



NARAJOLE RAJ COLLEGE
(NAAC Accredited 'B' Grade Government-Aided College)
NARAJOLE: PASCHIM MEDINIPUR: PIN-721211
E-mail: narajolerajcollege@rediffmail.com
Website: <http://narajolerajcollege.ac.in/>



Indian Knowledge System: 2022-2023

SUBJECT: BENGALI		
PAPER TITLE	PAPER CODE	SPECIFY FOCUS AREA
1. Bhasar Itihas O Parichay	101(PG)	Origin and development of Old Indo Aryan, Middle Indo Aryan & Neo Indo Aryan languages; Origin and development of Bengali inscription.
2. Madhya Juger Sahitya Dhara	102(PG)	Discussions on medieval Bengali culture, history, religion, and philosophy.
3. Prachya Sahitya Tatwa	402(PG)	Discussions on ancient Indian aesthetics.
4. Loksahitya – Sanskriti Tatwa O Path	405-E (PG)	Discussions on Indian folk lore and Bengali Folk literature.
5. Bangla Bhasar Udbhob O Parichay	C1T (H – UG)	Origin and development of Old Indo Aryan, Middle Indo Aryan & Neo Indo Aryan languages.
6. Bangla Sahityer Itihas (Prachin O Madhya Jug)	C2T (H – UG)	History of old and medieval Bengali literature and culture)
7. Prachin Sahitya Tatwa o Sahitya Tatwik	DSE 1T (H – UG)	Discussions on Ancient Indian aesthetics and scholars.
8. Kabyatatwa, Paschatya Sahitya	C12 T	Textual reading of ancient Indian aesthetics.



Samalochona Tatwao Sahityer Rup Riti		
9. Lok Sahitya	C13T	Discussions on Indian folk lore and Bengali Folk literature.
10. Sanskrit, English o pratibesi Sahityer Itihas	C14T	History of Sanskrit literature.
11. Banglar Bhukhando, Jatir Utpottio Dhormo o Sanskritir Itihas	GE1T	Discussions on ancient Bengal; origin of Bengali people; origin and development of Bengali religion and culture.

SUBJECT: BOTANY

PAPER TITLE	PAPER CODE	SPECIFY FOCUS AREA
1. Ethnobotany	SEC-3	Scope, objectives of ethnobotany; Major and minor ethnic groups or tribals of India; Methodology of ethnobotanical studies; Role of ethnobotany in modern medicine; Legal aspects of ethnobotany;
2. Medicinal Botany	SEC-4	Scope of Ayurveda, Siddha, Unani; Conservation of endangered and endemic medicinal plants; Ex-situ and in-situ conservation; Propagation of medicinal plants; Ethnobotany and folk medicines; Application of natural products to certain diseases;

SUBJECT: PHILOSOPHY

PAPER TITLE	PAPER CODE	SPECIFY FOCUS AREA
1. Indian Philosophy	C1T	Introduction



		The Vedas The Upanisads Astika and Nastika Schools
2. Ethics : Indian and Western	GE1T	Four Purusarthas – Dharma, Artha, Karma and Moksa and their interrelation. Karma (Sakama and Niskama)
3. Ethics (Indian)	C12T	Introduction: Karmayoga (Gita) Purusarthas and their interrelations. Meaning of Dharma, concept of rna and rta. Classification of Dharma: Sadharanadharma and Asadharana Dharma, Varnasrama Dharma Vidhi and Nisedha Buddhist Ethics: Pancasila, Brahmaviharabhavana, Ahimsa. Jaina Ethics: Anubrata, Mahabrata Mimamsa Ethics: Nityanaimittika Karma and Kamy Karma, the imperative in Kamy karmas and in kamyakarmas involving himsa
SUBJECT: EDUCATION		
PAPER TITLE	PAPER CODE	SPECIFY FOCUS AREA
Value Based Education	GE4T	Traditional Value -Purushartha, Satyam Shivam Sundaram, ahimshaprem and karma, tyaga and lokasangraha
SUBJECT: HISTORY		
PAPER TITLE	PAPER CODE	SPECIFY FOCUS AREA
1. Early Historic India(Proto History to 6th Century BC)	C2	The focus area is the Idea of Bharatavarsha: Indian subcontinent with all its diversity and cultural tradition.



