

**A**  
**Project Report**  
**On**  
**Water Quality Application over Tapi**  
**River using Remote Sensing**

**SUBMITTED AS THE PARTIAL FULFILLMENT**

**DEGREE OF**

**Master of Science in Geoinformatics**

**Under the Guidance of Space Application Centre,  
ISRO**

**Submitted by Mayuri A. Tandel**

**ID No. : 19GI12**

**EXAM No. : 9**

**Institute of Science & Technology for Advanced  
Studies & Research**

**(ISTAR)**

**Under the guidance of  
Dr. Unnati Patel**



**Estd. 1999**

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**Recognized under Section 2(f) and 12(B) of the UGC Act, 1956**

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**Earth-ecosystems Research and Training Division  
(ERTD)**

**VEDAS Research Group (VRG)**

**Earth, Ocean, Atmosphere, Planetary Sciences and  
Applications Area (EPSA)**

**CERTIFICATE**

This is to certify that **Ms. MAYURIBEN AJITBHAI TANDEL**, Master of Science in Geoinformatics, Institute of Science & Technology for Advanced Studies & Research, Vallabh Vidyannagar has satisfactorily completed her project **“WATER QUALITY ESTIMATION OVER TAPI RIVER USING REMOTE SENSING”** under the guidance of **Dr Sharad Chander** Scientist/Engineer - SE, LHD/GHCAG/EPSA Space Applications Centre, Ahmedabad from 15-01-2021 to 25-6-2021. The research work was carried out under **Training and Research in Earth Eco-System (TREES)** Program of Space Applications Centre, Ahmedabad.

डॉ. सर्वोत्तर व्यास / Dr. S.P. Vyas  
प्रमुख, वैज्ञानिक अनुसंधान एवं प्रशिक्षण विभाग (एसएआरटीडी) - केन्द्रीय  
Head, Scientific Research and Training Division (SRTD)-PPG  
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भारतीय अंतरिक्ष अनुसंधान संगठन (इसरो)  
Indian Space Research Organisation (ISRO)  
भारत सरकार / Govt. of India  
अहमदाबाद / Ahmedabad-380015.



## CERTIFICATE

This is to certify that Mr. / Miss **MAYURIBEN AJITBHAI TANDEL**, Exam Number **2**, student of M.Sc. Geoinformatics, Institute of Science & Technology for Advanced Studies & Research, Vallabh Vidyanagar, Gujarat has carried out his/her 4<sup>th</sup> semester project work - (PS04CGIN21) in M.Sc. Geoinformatics from 15/01/2021 to 15/05/2021 as a partial fulfillment of Master of Science in Geoinformatics affiliated to Sardar Patel University.

Dr. Unnati A. Patel  
Asst. Professor,  
M.Sc. Geoinformatics

Dr. Nirmal Kumar J. I.  
Principal

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**TO WHOM SO EVER IT MAY CONCERN**

**Date: April 28, 2021**

This is to certify that Miss. Mayuri A. Tandel, a student of M.Sc. Geoinformatics in Institute of Science & technology for advanced studies & Research, she has completed her internship from 08<sup>th</sup> December, 2020 to 26<sup>th</sup> January, 2021 at this firm.


During her stay here, she has shown positive attitude, skills as a committed, hardworking and creative toward full stack to learn basic of GIS, different coordinates system, basic of development plan and town planning scheme, application of Arc GIS in town planning and tools of Arc GIS like Georeferencing, buffer analysis, attribute data filling, different kind of format etc. She has a jubilant personality and always contributes positively towards a rift free work environment.

**We wish her a pleasant and successful life ahead.**

Thanking you,

Yours truly,

For Design Point Consult Pvt. Ltd.

  
Priyanka Patel  
(Director)



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## AKNOWLEDGEMENT

It gives me immense pleasure submitting this project report towards successful completion of my study. This project has given me an opportunity to think, implement and interact with various aspects of technology in the field of Remote Sensing and GIS.

I would like to express my sincere gratitude to **Mr. Shashikant A. Sharma**, Group Head, VRG (Vedas Research Group), **Dr. Markand P. Oza**, Head, CGDD (Content Generation and Data Dissemination) and **Dr. S.P. Vyas**, Head, ERTD (Earth-ecosystem Research and Training Division) for giving me a wonderful opportunity to work under the TREES program. I am very thankful to **Mr. Hiren Bhatt**, for his constant support and guidance.

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I am very much grateful to my college guide **Dr. Unnati Patel** (Head of Department, M.Sc Geoinformatics ) for her help and support whenever I needed. Her enthusiasm in learning new application for the field always influenced me find new possibilities.

My deepest thanks to **Krunal Sir** and all my classmates who have been extremely cooperative and have helped me to complete my work successfully.

**Mayuri A. Tandel**