

EGRA SARADA SHASHI BHUSAN COLLEGE

ESTD. : 1968

(Reaccredited by NAAC with – ‘B’ Grade with a CGPA of 2.32)

An ISO Certified College for ISO 9001 : 2015 & ISO 14001 : 2015

Post – Egra : Dist – Purba Medinipur (West Bengal) : Pin – 721429.

President : Mr. Tarun Kumar Maity, M.L.A., W.B.

Principal : Dr. Dipak Kumar Tamili.

☎ : 03220-244073, Website - www.egrassbcollege.ac.in : E-mail – info@egrassbcollege.ac.in



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info@egrassbcollege.org.in

☎ – 03220-244073 / 245557

Fax – 03220245867.

Memo No.-

Date- 04.07.2022

DEPARTMENT OF BOTANY NOTICE FOR TEN DAYS CERTIFICATE COURSE on BIO-RESOURCE ACCOUNTING

It is here by notified that the Dept. of Botany of Egra S.S.B. College is going to organize an Inaugural Programme of ten days workshop on “*Bio-Resource Accounting*” on 11.07.2022 to 21.07.2022 at Department of Botany of Egra S.S.B. College at 11.00 am.

All the students of our college are here by informed to register their name at the Department of Botany within 09.07.2022 .

Copy to-
TCS
HC
NB of College
NB of Science Building
Student Union (Ad-Hoc)

Principal
Egra S.S.B College

Principal
EGRA S.S.B. COLLEGE
P.O.-Egra, Purba Medinipur

HOD
Department of Botany

Head of the Department of Botany
Egra S.S.B. College

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Memo No.-

Date- 04.07.2022

Name of the certificate course: Bio – Resources Accounting

No. of the course: one

Duration of the course: 10 Days

Date of inauguration: 11.07.2022

Date of completion: 21.07.2022

Syllabus of the course:

EGRA SARADA SASHI BHUSAN COLLEGE

CERTIFICATE COURSE ON “Bio – Resources Accounting”

SESSION: 2022

SYLLABUS

DURATION: 10 Days

Course	Course Name	Teaching Scheme in hours per week	
		Lectures	Practical
Certificate Course	Bio–ResourcesAccounting Unit:1 FUNDAMENTALS OF NATURAL RESOURCES Concept of resource, classification of natural resources. Factors influencing resource availability, distribution and uses. Interrelationships among different types of natural resources. Concern on Productivity issues. Ecological, social and economic dimension of resource management	3	

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	social and economic dimension of resource management		
	<p>Unit : 2 ECOLOGY, ECOSYSTEMS TOWARDS SUSTAINABILITY</p> <p>Introduction: Definitions, history and relevance, levels of ecology, types of ecosystem, abiotic and biotic environments, biotic – abiotic interactions, UNESCO scheme of soil classification. Population ecology: Population attributes, population changes, survivorship curves, growth models, demographic models, dispersion Community ecology: Community structure, two-species interactions, food webs, succession Ecosystems ecology: Climate and weather, energy flows, productivity, nutrient cycling, hydrological cycling, cycling index, biogeochemical cycles (C, N, P, S). Ecosystem conservation: Ecosystem degradation, ecosystems rehabilitation, watershed management, population abatement in lentic and lotic environments, forest types in India, forest management, wildlife management, protected area categories: national parks, sanctuaries, Community and biosphere reserves. Global ecology/ Threats to Ecosystems: Greenhouse effect and climate change, ozone depletion, ecosystems responses to long-term climate patterns Sustainability: Sustainability theory, the underlying ecological imperative, carrying capacity, sustainability and society (social justice, development, economy), Sustainable Forest, Management, Agenda-21 and UNEP programmes</p>	6	

