



OFFICE OF THE PRINCIPAL
Shaheed Himayun Muzamil Memorial

Govt. Degree College Anantnag

Khanabal, Anantnag - 192101 (J&K) | NAAC Accredited Grade 'B' | CGPA: 2.53

No. DCA/Sub-Tour/25/1594.

Dated: 18-10-2025

Subject: Deputation of Officers/Officials in connection with Experiential Tour/Subject tour

ORDER

The following officers/officials of this College are hereby directed to accompany 34 students of the Department of Mathematics in connection with the Subject Tour scheduled on **22nd October 2025** to Pahalgam. The list of students is enclosed herewith this order as Annexure-A.

Furthermore, the accompanying staff members are directed to ensure their presence in the College at **08:00 a.m. positively on the scheduled date** along with the students. The safety and discipline of the students shall be the sole responsibility of the accompanying staff.

S.NO	Name of Officer/ official	Designation
01	Prof.Riyaz Ahmad Shah	Associate Professor
02	Dr. Aljaz Ahmad Najar	Assistant Professor
03	Mr. Zameer Ahmad Bhat	Assistant Professor
04	Mr Ali Mohd Sheikh	LFE

{Prof. Dr Mashtaq Ahmad Malik}

Principal.

Copy to :-

1. Convener subject Tours for information.
2. HOD MATHEMATICS for information.
3. All the concerned for compliance and note.

Mathematics Subject Tour Report

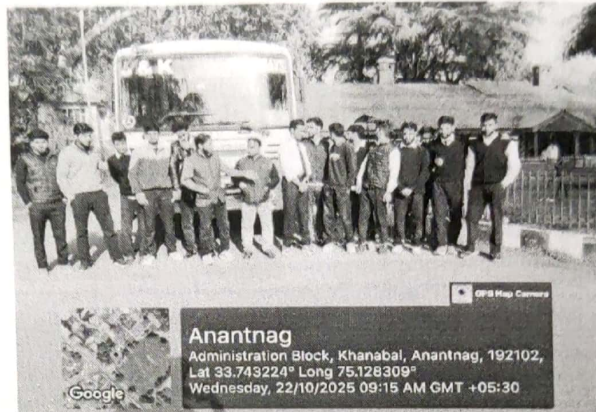
Topic: "Exploring Mathematical Patterns in Nature and Architecture"

Venue: Pahalgam, Kashmir

Date: 22nd October, 2025

Organizing Entity: Department of Mathematics, SHMM Govt. Degree College Anantnag

Participants: Mathematics Students of 3rd, 5th and 7th semesters.



Introduction & Objectives

The Mathematics Department of SHMM Govt Degree College Anantnag organized an educational tour to the picturesque town of Pahalgam on October 22, 2025. The primary objective was to transcend the boundaries of the classroom and provide students with a tangible, real-world context for mathematical concepts. The tour aimed to:

1. Identify and analyze geometric shapes, symmetry, and patterns in natural landscapes and man-made structures.
2. Understand the application of concepts like the Fibonacci sequence, the Golden Ratio, and fractals in the environment.
3. Develop observational and analytical skills by connecting abstract mathematical theories with concrete examples.
4. Foster a deeper appreciation for the universal language of mathematics.

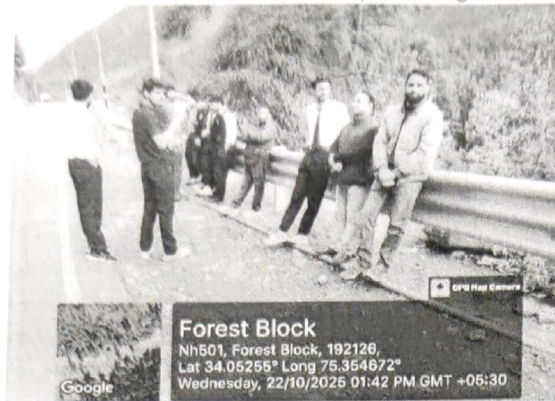
Itinerary & Mathematical Observations

The day was meticulously planned to cover locations that offered rich mathematical learning opportunities. As we approached Pahalgam, the winding Lidder River became our first subject of study. Students observed the river's path from the bus and later from a vantage point. The branching pattern of the river tributaries, the irregular yet self-similar coastline of the riverbanks, and the branching of trees on its shores were identified as classic examples of fractals. Students discussed how these complex patterns are formed by the repetition of a simple process (erosion, flow of water) and how this relates to the mathematical concept of recursion and infinite complexity within finite boundaries.

Betaab Valley - Symmetry and Angles

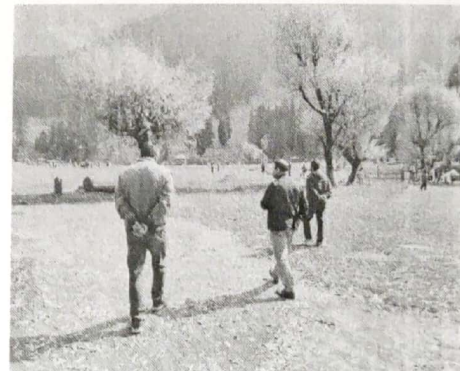
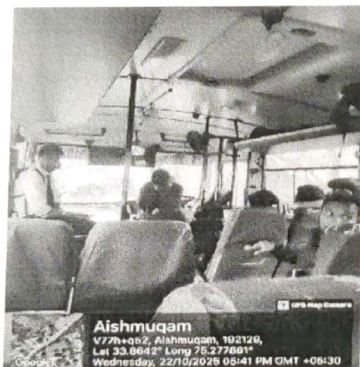
The sprawling, serene meadows of **Betaab Valley** provided an open-air classroom for studying symmetry and geometry, Axial & Radial Symmetry, Angles of Elevation

This practical exercise reinforced concepts of trigonometry and right-angled triangles.