		Paper discusses Political development culture and rituals in the Vedic Age. Paper also discusses about Ancient Indian Language and Literature. Course provides knowledge on Vedas, Brahmanas and Upanishads. Course also focuses on the Philosophy of unorthodox sects like Buddhism and Jainism in Ancient India.
2. Mauryan and Gupta Empire	C ₃	Course focuses on socio cultural aspects on Mauryan and Gupta Empire.
3. Political History of Early medieval phase in the Indian history	C ₄	Course focuses on different perception on the early medieval religious, culture and archaeology base knowledge in India.
4. Understanding Heritage	SEC ₂	Course provides knowledge on Evolution of Heritage, archaeology, tangible heritage, intangible heritage and Art treasure in Ancient India.

SUBJECT: SANSKRIT

PAPER TITLE	PAPER CODE	SPECIFY FOCUS AREA
1. Classical Sanskrit Literature	CC-1	Poetry & History of Sanskrit Literature
2. Classical Sanskrit Literature	CC-2	Prose & History of Sanskrit Literature
3. Basic Sanskrit	GE-1	Grammar
4. Sanskrit Poetry	DSC-1A/2A	Poetry & History of Sanskrit Literature
5. Critical Survey of Sanskrit Literature	CC-3	History of Sanskrit Literature
6. Self Management in the Gita	CC-4	Ideas about the Gita
7. Sanskrit and other Modern Indian Literature	GE-2	Linguistics
9. Sanskrit Prose	DSC-1B/2B	Prose & History of Sanskrit Literature
10. Classical Sanskrit	CC-5	Drama & History of Sanskrit



Literature		Literature
11. Poetics and Literary Criticism	CC-6	Poetics, Chhanda & Alamkara
12. Indian Social Institution and Polity	CC-7	Ancient Indian Society & Polity
13. Acting and Script Writing	SEC-1	Dramaturgy
14. Ancient Indian Polity	GE-3	Indian Polity
15. Sanskrit Drama	DSC-1C	Drama & History of Sanskrit Literature
16. Indian Epigraphy, Paleography and 17. Chronology	CC-8	Indian Epigraphy
18. Modern Sanskrit literature	CC-9	Modern Sanskrit
19. Basic Principles of Indian Medicine 20. System	GE-4	Ayurveda
21. Sanskrit Grammar	DSC-1D/2D	Grammar
22. Basic Elements of Ayurveda	GEN SEC-2	Ayurveda
23. Vedic Literature	CC-11	Veda & Upanisada
24. Sanskrit Grammar	CC-12	Grammar
25. Art of Balanced Living	DSE-1	Philosophy
26. Theatre and Dramaturgy in Sanskrit	DSE_2	Indian Theatre & Dramaturgy
27. Philosophy, Religion and Culture in 28. Sanskrit Tradition	GEN DSE-1A	Philosophy & Religion
29. Basic Elements of Jyotisha	GEN SEC-3	Indian Astrology
30. Political Thoughts in Sanskrit	GEN GE-1	Indian Political Thought
31. Ontology and Epistemology	CC-13	Philosophy
32. Sanskrit Linguistics	DSE-3A/3B	Linguistics



33. Fundamentals of Ayurveda	DSE-4B/4B	Ayurveda
SUBJECT: POLITICAL SCIENCE		
PAPER TITLE	PAPER CODE	SPECIFY FOCUS AREA
Indian Political Thought-I	CC12	Traditions of Pre-Colonial Indian Political Thought (Brahmanic , Shramanic, Islamic, Syncretic, Ved Vyasa , Manu-Social Laws, Kautilya: Theory of State. Aggannasutta- Theory of Kinship, Barani, Abul Fazal –Monarchy, Kabir Syncretism
SUBJECT: ENGLISH		
PAPER TITLE	PAPER CODE	SPECIFY FOCUS AREA
Indian Classical Literature	CC13	Rasa Theory Different Bhabas Different kinds of Rupaka Prakarana Status of women in ancient India Social life Penchant for fine arts. Position of Prostitute Law and order in ancient India Bharat Muni’s Natyashstra, specifically the theory of Rasa. A holistic idea of Dharma that defines human existence.