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	<p>towards sustainable development.</p> <p>Unit 3: BIODIVERSITY AND BIOSYSTEMATICS</p> <p>Introduction to biodiversity: Definition, components, scope, and constraints of biodiversity (genetic diversity, species diversity, ecosystem diversity – agrobiodiversity, urban – peri-urban biodiversity), forest biodiversity; biodiversity indices, threats to biodiversity.</p> <p>Plant and animal taxonomy and systematics: Brief history and definition, the importance of taxonomy in Natural Resource Management, national and international organizations associated with taxonomic studies.</p> <p>Theory and practice of biological classification: Definition and problems of the species concept, intraspecific categories, super species, population structure and taxonomic challenges, 13 phenetic, cladistic and evolutionary concepts involved in nomenclature, taxonomic hierarchy.</p> <p>Unit :4 ENVIRONMENT, ENERGY AND TECHNOLOGY</p> <p>Introduction to energy: Definition and units of energy, power, forms of energy, second law of thermodynamics, solar spectrum, solar radiation, extraterrestrial radiation, effect of atmosphere, estimation of solar radiation on horizontal and tilted surface analysis of Indian solar radiation data and applications</p> <p>Environmental impacts: Fossil fuel impacts and patterns of consumption, renewable electricity and key elements, global climate change, CO₂ and renewable</p>	<p>6</p> <p>6</p>	
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	<p>(BOD), chemical oxygen demand (COD), total dissolved solids (TDS), Ph, turbidity, hardness, heavy metals</p> <p>Soil Analyses: Soil Ph, conductivity, moisture content, soil organic carbon content, dead wood and forest litter carbon estimation.</p> <p>Fuel technology- proximate analysis of fuel (coal, wood samples), calorific values of solid and liquid fuel.</p> <p>Rocks and minerals- identification of various types, forms their characteristics</p> <p>Atmosphere Analyses: Sox, Nox, and suspended particulate matters, carbon dioxide content of a gas sample and climate change</p>		
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Principal
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Class Routine:

EGRA SARADA SASHI BHUSAN COLLEGE
DEPARTMENT OF BOTANY
CERTIFICATE COURSE ON “Bio – Resources Accounting”
SESSION: 2022
DATE: 11.07.2022-21.07.2022

DAY	10.15-11.15	11.15-12.15	12.15-1.15	1.15-2.15	2.15-3.15	3.15-4.15	4.15-5.15
MON	Theory(MK)				Theory(S.R)	Theory(RB)	
TUE	Theory(MK)				Theory(BP)	Theory(MP)	
WED	Theory(MP)				Theory(S.R)	Theory(MK)	
THURS	Theory(RB)				Theory(BP)	Theory(MP)	
FRI	Theory(S.Roy)				Practical(MK)		
SAT	Theory(MP)				Practical(MP)		

MP- Prof.Maniklal Pati ; MK-Prof. Mamtaj Khatun; SR- Prof. Sambhu Rana; RB- Prof. Rachana Bera; BP- Prof Biswajit Pradhan; S.Roy- Prof- Saswati Roy




Principal,
EGRA SARADA SASHI BHUSAN COLLEGE
Purba Medinipur

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Course Outcomes:

- Integrate the essential principles of physical, chemical, biological, and ecological sciences to manage ecosystems and solve environmental problems;
- Know biogeochemical, energy, hydrologic, population, and community patterns and processes in coastal landscapes and ecosystems;
- use contemporary tools and techniques for studying ecosystems;
- Be familiar with a variety of laws and regulations that influence how natural resources are used and protected;
- Understand the impacts of land use and environmental management decisions on ecosystems and society; and
- Meet or exceed the standards applied by professional societies (e.g., Wetland Scientists, Soil Science Society).
- Identify environmental problems, evaluate problem-solving strategies, and develop science-based solutions; and
- Understand the need to integrate relevant social sciences (e.g., environmental planning, policy, law, economics) in environmental problem-solving.



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List of Participants:

