

To,

Date : 17/02/2023

The Principal,
Tuljaram Chaturchand College of Arts, Science and Commerce,
Baramati-413 102.

Sub.: Permission to conduct Study tour of M.Sc.I. Botany at Goa during 02/03/2023 to 04/03/2023.

Respected Sir,

As per the syllabus of Savitribai Phule Pune University, Pune there is a compulsory submission of visit report to M.Sc.I. Botany during external practical examination. Hence a tour programme has been prepared and submitted as follows for your kind permission.

The schedule of tour is as follows:

| | | |
|---|------------------------------------|---|
| 1 | Class | M. Sc. I Botany |
| 2 | Dates | 02/03/2023 to 04/03/2023 |
| 3 | No. of students to be participated | 13(Girls =11 and Boys = 02) |
| 4 | Mode of Journey | Travel bus |
| 5 | Route of Travel | Baramati-Kolhapur university - Goa |
| 6 | Staff Escorts | 1) Prof.Dr. B. S. Mali 2) Miss. S. K. Thombare |

Please permit us to conduct study tour and grant T. A. and D. A. to the accompanying teaching and non teaching staff.

Thanking You,

Yours Sincerely,

Anekant Education Society's
Tuljaram Chaturchand College of Arts, Science and Commerce, Baramati.
(Autonomous)
Department of Botany
M.Sc. I Botanical excursion tour- (Goa)
List of students

| Sr. No. | Roll No. | Name of student | Mobile No. | Remark |
|---------|----------|----------------------------|------------|--------|
| 1. | 15741 | Sonawane Nayana Kishor | 9420633042 | |
| 2. | 15742 | Bankar Apurva Jalindar | 9422758694 | |
| 3. | 15744 | Sayyad Jasmin Maheeb | 8788798822 | |
| 4. | 15745 | Madane Pratiksha Kashiram | 9552649714 | |
| 5. | 15746 | Ghodake Nikita Dilip | 8554903541 | |
| 6. | 15749 | Deokate Sayali Sanjay | 7218859488 | |
| 7. | 15751 | Kamble Pratiksha Dayanand | 9373175898 | |
| 8. | 15752 | Kuchekar Anjali Satish | 9284715172 | |
| 9. | 15753 | Dhandchire Prerana Bhagwan | 8459602850 | |
| 10. | 15756 | Sonwalkar Nikita Rajendra | 9529908845 | |
| 11. | 15757 | Jagtap Sourabh Suresh | 8975384674 | |
| 12. | 15762 | Ghanwat Vidya Anil | 9172116446 | |
| 13. | 15743 | Thorave Abhishek | | |
| 14. | 15750 | Dudhal Nilam | 9172860559 | |

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Tour In-charge

Head of Department

Class : M. Sc. I (Semester- II) Paper Code : PSBT...
Paper : Practicals based on PSBT..and PSBT..

A) Learning Objectives:

1. To generate awareness on habit of plants with reference to its habitats and conservation of ecology.
2. To train skilled students in physiological and biochemical techniques.

B) Learning Outcome:

Appreciate the ethical, cross-cultural and historical context of environmental issues and the links between human and natural systems.

Practicals Based on Based on PSBT (Any 12 Practical)

Pteridophytes : Morphological, anatomical and reproductive studies

1. Psilopsida: *Psilotum* and *Tmesipteris* (Figure of *Tmesipteris* must be shown)
(1P)
2. Lycoposida and Sphenopsida: *Lycopodium*, *Selaginella*, *Equisetum*, *Isoetes*
(2P)
3. Pteropsida: *Ophioglossum*, *Angiopteris*, *Osmunda*, *Salvia*, *Azolla*, *Marsilea*,
Lygodium, *Pteris*, *Adiantum*, *Gleichenia*, *Cheilanthes*, *Blechnum*, *Acrostichum*
(4P)
4. Fossil Pteridophytes: Any eight forms (At least one from each group)
(2P)

