

OFFICE OF THE DIRECTOR OF HIGHER & TECHNICAL EDUCATION
MEGHALAYA :: :: :: SHILLONG

No.CE/GC/PRO/ET/1/2018-2019/80,

Dated Shillong the 22nd July, 2022.

From: Dr. E. K. Mawkhiew,
Dy. Director of Higher Technical Education,
Meghalaya, Shillong.



To: The Principal,
Kiang Nangbah Government College,
Jowai.

Subject: Sanction for Field study trip in respect of Kiang Nangbah Government College, Jowai.

Sir,


With reference to the subject cited above, I am to forward herewith letter No.EDU/0298/2223/GEN, dated 18th July, 2022 and Sanction No:EDU/0338/15072022/2202/23, Sanction ID:2992 in connection with sanction for Field study trip in respect of Kiang Nangbah Government College, Jowai.

The amount has been allotted through BEAMS.

This is for your information and necessary action.

Enclosures: As stated.

Yours faithfully,


Dy. Director of Higher & Technical Education
Meghalaya :: :: :: Shillong



Government of Meghalaya
Education Department

190

No.EDU/0298/2223/GEN

Dated: 18-07-2022

Sanction No: EDU/0338/15072022/2202/23

Sanction ID:2992

From : Shri P.N.Sangma
Deputy Secretary.
Education Department

To : The Director of Higher and Technical Education
Meghalaya Shillong

Sub : Sanction for Field study trip in respect of Kiang Nangbah Govt College, Jowai.

Sir,

I am directed to convey the sanction of the Governor of Meghalaya for an amount not exceeding ₹4,25,000.00/- (Rupees Four Lakhs Twenty Five Thousand only) for field study trip in respect of Zoology and Botany Department of Kiang Nangbah Govt College, Jowai..

The relevant rules and procedures laid down for incurring the expenditure and drawing and disbursement of the money should be strictly adhered to.

The expenditure is debitible to the Head of Account "212202031032300V1" (2202-GENERAL EDUCATION 03-UNIVERSITY AND HIGHER EDUCATION 103-GOVERNMENT COLLEGES AND INSTITUTES (23)-Excursion for College students 00-- 36-Grants-in-aid General (Non-Salary) General) for amount Rs. 4,25,000.00/- during the year 2022-2023.

The sanction is issued with the concurrence and approval of Finance Department vide Finance Memo vide No: FIN/477/2022-23, dated 12 Jul, 2022.

Yours faithfully

Deputy Secretary of Govt. of Meghalaya
Education Department

Dated Shillong the 18-07-2022

Memo No.EDU/0298/2223/GEN-A

Copy forwarded to:

1. Finance (EC-II) Department for Information
2. Finance (B) Department
3. Treasury Officer, Jowai.
4. Office Copy

By Order etc...

Deputy Secretary of Govt. of Meghalaya
Education Department

Dated Shillong the 18-07-2022

Memo No.EDU/0298/2223/GEN-B

Copy forwarded to:

1. The Accountant General (Audit)
2. The Accountant General (Accounts)

By Order etc...

Financial Adviser,
Education Department



Revised

REG. NO. 118
Syllabus 2015



NORTH - EASTERN HILL UNIVERSITY
Headquarter :: Shillong

Dated 3rd June, 2015

No. F.3-3/Ex/Con/2015- 438

To,

The Principal,

Kiang Noy Sah Gout. college
Jowai


118
11/6/15

Subject: Revised Under Graduate Syllabus in BSc.(Botany) under the Semester System.

Sir/Madam,

Please find enclosed a copy of the Revised Under Graduate Syllabus of B.Sc.(Botany) under the Semester System with minor corrections for favour of your information and necessary action.

The earlier version of BSc.(Botany) Syllabus issued vide letter No.F.2-3/Exam/Con/2015-425, dt.23.3.2015 stands withdrawn.