NARAJOLE RAJ COLLEGE

AFFILIATED BY VIDYASAGAR UNIVERSITY

ACCREDITED GRADE B BY NAAC

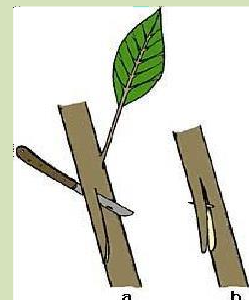
MEDICINAL

CONSERVATION

PROPAGATION & USES

ORGANIZED BY THE DEPARTMENT OF BOTANY

NARAJOLE RAJ COLLEGE



AN IQAC INITIATIVE

OBJECTIVES OF THE COURSE:

- To know about the endangered and endemic medicinal plants;
- To identify the importance of the medicinal plants;
- Hand on-ex-situ conservation;
- To expertising in the technique of propagation;
- To prepare medicine for the treatment of some common diseases.

SYLLABUS:

1. Importance of Medicinal Plants
2. Classification of medicinal plants (on the basis of existence)
 - A. Endangered (definition, example)
 - B. Endemic (definition, example)
3. Conservation
 - A. In situ conservation
 - B. Ex situ conservation
4. Ethnomedicinal plant garden
 - A. Preparation of bed
 - B. Plantation
 - C. Manuring
 - D. Watering
 - E. Nourishment
5. Propagation
 - A. Cutting
 - B. Layering
 - C. Grafting
 - D. Budding
6. Uses: Identifying plants for the treatment of:
 - A. Diabetes
 - B. Skin diseases
 - C. Diarrhoea
 - D. Cough/cold
 - E. Flatulence

SCHEDULE:

Total course duration of 30 hours will be scheduled from November 2022. The classes will be both the theory and practical based.



ELIGIBILITY:

The applicant must be the student of this college, opened for every department and all semesters.

REGISTRATION/APPLICATIONPROCEDURE:

The application is to be done through the departmental Heads. Not more than 30 candidates will be selected for the above schedule course from the entire college.

FEE PAYMENT: Rs100

EVALUATION:

After the completion of the course a timely evaluation will be conducted which will be theoretical based or

non-theoretical based.

CERTIFICATION:

Certification will be done to the candidates who will go through the evaluation procedure. The certificate will contain the grades which will signify their level of interest and performance in the proposed course.

ABOUT THE DEPARTMENT OF BOTANY:

The department of Botany is one of the finest departments of Narajole Raj College. The course was introduced in the year 1991 as a pass course subject. In the year 2002 it introduced its first honours courses. The students and the teachers work very hard for the overall development of the department. Every year the students pass the Vidyasagar University examination with flying colours.

ABOUT THE IQAC:

The Internal Quality Assurance Cell (IQAC) has been conceived by NAAC for the purpose of quality enhancement and sustenance within institutions. The prime task of the IQAC is to



develop a system for conscious, consistent and catalytic improvement in the overall performance of the college. The Add-On-Course (AOC) is an initiative taken by the IQAC of Narajole

Raj College and will be administered as

a Certificate Course by different academic departments to facilitate skill development among stu

FACULTY OF THE COURSE

	<ul style="list-style-type: none">• Professor Nandita Bhakat, Assistant Professor & HOD Dept of Botany, Teaching experience 6 yrs mailid: nandita@narajolerajcollege.ac.in
	<ul style="list-style-type: none">• Professor Sanjay Kumar Dutta, State Aided College Teacher, Dept of Botany, Teaching experience 25 yrs mailid: sanjay@narajolerajcollege.ac.in
	<ul style="list-style-type: none">• Professor Bangamoti Hansda, Assistant Professor, Dept of Botany, Teaching experience 2 yrs mail id: bangamoti@narajolerajcollege.ac.in



- Dr. Arpita Chakraborty, State Aided College Teacher, Dept of Botany, Teaching experience 12 yrs
mailid:arpita@narajolerajcollege.ac.in