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Col/Comp	Sam/Name	Studentid	RollNo	Clas	Gender	Use/Mobile
(S)BOTANY(VI)	1 ANJANA MAHAPATRA	2021-1744	26	GF	FEMALE	70619346020
(S)BOTANY(VI)	1 ANANYA JANA	2021-0517	318	GF	FEMALE	8167231825
(S)BOTANY(VI)	1 ANANDYA BERA	2021-1854	7	GF	FEMALE	9547902480
(S)BOTANY(VI)	1 ANINDITA MAITY	2021-1519	53	GF	FEMALE	7501790983
(S)BOTANY(VI)	1 ANNESHWYA PATRA	2021-2061	321	GF	FEMALE	7001503113
(S)BOTANY(VI)	1 ARPIYA JANA	2021-1310	75	GF	FEMALE	9002008558
(S)BOTANY(VI)	1 ARPIYA DHARA	2021-1180	112	GF	FEMALE	1708131806
(S)BOTANY(VI)	1 BAIKASHI MAITY	2021-1182	111	GF	FEMALE	7602991948
(S)BOTANY(VI)	1 BANGSI MAITY	2021-1587	88	GF	FEMALE	7508089152
(S)BOTANY(VI)	1 BASANTI SHET	2021-1565	314	GF	FEMALE	8972419804
(S)BOTANY(VI)	1 BHARWATI PRADHAN	2021-1587	8	GF	FEMALE	7477317600
(S)BOTANY(VI)	1 SHREYA PAKARI	2021-1718	24	GF	FEMALE	7161976929
(S)BOTANY(VI)	1 KAKALI SAMRA	2021-1306	78	GF	FEMALE	8642710189
(S)BOTANY(VI)	1 KALYANI DAS	2021-1275	48	GF	FEMALE	951300303
(S)BOTANY(VI)	1 KAMALATA NAJIB	2021-1355	45	GF	FEMALE	7001934256
(S)BOTANY(VI)	1 KANCHANLA PATRA	2021-1738	31	GF	FEMALE	8350620571
(S)BOTANY(VI)	1 MOUSUMI SAHOO	2021-1469	1	GF	FEMALE	7602185646
(S)BOTANY(VI)	1 PARICHITA MAHAPATRA	2021-1492	27	GF	FEMALE	8651102485
(S)BOTANY(VI)	1 PUSPITA PANDE	2021-1643	34	GF	FEMALE	8295256012
(S)BOTANY(VI)	1 RIYA AXIA	2021-1518	54	GF	FEMALE	8598217473
(S)BOTANY(VI)	1 ROKAYA KHATUN	2021-1488	59	GF	FEMALE	923263733
(S)BOTANY(VI)	1 SAHIL DAS	2021-1492	391	GF	FEMALE	7602731506
(S)BOTANY(VI)	1 SAMPA BHUNIA	2021-1241	96	GF	FEMALE	9503003040
(S)BOTANY(VI)	1 SAMPITI MAITY	2021-1223	101	GF	FEMALE	7272138639
(S)BOTANY(VI)	1 SASSWATI MAITY	2021-1177	114	GF	FEMALE	7364813612
(S)BOTANY(VI)	1 SUBANTI MAHAPATRA	2021-1739	80	GF	FEMALE	7602742710
(S)BOTANY(VI)	1 SUBARNA JANA	2021-1605	17	GF	FEMALE	9564708240
(S)BOTANY(VI)	1 SUSMITA PRADHAN	2021-1225	100	GF	FEMALE	7001849488
(S)BOTANY(VI)	1 SUSMITA DAS	2021-0147	93	GF	FEMALE	9832701192
(S)BOTANY(VI)	1 SUSMITA DAS	2021-1316	71	GF	FEMALE	8101903543
(S)BOTANY(VI)	1 SWARNALATA SINGHA	2021-1248	316	GF	FEMALE	6295033504
(S)BOTANY(VI)	1 TANAYA DAS	2021-1513	56	GF	FEMALE	7602182662
(S)BOTANY(VI)	1 TANUSREE MAITY	2021-1833	6	GF	FEMALE	9679810777
(S)BOTANY(VI)	1 ABHINANDAN JANA	2021-1164	118	GF	MALE	85099391925
(S)BOTANY(VI)	1 BIRNAS MAITY	2021-1198	109	GF	MALE	954543878
(S)BOTANY(VI)	1 CHIRANJIT BHUNIA	2021-1207	105	GF	MALE	8927430581
(S)BOTANY(VI)	1 DEBABRATA PAHARI	2021-1970	292	GF	MALE	9773800156
(S)BOTANY(VI)	1 DEBANKAR BARUI	2021-1350	29	GF	MALE	9064173354
(S)BOTANY(VI)	1 JAGAT CHINTANONI PRAMANIK	2021-1137	124	GF	MALE	8479913379
(S)BOTANY(VI)	1 BARTI MANN	2021-1282	84	GF	MALE	9091165369
(S)BOTANY(VI)	1 SANJANU BAYRA	2021-1649	319	GF	MALE	9883097228
(S)BOTANY(VI)	1 SANTANA DAS	2021-1109	147	GF	MALE	9635712740
(S)BOTANY(VI)	1 SUBHAM PANDE	2021-1376	135	GF	MALE	9907177959
(S)BOTANY(VI)	1 SUBRATA KAN	2021-1256	91	GF	MALE	9593619444
(S)BOTANY(VI)	1 SUDRCHA SUBRINA JANA	2021-1313	74	GF	MALE	9907485400
(S)BOTANY(VI)	1 ANITA BARUI	2021-0098	126	GF	FEMALE	8391005148
(S)BOTANY(VI)	1 BARNAJI PRAMANIK	2021-1749	25	GF	FEMALE	9643169366
(S)BOTANY(VI)	1 PIYU JANA	2021-0645	185	GF	FEMALE	900266692
(S)BOTANY(VI)	1 SANCHARI SHET	2021-0255	124	GF	FEMALE	9139143099
(S)BOTANY(VI)	1 SHRITA BAR	2021-1844	8	GF	FEMALE	9832702334
(S)BOTANY(VI)	1 MANIK GHOSAI	2021-1121	119	GF	MALE	8116352975
(S)BOTANY(VI)	1 ANITA DAS	2020-1191	162	GF	FEMALE	760272855
(S)BOTANY(VI)	1 ROSHA SARMAL	2020-1877	304	GF	FEMALE	6294111196
(S)BOTANY(VI)	1 MANINDIA PATRA	2020-113	34	GF	FEMALE	9732921963
(S)BOTANY(VI)	1 PARANJITA SAHAYATA	2020-286	27	GF	FEMALE	9151842177
(S)BOTANY(VI)	1 BITUPARNA BHANDAL	2020-172	332	GF	FEMALE	6291853854
(S)BOTANY(VI)	1 SANGITA GIRI	2020-1453	211	GF	FEMALE	9635545188
(S)BOTANY(VI)	1 SANGITA KHATI	2020-2037	322	GF	FEMALE	6296509917
(S)BOTANY(VI)	1 SATYI JANA	2020-332	13	GF	FEMALE	6297726366
(S)BOTANY(VI)	1 SUSMITA KARAN	2020-132	39	GF	FEMALE	8145132503
(S)BOTANY(VI)	1 TRINAJANA SAHOO	2020-264	331	GF	FEMALE	7346495424
(S)BOTANY(VI)	1 TRIPATI CHAKRABARTY	2020-1493	232	GF	FEMALE	8101206807
(S)BOTANY(VI)	1 KOLUSHEE SAHAJATA	2020-1503	238	GF	MALE	7427743174
(S)BOTANY(VI)	1 PRANAV GIRI	2020-121	32	GF	MALE	7488025597
(S)BOTANY(VI)	1 SUBRANJAN SAHAYATI	2020-1410	163	GF	MALE	6296133518
(S)BOTANY(VI)	1 SUTANAY MAHAPATRA	2020-1434	226	GF	MALE	7047038058
(S)BOTANY(VI)	1 KARITA SAHOO	2020-1342	247	GF	FEMALE	6297732483
(S)BOTANY(VI)	1 JAYAN KARAN	2020-254	25	GF	MALE	6296525847
(S)BOTANY(VI)	1 SUSIP SAHOO	2020-992	147	GF	MALE	8902999315
(S)BOTANY(VI)	1 PIVALI PRAMANIK	2020-68	1	GF	FEMALE	9883885207
(S)BOTANY(VI)	1 PARANJITA JOSHI	2019-1327	135	GF	FEMALE	8477577407
(S)BOTANY(VI)	1 SIBRILATA DAS	2019-1984	326	GF	FEMALE	84988717812