Gymnosperms :

5. Study of external, internal and reproductive morphology of *Cycas* and *Zamia*
(1P)
6. Study of external, internal and reproductive morphology of *Pinus*, *Cupressus*,
Araucaria, *Agathis* and *Podocarpus*
(1P)
7. Study of external, internal and reproductive morphology of *Gnetum* and *Ephedra*
(1P)
8. Study of fossil specimens of gymnosperm (any six) from order Pteridospermales,
Cycadeoidales and Pentoxylales
(1P)

Anekant Education Society's
Tuljaram Chaturchand College of Arts, Science and Commerce,
Baramati(Autonomous)

Department of Botany

M.Sc.-I Botany ,Boatnical Excursion Tour at Kolhapur, Amboli, Goa
During 02nd March to 04th March
Academic year 2022-23

Tour Programme

| Day & Date | Departure from & time | Arrival at & time | Total distance | Mode of journey | Place to be visit | Halt |
|------------------------|-----------------------|---------------------|----------------|------------------------|--|------|
| Thursday 02/03/2023 | Baramati 05.00 am | Kolhapur 09.00 | 213 km | Travels (17 seater) | Mahalaxmi mandir, ✓ | |
| | | Kolhapur 11.00am | | | Shivaji University, Kolhapur ✓ | |
| | Kolhapur 01.00pm | Ajra 03.00 pm | 85 km | | Ajra pine forest ✓ | |
| | Ajra 05.00 pm | Amboli 06.00 pm | 32 km | | Amboli- sight scene | Am |
| Friday 03/03/2023 | Amboli 07.00am | Goa 11.00am | 128 km | Travels (17 seater) | Goa-Sight scene | |
| | | Goa 01.00pm | | | Goa- University of Goa | |
| | | Goa 03.00pm | | | Goa-National Institute of Oceanography | |
| Saturday 04/03/2023 | Goa 07.00am | Baramati 08.00pm | 423 km | Travels (17 seater) | Goa sight scene | |

Neeraj S
Tour In-charge

Neeraj S
Chairman
Excursion Committee

Neeraj S
Department

Prof. Dr. B. S. Mali,
Department of Botany,
Tuljaram Chaturchand College,
Baramati, 413102.
Date:

To,
The Principal,
Tuljaram Chaturchand College of Arts, Science and Commerce,
Baramati.

Subject: Report of study tour of M. Sc. I (Botany) students at Goa.

Respected Sir,

With your prior permission we have organized a study tour of M. Sc. I (Botany) students from 02/03/2023 to 04/03/2023 at Goa. This study tour was the part of M. Sc. I (Botany) curriculum of Savitribai Phule Pune University, Pune.

We have started our journey from Baramati by bus at 5.30 am on 02nd March, 2023 towards Shivaji University, Kolhapur and reached at 11.30 a.m. There we have visited Lead Botanical Garden. Then we were visited Mahalaxmi Temple, Panhala fort. After that we have preceded our journey towards Aajara .

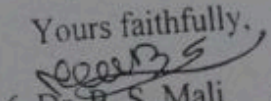
On second day we have departed from Amboli, Aajara and started journey towards Pine forest, Devurdii. Along the way we have observed many Pteridophytes, Gymnosperms .After that we have preceded our journey towards Goa. At afternoon we have reached at NIO (National Institute of Oceanography)

On 4th march we have started our journey towards Calangute beach. On the way we have visited Aguada fort in Goa, Mangesh Temple and Singham point in Dona Paula. At afternoon we have reached at old Goa Church.

We have observed and collected some Pteridophytes and Gymnosperms . This study tour was much informative for the students as we have observed several unique plants throughout the route .

I am very much thankful to you for your valuable guidance during the planning and kind support throughout the programme.

Thanking you,

Yours faithfully,

(Dr. B. S. Mali)

Encl:

1. Expenditure statement
2. TA and DA claim bills