve, their potential for solving real-world problems is expected to expand further, contributing to a more resilient and sustainable future.



ANNASAHEB AWATE COLLEGE, MANCHAR

Rayat Shikshan Sanstha's

Annasaheb Awate Arts, Commerce and Hutatama Babu Genu Science College,
Manchar, Tal. Ambegaon, Dist. Pune PIN 410503

Certificate Courses Science Faculty Academic Year 2022-23

NOTICE

Date 05/11/2022

All Heads of the Science Faculty are here informed that during academic year 2022-23. all Science Short Term Courses and students strength are decided below pattern. All should prepare Short Term Course Time Table and conduct the Course and keep records in their respective departments.

SN	Dept.	Certificate Course Title	Class and Batch Name Group	Students Roll Nos.	Total
1	Electronics	Certificate Course in Artificial intelligence	F. Y. B. Sc. Batch- A (PCME)	4002, 4003, 4004, 4005, 4008, 4013, 4014, 4020, 4022, 4023, 4026, 4030, 4032, 4035	14
2	Physics	Certificate Course in Basic GIS and Remote Sensing	F. Y. B. Sc. Batch- B (PCME)	4036, 4037, 4043, 4046, 4049, 4051, 4057, 4058, 4062, 4064, 4065, 4067, 4068	13
3	Chemistry	Certificate Course in Dairy Science	F. Y. B. Sc. Batch- C (PCBZ)	4001, 4006, 4007, 4009, 4010, 4011, 4012, 4015, 4016, 4017, 4018, 4019, 4021, 4024, 4025	15
4	Botany	Certificate Course in Organic Farming	F. Y. B. Sc. Batch- D (PCBZ)	4027, 4028, 4029, 4031, 4033, 4034, 4038, 4039, 4040, 4041, 4042, 4044, 4045, 4047, 4048	15
5	Zoology	Certificate Course in Apiculture	F. Y. B. Sc. Batch- E (PCBZ)	4050, 4052, 4053, 4054, 4055, 4056, 4059, 4060, 4061, 4063, 4066, 4069, 4070, 4071, 4072	15
6	Biotech.	Certificate Course in Plant Tissue Culture	F. Y. Biotech. -	F. Y. Biotech. 4001 to 4010	10

Chairman
Short Term Course Committee

Principal
Annasaheb Awate Art's Commerce, &
Hutatma Babu Genu Science College,
Manchar, Tal.Ambegaon, Dist.Pune

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Manchar, Tal. Ambegaon, Dist. Pune-410503.
Department of Physics
Certificate Course in Basic in GIS & Remote Sensing
2022-2023

BOS Members

Sr.No.	Name of Teacher	
1	Dr. Nimbalkar R.S.	Chairman
2	Prof. Mahakal S.C.	Member
3	Prof. Ugale S.D.	Member
4	Dr.Kekade S. S.	Member

Rayat Shikshan Sanstha's

Annasaheb Awate College Manchar

Department of Physics

2022-2023

STC – Basic in GIS & Remote Sensing

Mark list

Sr.No	Name of the Student	Mark
1	Lohakre Priya Kantaram	35
2	Lohate Dipali Santosh	38
3	Nighot Gauri Sambhaji	40
4	Pathan Arshiya Riyajkhan	59
5	Pokharkar Anuj Suresh	46
6	Shinde Aishwarya Bharat	48
7	Tawhare Digambar Balasaheb	50
8	Thorat Ashish Nitin	57
9	Thorat Shraddha Bhaguji	55
10	Wagh Karan Jalinder	37

Head

Head
Department of Physics
A.A. College,Manchar

Rayat Shikshan Sanstha's

Annasaheb Awate College Manchar

Department of Physics

STC – Basic in GIS & Remote Sensing

Report

Date- 04/05/2023

In academic year 2022-23, Department of Physics has conducted the short term course – **Basic in GIS & Remote Sensing** for F.Y.B.Sc students. Lectures were conducted by Prof. Kurkute. P.V. had guided about the course. Total 10 students were involved in course.

This course was commenced on 23/03/2023 to 03/05/ 2023.