3.6.15
Controller of Examination

Copy to :

1. Dr. S.K. Barik, Chairman, BoS in Botany, NEHU, Shillong for information.



Semester 3

Paper 3: Theory

Angiosperm taxonomy, Economic Botany, Ethnobotany and Phytogeography

Unit 1

1. Major systems of classification – artificial, natural and phylogenetic.
2. Bentham and Hooker's, and Hutchinson's system of classification.
3. I.C.N. – Principles of Botanical Nomenclature, Type method and typification, and Rules and limitations of Priority.
7 methods of Types.

Unit 2

1. Distinguishing features and economic importance of the following dicotyledonous families: Ranunculaceae, Fabaceae, Asteraceae, Solanaceae, Verbenaceae and Lamiaceae.
2. Distinguishing features and economic importance of the following monocotyledonous families: Liliaceae, Zingiberaceae, Orchidaceae and Poaceae.

Unit 3

1. Ethnobotany and its significance; Study of some ethnobotanical plants of north- eastern India having medicinal and food values.
2. Study of economically important plants – cereals, pulses, oil yielding, spices, condiments, fibres, ornamentals and aromatic (scientific names, families, and parts used of at least three plants under each category).
3. Characteristics, cultivation and uses of aromatic and medicinal plants (*Citronella* and *Rauwolfia*).
4. Characteristics, cultivation and uses of timber yielding plants (Teak and Sal).
5. Cultivation and processing of tea and rubber.

Unit 4

1. Floristic regions of India.
2. Continuous and discontinuous plant distribution in India: Factors and theories.
3. Centre of origin of plants (Primary and Secondary centres).
4. Barriers to plant migration.

Paper 3: Practical

Angiosperm taxonomy, Economic Botany, Ethnobotany and Phytogeography

1. Taxonomic studies of angiosperm plants belonging to both dicot and monocot families mentioned in Paper 3. Flower dissection, drawing and description in technical language, and identification upto Genera.
2. Qualitative detection of starch, protein, fat and cellulose in plant materials by chemical tests.
3. Spotting: Economically important plants or plant products prescribed in Paper 3.
4. Techniques for preparation of herbarium sheets of flowering plants and submission of at least 5 herbarium sheets.
5. Study of 5 plants having ethnobotanical importance.
6. One local field trip of botanical relevance.

Recommended Readings

- ✓ Naik, V.N. 2014. Taxonomy of Angiosperms. Tata McGraw Hill Publ. New Delhi.
- ✓ Lawrence, G.H.M. 1951. Taxonomy of Vascular Plants. Macmillan Company, New York.
- ✓ Puri, G.S. 1990. Forest Ecology Volume 1. Oxford IBH, New Delhi.
- ✓ Jain, S.K. 1981. Glimpses of Indian Ethnobotany. Oxford IBH, New Delhi.





REPORT ON STUDY TRIP TO RRTC UMRAN, MEGHALAYA BY STUDENTS OF BSC 3rd SEMESTER BOTANY DEPARTMENT, OF KIANG NANGBAH GOVERNMENT COLLEGE, JOWAI ON THE 20TH SEPTEMBER 2022.

The Rural Resource and Training Centre (RRTC), Umran, registered as St. Joseph's Agricultural Training Centre (SJATC), evolved into existence after several years of study and experimentation, as an answer to the critical problems that challenge the vast majority of the rural population of the Northeastern region specially Meghalaya. The most successful organic farming project in RRTC is "Sustainable Practice through Organic Agriculture in Ri-Bhoi District of Meghalaya"

RRTC has a rich experience in working with rural poor, especially by providing skills and training in the organic farming, livestock management, agriculture low-cost and appropriate technology and entrepreneurship in the field of Agriculture. The centre imparts training and exposure to groups comprising of youth, women and men farmers, young entrepreneurs, school and college students and Government officers from all eight states of North east India, numbering up to 5000 annually.

Our main objective of the visit was to get an exposure to an integrated rural development approach leading towards uplifting and empowerment of agricultural community in a sustainable manner in context of the Northeast India.