- Dr Uttam Kumar Kanp, Assistant Professor, Dept of Botany, Teaching experience 12 yrs.
mailid:uttam@narajolerajcollege.ac.in



- Dr Prithwi Ghosh, Assistant Professor, Dept of Botany, Teaching experience 2 yrs
mailid:prithwi@narajolerajcollege.ac.in



NARAJOLE RAJ COLLEGE
(NAAC Accredited B Grade Govt. – Aided College)
NARAJOLE- PASCHIM MEDINIPUR. PIN-721211



Dept. of Political Science

Proposal of Add on Course

Title :Indian Constitution and Polity

Introduction: Department of Political Science has resolved in its Departmental meeting dated 17th February 2023(Agenda No 2.) to offer an Add On Course entitled “Indian Constitution and Polity” for the students of all Departments of Humanities and Science. In the present syllabus (CBCS), Indian constitution has been incorporated in the Core Course C2T. Students of Political Science (CC) can be enriched through this Core course. But the students of other departments who are the citizens and the credible administrators or people representatives or holders of the public office should know our constitution. Keeping this in view our aim is to give them an opportunity to study the basic principles of our constitution and issues of Indian Politics through this Add on Course.

Objectives :We, know that a Constitution outlines the fundamental principles of our civilization and serves as a collection of laws and standards that the citizens of a nation should rely upon as the foundation for how the country should be ruled. It also lays down limits on the power of the government so that the fundamental rights of the citizens would not be violated. The fundamental duties of the citizens are also mentioned in the Constitution. The Constitution of India is not an exception. So the study of Indian Constitution is of utmost need and important for all citizens. It also helps our students for their preparation of competitive examination.





NARAJOLE RAJ COLLEGE
(NAAC Accredited B Grade Govt. – Aided College)
NARAJOLE- PASCHIM MEDINIPUR. PIN- 721211



Department of Political Science

Indian Constitution and Polity (Add-on Course)

Course Duration : 3 Months

Course Contents

Unit-1 : Constitutional Framework

- A : Historical Background and Making of the Indian Constitution.
- B : Basic Features of the Indian Constitution.
- C : Preamble
- D : The Union and Its Territories
- E : Citizenship
- F : Fundamental Rights and Duties
- G : Directive Principles of State Policy
- H : Amendment of the Constitution- Basic Structure.

Unit -2 : System of Government

- A : Parliamentary System and Federal System
- B : Inter-State Relations

Unit -3 : Central Government

- A : President and Vice-President
- B : Prime Minister and Council of Ministers
- C : Parliament
- D : Supreme Court



Unit -4 : State Government

- A : Governor
- B : Chief Minister and Council of Ministers
- C : State Legislature
- D : High Courts

Unit -5 : Local Self Government

- A : Panchayati Raj
- B : Municipalities

Unit -6 : Constitutional Bodies

- A : Election Commission
- B : UPSC
- C : SPSC

Course Coordinator






NARAJOLE RAJ COLLEGE
(NAAC Accredited B Grade Govt. - Aided College)
NARAJOLE- PASCHIM MEDINIPUR- PIN-721211



2. Name of the joint Course Coordinator & brief bio :Prof.Supen Sarkar, Assistant Professor of Political Science, and Prof.PrasenjtitSenapoti (SACT)of Political Science


3. Name/s of Faculty Members involved in the course & brief bios :

Sl.No	Photo	Name	Designation
1.		Dr.RajasreeDebnath	Associate Professor, Dept. of Political Science
2.		Dr.TanukaAcharjya	Associate Professor, Dept. of Philosophy
3.		Prof. Soma Debray	Assistant Professor, Dept. of English
4.		Prof.BaishaliGuha	Assistant Professor, Dept. of History
5.		Prof.SingrayTudu	Assistant Professor, Dept. of Philosophy
6.		Prof.MilionMondal	Assistant Professor, Dept. of English
7.		Prof.BholanathMahato	Assistant Professor, Dept. of Philosophy
8.		Prof.Supen Sarkar	Assistant Professor, Dept. of Political Science
9.		Prof.Barun Rout	SACT, Dept. of Political Science
10.		Prof.PrasenjtitSenapoti	SACT, Dept. of Political Science
11.		Prof.Bhaktipoda Jana	SACT, Dept. of History