Course Coordinator

Head

Head
Department of Physics
A.A. College.Manchar

Rayat Shikshan Sanstha's

Annasaheb Awate College, Manchar

Department of Physics

Short Term Course 2022-2023

Notice

All the students of F.Y. B.Sc. listed below are hereby informed that the short term course on **"Basic in GIS & Remote Sensing** "organized by Department of Physics will commence from 21/03/2023. All the students of this course should remain present for the classes and practical's as per the timetable . It is mandatory to all enrolled students.

Head
Department of Physics
A.A. College,Manchar

Rayat Shikshan Sanstha's

Annasaheb Awate College Manchar

Department of Physics

2022-2023

STC – Basic in GIS & Remote Sensing

Timetable

Monday	Tuesday	Wednesday	Friday	Saturday
Practical 9.30 to 11.30	**9.30 to 10.30 (L)**	**9.30 to 10.30 (L)**	**9.30 to 10.30 (L)**	**Practical 9.30 to 11.00**

Head

Department of Physics

A.A. College,Manchar

Rayat Shikshan Sanstha's

Annasaheb Awate College, Manchar

(NAAC Accredited with 'A' Grade

Affiliated to Savitribai Phule Pune University, Pune)

Department of Physics

Syllabus

Certificate Course on Course in **"Basic in GIS & Remote Sensing"**

1. **Introduction to Map and Scale.** **(02L +04P)**
   Meaning & Definitions of Map and Scale, Component of Map, Types of Map, Methods of Representation of Scale, Scale Conversion,

2. **Geographical Information System.** **(05L + 08)**
   Definition & History, Component of the GIS, Data Structure and Formates, Spatial Data Models- Raster Data, Vector Data, Application of GIS,

3. **Principles of Remote Sensing.** **(05L + 08)**
   History & Development, Principles of Remote Sensing, Electro-Magnetic Radiation, Types of Remote Sensing- Aerial photographs and Satellite Images, Application of Remote Sensing

4. **Introduction to GIS Software.** **(05L + 08)**
   Overview an Arc Map & ERDAS, Interpretation of Aerial Photographs, Exercise with Google Map,

Head
Department of Physics
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Rayat Shikshan Sanstha's

Annasaheb Awate College Manchar

Department of Physics

2022-2023

STC – Basic in GIS & Remote Sensing

Student List

Sr.No	Name of the Student
1	Lohakre Priya Kantaram
2	Lohate Dipali Santosh
3	Nighot Gauri Sambhaji
4	Pathan Arshiya Riyajkhan
5	Pokharkar Anuj Suresh
6	Shinde Aishwarya Bharat
7	Tawhare Digambar Balasaheb
8	Thorat Ashish Nitin
9	Thorat Shraddha Bhaguji
10	Wagh Karan Jalinder

Head

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Department of Physics
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Department of Physics

STC-2022-23

Certificate Course on Course in **"Basic in GIS & Remote Sensing"**

Attendance (Lecture)

Sr.No.	Name of the Student	21/03	22/03	23/03	24/03	28/03	29/03	30/03
1.	Lohakare Priya Kantaram					A		
2.	Lohate Dipali Santosh					A		
3.	Nighot Gauri Sambhaji							
4.	Pathan Arshiya Riyajkhan							
5.	Pokharkar Anuj Suresh							
6.	Shinde Aishwarya Bharat					A		
7.	Tawhare Digambar Balasaheb							
8.	Thorat Ashish Nitin							
9.	Thorat Shraddha Bhaguji				A			
10.	Wagh Karan Jalinder							

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Department of Physics

Skill Based Short Term Course-2022-23

Certificate Course on Course in **"Basic in GIS & Remote Sensing"**

Attendance (Practical)

Sr.No.	Name of the Student	25/03	26/03	01/04	02/04	08/04	09/04	15/04
1.	Lohakare Priya Kantaram					A		
2.	Lohate Dipali Santosh					A		
3.	Nighot Gauri Sambhaji							
4.	Pathan Arshiya Riyajkhan							
5.	Pokharkar Anuj Suresh							
6.	Shinde Aishwarya Bharat				A			
7.	Tawhare Digambar Balasaheb							
8.	Thorat Ashish Nitin							
9.	Thorat Shraddha Bhaguji					A		
10.	Wagh Karan Jalinder						A	

Head
Department of Physics
A.A. College, Manchar