The B.Sc 3rd semester students of Botany Department. Kiang Nangbah Govt College, Jowai, took a one-day study tour programme to St Joseph Agricultural Training Centre, Rural Resource and Training Centre (RRTC), situated at Umran in the State of Meghalaya about 3- and a half hour drive from the College Campus. On the 20th August 2022 the College Bus boarded by about 70 pupil including Students and Faculty members departed from the college at 7.A.M sharp in the morning. We reached RRTC at 10.30 am where we were welcome by the programme coordinator Mr. Malcolm Nongpluh.

The students were then greeted by the Director of SJATC, RRTC, Umran, he addresses the participants and explain to them about the centre and the challenges they have face especially in terms of finance and marketing. Then the programme coordinator introduces all the participants to the instructors of the food and winery processing units where a lady instructor gave a short lecture on the techniques of how pickles, jams and many other items are

produced. Then we were guided to the Vermicomposting department where a gentleman



shares his knowledge and wisdom over his experienced over the years with vermicomposting about how Organic manure which is the source of organic matter and supply life to the soil as it contains micro and macro nutrients, growth promoters, vitamins, amino acids, etc. It includes animal manure, farm yard manure (FYM), Compost, Vermicompost etc. Also, there was an introductory speech about Nursery & Integrated Framing, then we headed on to the

sections where Dairy and Poultry are being taken care off, even here an instructor highlighted about how to carry on with poultry farming to generate income over wide range of productions. And finally, the instructor gave a good hands-off training on Bees keeping or Apiculture. All the instructor of different units spoke about their respective units, the cost of the production, processing, the market opportunities and challenges involved with



respect to each unit. The participants were able to interact with the instructors and were familiarise with the units and the industry of starting such ventures in the state. The programme ended at 4.00 pm and all the participants finally came back and reached the college at 8.00 pm. Overall, the exposure programme help the student's identity with the course curriculum and the agricultural and rural market which will empower them to come up with developing strategies in the field. The students gained a wide range of information and knowledge about the variety of programmes and projects and to have a firsthand experience of organic homestead farming, horticulture, floriculture, fishery, herbal and flower garden, dairy, poultry, piggery and food processing.



XX

For HOD Botany

[Handwritten Signature]

(Dr. B. R. Suchiang)
Asst. Prof.
Department of Botany



Field Trip to Rural Resource Training Centre (RRTC)
Umran, Ri-Bhoi
Department of Botany
Kiang Nangbah Government College, Jowai

ATTENDANCE

SL.NO.	ROLL NO	NAME OF STUDENT	SIGNATURE
1	S2102302	RIDASHISHA DHAR	R. Dhar
2	S2102303	JESSICA SHADAP	J. Shadap
3	S2102304	DEISHISHA SUCHIANG	D. Suchiang
4	S2102305	BTHELDA LYNGGDOH	B. Lyngdoh
5	S2102306	DAWANHI JOH	D. Joh
6	S2102307	GRESILIA LAMIN GADEW	G. Lamin
7	S2102308	BATRITY DKHAR	B. Dkhar
8	S2102309	HAKINIPAYA SIANGSHAI	H. Siangshai
9	S2102310	PHULBINA KHONGMAWLOH	P. Khongmauloh
10	S2102312	JASMINE LAMARE	J. Lamare
11	S2102313	PRECIOUSLY DKHAR	P. Dkhar
12	S2102314	PROMILA SYMBLAI	P. Symbalai