NARAJOLE RAJ COLLEGE
(NAAC Accredited B Grade Govt. - Aided College)
NARAJOLE- PASCHIM MEDINIPUR- PIN- 721211



12.		<i>Prof. Bilash Samanta</i>	<i>Assistant Professor, Dept. of History</i>
13..		<i>Prof. Manas Barik</i>	<i>SACT, Dept. of English</i>

4. *Proposed schedule (mention the months of the year) : May 2023 to June 2023*

5. *Lecture outline of the AOC (please list the lecture topics and the names of the faculty)*





Department of Political Science

Indian Constitution and Polity (Add-on Course)

TIME TABLE

(With effect from 03-05-2023 to 30-06-2023)

Date & Day	Paper & Unit No.	Resource Person with designation	No of Classes	TIME
03/ 05/2023	Inauguration Speech	Indian Constitution and Polity : An Overview- Dr RaajasreeDebnath	1	10.00 a.m.
04/ 05 /2023 11/ 05 /2023	Unit-1 A : Historical Background and Making of the Indian Constitution.	Dr. Bhakti Pada Jana	2	10.00 a.m.
18/ 05 /2023	B : Basic Features of the Indian Constitution.	Dr. Bhakti Pada Jana	1	10.00 a.m.
06/ 06 /2023	C : Preamble	Prof.SingrayTudu	1	10.00 a.m.
27/ 05 /2023	D : The Union and Its Territories	Prof.Supen Sarkar	1	10.00 a.m.
07/ 06 /2023	E : Citizenship	Dr.BholanathMahato	1	10.00 a.m.
08/ 05 /2023	F : Fundamental Rights and Duties	Prof. Milan Mondal	1	10.00 a.m.
10/ 06 /2023	G : Directive Principles of State Policy	Dr.TanukaAcharjya	1	10.00 a.m.
24/ 05 /2023	H : Amendment of the Constitution- Basic Structure.	Prof.Supen Sarkar	1	10.00 a.m.
10/ 05 /2023	Unit-2 A : Parliamentary System and Federal System	Dr RaajasreeDebnath	1	10.00 a.m.
16/ 05 /2023	B : Inter-State Relations	Dr RaajasreeDebnath	1	10.00 a.m.
26/ 05 /2023	Unit-3 A : President and Vice-President	Prof.PrasenjitSenapoti	1	10.00 a.m.
29/ 05 /2023	B : Prime Minister and Council of Ministers	Prof.PrasenjitSenapoti	1	10.00 a.m.
01/ 06 /2023	C : Parliament	Prof.PrasenjitSenapoti	1	10.00 a.m.
20/ 05 /2023	D : Supreme Court	Prof.BilasSamanta	1	10.00 a.m.
22/ 05 /2023	Unit-4 A : Governor	Prof.BaishaliGuha	1	10.00 a.m.
09/ 06 /2023	B : Chief Minister and Council of Ministers	Prof.PrasenjitSenapoti	1	10.00 a.m.
05/06/2023	C : State Legislature	Dr RaajasreeDebnath	1	10.00 a.m.
03/ 06 /2023	D : High Courts	Prof.Supen Sarkar	1	10.00 a.m.
13/ 05 /2023	Unit-5 A : Panchayati Raj	Prof.ManasBarik	1	10.00 a.m.
14/ 06 /2023	B : Municipalities	Prof.Supen Sarkar	1	10.00 a.m.
17/ 05 /2023	Unit-6 A : Election Commission	Prof.Supen Sarkar	1	10.00 a.m.
13/ 06 /2023	B : UPSC	Prof.Supen Sarkar	1	10.00 a.m.
15/ 06 /2023	C : SPSC	Prof.PrasenjitSenapoti	1	10.00 a.m.
	Doubt clearing session & Revision	As per the need of the Students	1	10.00 a.m.
	Doubt clearing session & Revision.	As per the need of the Students	1	10.00 a.m.
	Doubt clearing session & Revision.	As per the need of the Students	1	10.00 a.m.
	Valedictory Speech	28/06/2023	1	
	Total Classes		29	