Pahalgam Town - Geometry in Architecture

A walk through the local market and observations of traditional Kashmiri woodwork and bridge construction offered insights into applied geometry. Mathematical Concepts like Tessellations, Polygons, and Structural Engineering can be seen throughout the market. The intricate woodwork on buildings (Khatamband) displayed complex geometric tessellations, where shapes like stars, hexagons, and octagons fit together perfectly without gaps. The wooden bridges over the Lidder River were analyzed as real-life examples of triangulation in trusses, a principle used to ensure structural strength and stability. The cylindrical shape of log bridges and the parabolic arcs of suspension cables were also noted and discussed.



Learning Outcomes:

The tour successfully achieved its objectives. Key takeaways included:

1. Students moved from perceiving mathematics as a purely abstract subject to recognizing it as a fundamental framework of the natural and built world.
2. Concepts like fractals and the Fibonacci sequence, often difficult to visualize in class, became memorable and clear.
3. The interdisciplinary nature of the tour linked mathematics with geography, biology, and art, providing a holistic learning experience.

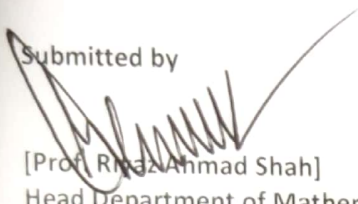
Conclusion

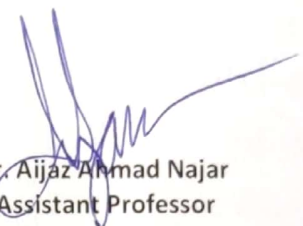
The Mathematics tour to Pahalgam on 22nd October 2025 was an resounding success. It was an enlightening journey that proved the mountains, rivers, and flowers are all speaking the language of mathematics; we only need to learn how to listen. The experience has undoubtedly ignited a renewed curiosity and a deeper appreciation for the subject among the students.

Acknowledgements

We extend our sincere gratitude to the Principal of our college for granting permission for this educational endeavor. We also thank convener tour and travel committee for their support and cooperation, which ensured a smooth, safe, and productive trip for all participants.

Submitted by


[Prof. Raza Ahmad Shah]
Head Department of Mathematics
Date: 25th October, 2025


Dr. Aijaz Ahmad Najar
Assistant Professor
Tour In-charge

Department of Mathematics

SHMM Government Degree College Anantnag

List of Students for Experiential/Subject Tour to Pahalgam on 22-10-2025

S. No.	Name of the Student	Semester	Class Roll Number	Remarks/Signature
1.	Arsalan Manzoor	3 rd	21	Consent Received
2.	Shahid Ahmad Bhat	3 rd	05	Consent Received
3.	Iyman Gowher	3 rd	22	Consent Received
4.	Sahil Shiraz	3 rd	904	Consent Received
5.	Kamran Farooq	3 rd	918	Consent Received
6.	Mehran Yousuf	3 rd	919	Consent Received
7.	Sheikh Midhat	3 rd	13	Consent Received
8.	Sheeraz Manzoor	3 rd	06	Consent Received
9.	Irfan Ahsan	3 rd	20	Consent Received
10.	Salman Junaid	5 th	1801	Consent Received
11.	Shahid Ayoub	5 th	1823	Consent Received
12.	Irfan Bashir Parry	5 th	13	Consent Received
13.	Asrar Ahmad Bhat	5 th	1828	Consent Received
14.	Najma Jan	5 th	23	Consent Received
15.	Muntaha Sharief Shah	5 th	22	Consent Received
16.	Abdul Raof Bhat	5 th	04	Consent Received
17.	Mohd Ismail Kumar	5 th	10	Consent Received
18.	Irshad Ahmad Sheikh	5 th	05	Consent Received
19.	Mumtaziz Zahoor	5 th	01	Consent Received
20.	Basit Reyaz Wani	3 rd	17	Consent Received
21.	Mir Faisal Abbas	3 rd	18	Consent Received

22.	Owais Gulzar Ahangar	3rd	1614	Consent Received
23.	Syed Tawfeeq Shafi	3rd	1613	Consent Received
24.	Sareer Ahmad Haji	3rd	19	Consent Received
25.	Faisal Ahmad Wagay	3rd	07	Consent Received
26.	Muneeb Ahmad Shah	5 th	06	Consent Received
27.	Saahi Raj Zargar	5 th	1810	Consent Received
28.	Midhat Fayaz	5 th	327	Consent Received
29.	Muskana Gulzar	5 th	12	Consent Received
30.	Rahil Reyaz	7 th	44	Consent Received
31.	Faizan Ameen Shah	7 th	38	Consent Received
32.	Faisal sabzar	7 th	18	Consent Received
33.	Faizan Muzafer	7 th	28	Consent Received
34.	Ishtiyag Ashraf	7 th	14	Consent Received

HOD
Mathematics