(S)BOTANY(VI)	1 SPUJA SAHOO	2019-1892	160	GF	FEMALE	##738161615
(S)BOTANY(VI)	1 SUSMITA MAITY	2019-862	108	GF	FEMALE	##809451889
(S)BOTANY(VI)	1 SUSMITA PATRA	2019-1280	318	GF	FEMALE	##810100039
(S)BOTANY(VI)	1 SANKARDEVI DAS	2019-892	130	GF	MALE	##844879246
(S)BOTANY(VI)	1 SBIYATI DAS	2019-369	109	GF	MALE	##829713442
(S)BOTANY(VI)	1 SIBANGOLU SARANGI	2019-955	81	GF	MALE	##882252505
(S)BOTANY(VI)	1 SAMADHYA MEITY	2019-2010	170	GF	MALE	##820039317
(S)BOTANY(VI)	1 SAKETI MAITRA KHAMMAN	2019-2311	376	GF	MALE	##824497717
(S)BOTANY(VI)	1 SOUNHATA DEY	2019-2316	370	GF	MALE	##873275203
(S)BOTANY(VI)	1 SUBHARJEET PANDE	2019-1967	313	GF	MALE	##718440090
(S)BOTANY(VI)	1 SUBHASI BERA	2019-2045	348	GF	MALE	##891893298
(S)BOTANY(VI)	1 SUBRATA DUTTA	2019-2063	317	GF	MALE	##807832420
(S)BOTANY(VI)	1 SAMPAN BAR	2019-2130	314	GF	MALE	##819397486
(S)BOTANY(VI)	1 SUPRINA MONDAL	2019-499	147	GF	MALE	##707472478
(S)BOTANY(VI)	1 SANDIPAN JANA	2019-1387	143	GF	MALE	##702062667



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Pic:3. Certificate given by Dr. Janesh Ranjan Bhattacharya and Dr. Maniklal Pati



Pic: 4. Certificate given by Dr. Mamtaj Khatun and Dr. Dipak Bisoi

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Pic: 1. Lecture delivered by Mr. Biswajit Pradhan



Pic: 2. Lecture delivered by Mr. Shambhu Rana