Inauguration Speech : Indian Constitution and Polity : An Overview (Dr RaajasreeDebnath)

Valedictory Speech:





NARAJOLE RAJ COLLEGE
(NAAC Accredited B Grade Govt. - Aided College)
NARAJOLE- PASCHIM MEDINIPUR. PIN- 721211



6. Mechanism for Evaluation & Assessment: MCQ Test on 50 marks

7. Budget Estimation: Rs. 2000/-

i) Remuneration and TA of the BOS (1000)

ii) Contingency (Printing, Paper etc.): Rs. 1000/-

Prof. Supen Sarkar & Prof. Prasenjit Senapati

Dept. of Political Science, Narajole Raj College





Objective of the Course:

1. An approach towards practicing writing skills.
2. Enhancing cooperative skills.
3. Rejuvenating imagination skill towards a wider range.
4. Improving writing techniques by gathering experience.

Learning Outcome:

After completion of the course:

1. Students may develop a better expression of their experiences.
2. Writing ability of the students will be enhanced.
3. Inculcation of their creativity will be rightly explored.
4. Along with academia students may find their career in creative world like literature, , film, social media etc.

Syllabus: Creative Writing

Course Duration: 3 months

32 contact hours along with evaluations.

Part A: Basic Theory -

- | | |
|---|------------|
| 1. What is creative writing? | 1lecture |
| 2. Characteristics of good writing. | 1lecture |
| 3. Figurative language, Imagery, Rhyme. | 3 lectures |
| 4. Style | 2 lectures |

Part B : 'Mind which creates' -

- | | |
|--|------------|
| 1. What is Poetic inspiration? | 1lecture |
| 2. Selected writings of eminent writers explaining poetic inspiration: Students have to read | 3 lectures |

Selected essays of -

- a. Rabindranath: Jibonsmiriti (Prabhat Sangeet)





- b. Jibonanda Das: Kobitar Kotha (Kobitar Kotha)
3. Students have to read some specimen of Creative Writing along with their explanations: 7 lectures
- Shankha Ghosh: Kobitar muhurto
 - Jokhon Dakghor Achhe Amal nei a drama by Subhasis Gangopadhyaya (transformation of a creation into re-creation)
 - . Nante – Fante by Narayan Debnath
 - Purono kolkatar golpo – a dedicated Bengali blog to discuss on history and culture of old Kolkata.

Part C: Skill development Classes on

- Writing of Pure literature (novel, short stories, poem, drama, biography) 6 classes
- Writing of Critical Appreciation 2 classes
- Media writing – Reportage, Screenplay, Blog writing and its tools and techniques. 4 classes

Eligibility:

All the graduating students of the college may join in this course.

Seat Capacity:

Maximum thirty (30) students will be accommodated in a batch.

Schedule:

The course will be offered twice in a year following the Academic Calendar of Odd and Even semesters. Thirty-two (32) contact hours will be given for the completion of the course. The classes will be arranged beyond our regular teaching time i.e., before 10 .00 am or after 5.00pm. If required, department may arrange virtual classes for the convenience of the students.

Registration / Application:

Students may get application forms in their parent departments and the admission of the course will be done on 'first come first served' basis.





Evaluation and Certification:

Evaluation of the students will be done through home assignments and examinations. Students have to attend all classes and have to score at least 50% marks in their examinations for getting their certificates.

Fee Payment:

No Application fee / Course fee will be charged by the College for this course. Students have to pay a nominal charge of Rs 100/ for their certificates only.

About the department:



One of the oldest departments of the college. Department runs both Undergraduate and Post graduate courses. Presently the department have Eight (08) faculties. The result of the department is very much satisfactory and progression statistics of the students from UG to PG is enough encouraging. Department have a departmental library of its own. Besides academia department maintains an ambiance to nurture the creativity of the students through different literary and cultural initiatives. The department nourishes a cordial relation with its students and Alumni and vice versa to make the department as their 'second family'.