13	S2102315	TREKI DHAR	
14	S2102316	HANDAKARUPAYA SYIH	Hajih
15	S2102317	NAINA LIMBU	Naina
16	S2102318	JOYFULLY RYNGKHEM	J. Ryngkhem
17	S2102319	KYNTIEWNAPHI DKHAR	K. Dkhar
18	S2102320	SANTI SUCHIANG	S. Suchiang
19	S2102321	LAMPHRANG SUCHIANG	Suchiang
20	S2102322	LARUKINI LAMARE	Lam
21	S2102323	SHONGHOK BIAM	Shiam
22	S2102328	RIAKOR SUCHIANG	R. Suchiang
23	S2102331	LUCKYSTAR RYMBAI	Ry
24	S2102334	RIBHAKI SHYLLA	Ry
25	S2102349	RECOMFORT SHYLLA	Ry
26	S2102350	RIHAKANI DKHAR	R. Dkhar
27	S2102351	RITY DKHAR	
28	S2102352	SA O HI HINGE	S. Hinge



29	S2102353	DAMAPHIHI F DKHAR	
30	S2102354	GOURSITY SUTNGA	G. Sutnga
31	S2102355	PUSONBHA KHYRIEM	
32	S2102356	WANSAKA LANGBANG	W. Langbang
33	S2102357	SOKI DKHAR	S. Dhar
34	S2102360	BUROM TANG	
35	S2102361	SILVERSTER MURUH	
36	S2102363	RECONIA DHAR	R. Dhar
37	S2102364	IAHPHRANGKI LYNGDOH	
38	S2102366	DAMIKA SAJEM	D. Sajem
39	S2102367	SANKI DHAR	S. Dhar
40	S2102369	SHINING STAR LYNGDOH	
41	S2102371	SAKANIROI TARIANG	T. Tariang
42	S2102372	PYNTYRSHAIN WANKI SYNG	
43	S2102373	DAPLANGKI PASI	
44	S2102374	PYNTNGEN PASSAH	P. Passah



45	S2102462	YOHUN I KA LIAM	<i>Yiam</i>
46	S2102463	MERIMON PALE	<i>M. Pale</i>
47	S2102464	HAVINGSON SHYLLA	<i>Shylla</i>
48	S2102466	YOHIMITRE LYTAN	<i>Lytan</i>
49	S2102467	ELURA PYRTUH	<i>E. Pyrtuh.</i>
50	S2102468	NIWANSHWA LYNGDOH	<i>N. Lyngdoh.</i>
51	S2102469	SABATHANI RYMBAI	<i>S. Rymbai</i>
52	S2102470	MEWANHI BAREH	<i>Mzech</i>
53	S2102471	RIMIKA SIANGSHAI	<u><i>Rimika</i></u>
54	S2102473	RIKDUP KYNDIAH	<i>R. kyndiah</i>
55	S2102474	SHAKUNTALA MARBANIANG	<i>S. marbaniang</i>
56	S2102477	LUCY MERY MUTHLIANG	<u><i>Muthliang</i></u>
57	S2102478	DEIWITAWAN GYMPAD	<i>Gympad</i>
58	S2102479	REMEMBERME PHAWA	<i>R. Phawa</i>
59	S2102481	IAISANLANG SUIAM	<i>I. Suiam</i>
60	S2102482	VANGSAKSILI DARNEI	



61	S2102483	BIRANI SUIAM	B. Suiam
62	S2102484	BLESSME POHLONG	B. Pohlong
63	S2102485	POILIN LYNGDOH	P. Lyngtoh
64	S2102486	CONFIRMLY LANGSHIANG	C. Langshiang
65	S2102488	LASANBOR I TARIANG	L. Tariang
66	S2102489	JACKSON BIAM	J. Biam
67	S2102490	RIJUBAN PDE	R. Pde
68	S2102491	MANKORDOR LYNGDOH TALANG	M. Talang
69	S2102492	NIDAROI NONGRUM	N. Nongrum
70	S2102493	ELADMI LAPASAM	E. Laposam
71	S2102494	WANBHA PHAWA	W. Phawa
72	S2102495	EVACELINA LYNGDOH	E. Lyngtoh
73	S2102500	FIRSTBORN PASI	P. Pasi

Date: 20th September 2022.

A. Mawa
Head

Department of Botany
Kiang Nangbah Government College, Jowa