Information about the faculties involved with this course:



1.

Name: Dr. Nilanjana Bhattacharyya.

Designation: Associate Professor in Bengali Language and literature

Academic Qualifications: M.A.; M.Phil.; Ph.D

2.



Name: Dr. Sadhan Chandra Pandit

Designation: Assistant Professor in Bengali Language and literature

Academic Qualifications: M.A.; B.Ed.; Ph.D

3.



Name: Dipak Shom

Designation: Assistant Professor in Bengali Language and literature

Academic Qualifications: M.A.; B.Ed.; Ph.D





4.



Prof. Avijit Chakraborty
Designation: SACT
Academic Qualifications: M.A.

5.



Name : Prof. Goutam Jana
Designation: SACT
Academic Qualifications: M.A. B. Ed

6.



Name: Prof. Sanat Pan
Designation: SACT
Academic Qualifications: M.A. B. Ed, M.Phil.





About the IQAC:

The Internal Quality Assurance Cell (IQAC) has been conceived by NAAC for the purpose of quality enhancement and sustenance within institutions. The prime task of the IQAC is to develop a system for conscious, consistent and catalytic improvement in the overall performance of the college. The Value-Added Course (VAC) is an initiative taken by the IQAC of Narajole Raj College and will be administered as a Certificate Course by different academic departments to facilitate skill development among students.

Aim of the VAC:

The purpose of the Value-Added Courses is to impart transferable and life skills to the students. Transferable skills refer to the 'portable skills' of an individual that enable him/her to navigate across different areas of life socially as well as professionally. These courses are aimed at adding value to the learning outcomes of the students and should help them in getting placed after completion of the degree. Sometimes the lack of relevant, industry-specific experience becomes a deterrent for potential candidates seeking employment opportunities. Students can overcome this constraint by demonstrating a considerable range of transferable skills that they have acquired and developed through these VACs.

Rules of VAC:

- 1) A student will be permitted to register for only one Value Added Course at a time.
- 2) No student will be encouraged to opt for the VAC offered by his/her parent Department but should first explore other branches of knowledge outside their curriculum.
- 3) The inclusive and interdisciplinary scope of the VACs allows students from Humanities to opt for Value Added Courses in the Sciences and vice-versa.
- 4) A student shall register for a Value-Added Course by submitting the duly filled in registration form through the concerned Head of the Department to which the student belongs.





NARAJOLE

**RAJ
COLLEGE**

Affiliated by Vidyasagar university

Accredited Grade B

A Value-Added-Course on

***THE STUDY OF BIODIVERSITY AND ITS
IMPACT ON HUMAN HEALTH***

Organised by the Department of Botany

In Collaboration with

The Departments of Zoology & Physiology

Course Co-Ordinator

Prof. Nandita Bhakat

Tentative Period of the course:



February 2023

An IQAC INITIATIVE



OBJECTIVES OF THE COURSE

The purpose of the Value Added Courses is to impart transferable and life skills to the students. Transferable skills refer to the ‘portable skills’ of an individual that enable him/her to navigate across different areas of life socially as well as professionally. These courses are aimed at adding value to the learning outcomes of the students and should help them in getting placed after completion of the degree. Sometimes the lack of relevant, industry-specific experience becomes a deterrent for potential candidates seeking employment opportunities. Students can overcome this constraint by demonstrating a considerable range of transferable skills that they have acquired and developed through these VACs.

SYLLABUS

Botany

1. Study of the plant species on the abandoned building of Narajole Raj Bari.
2. Study of the tree species and its importance in the building campus.
3. Steps taken for the conservation of plants.
4. Techniques to prepare herbarium sheets.

Zoology

1. Study of the animal species and their role at Narajole Raj Bari campus.
2. Steps to be taken for the conservation of the animal species.

Physiology

1. Biological contaminants generated by the damp buildings at Narajole Raj Bari
2. Effects of contaminants on human health.
3. Mould Remediation.

SCHEDULE

Total course duration of 30 hours will be scheduled from February 2023. The classes will be both theory and practical based

ELEGIBILITY

The applicant must be the student of this college, opened for every department and all semesters.



REGISTRATION/APPLICATION PROCEDURE:

The application is to be done through the departmental Heads. Not more than 30 candidates will be selected for the above schedule course from the entire college.

EVALUATION:

After the completion of the course a timely evaluation will be conducted which will be theoretical based or non-theoretical based.

CERTIFICATION:

Certification will be done to the candidates who will go through the evaluation procedure. The certificate will contain the grades which will signify their level of interest and performance in the proposed course.

ABOUT THE DEPARTMENT OF BOTANY:

The department of Botany is one of the finest departments of Narajole Raj College. The course was introduced in the year 1991 as a pass course subject. In the year 2002 it introduced its first honours courses. The students and the teachers work very hard for the overall development of the department. Every year the students pass the Vidyasagar University examination with flying colours.

ABOUT THE IQAC:

The Internal Quality Assurance Cell (IQAC) has been conceived by NAAC for the purpose of quality enhancement and sustenance within institutions. The prime task of the IQAC is to develop a system for conscious, consistent and catalytic improvement in the overall performance of the college. The Value-Added Course (VAC) is an initiative taken by the IQAC of Narajole Raj College and will be administered as a Certificate Course by different academic departments to facilitate skill development among students



FACULTIES OF THE COURSE

	<ul style="list-style-type: none">• Professor Nandita Bhakat, Assistant Professor & HOD Dept of Botany, Teaching experience 6 yrs mail id: nandita@narajoleraicollege.ac.in
	<ul style="list-style-type: none">• Professor Sanjay Kumar Dutta, State Aided College Teacher, Dept of Botany, Teaching experience 25 yrs mail id: sanjay@narajoleraicollege.ac.in
	<ul style="list-style-type: none">• Professor Bangamoti Hansda, Assistant Professor, Dept of Botany, Teaching experience 2 yrs mail id: bangamoti@narajoleraicollege.ac.in
	<ul style="list-style-type: none">• Dr. Arpita Chakraborty, State Aided College Teacher, Dept of Botany, Teaching experience 12 yrs mail id: arpita@narajoleraicollege.ac.in
	<ul style="list-style-type: none">• Dr Uttam Kumar Kanp, Assistant Professor, Dept of Botany, Teaching experience 12 yrs. mail id: uttam@narajoleraicollege.ac.in
	<ul style="list-style-type: none">• Dr Prithwi Ghosh, Assistant Professor, Dept of Botany, Teaching experience 2 yrs mail id: prithwi@narajoleraicollege.ac.in



- Dr. Poulami Adhikari Mukherjee, Assistant Professor & HOD, Dept. of Zoology, Teaching Experience 2 yrs.
Mail id: poulami@narajolerajcollege.ac.in



- Dr. Parimal Dua, Assistant Professor & HOD, Dept. of Physiology, Teaching Experience 2 yrs.
Mail id: poulami@narajolerajcollege.ac.in



Type text here

SYLLABUS

Theory:

Unit 1: Basic Electronics: Basic Semiconductor, P-n junction diode, LED, Transistor, Biasing of transistor, Current amplification circuit, Designing of filter. Identification of circuit components

Unit 2: Understanding the electrical properties of different components, Understand the functionality of coil, winding of coil, Understand the functionality of multi-meter, Explain different modes of testing in multi-meter. Handling of regulated power supply, precautions dealing with AC & DC current.

Unit 3: SMT machine, reflow oven, Soldering of semiconductor devices, Manual screen printer, Soldering Iron, Soldering and De-soldering, AC to DC regulated power supply, AC to AC regulated power supply, LED Driver Tester.

Unit 4: Principal of illumination from a LED, properties of LED, identifying the reason of LED malfunctioning, various blocks of a LED, Analyzing the fault by approaching each block, Selection of alternate spare in case of unavailability of components, Array of LED

Practical: Measurement through Multimeter, Regulated Power Supply, Soldering & Desoldering of Semiconductor Device, Rectifier Circuit, AC to DC regulated power supply, LED Driver Tester, Production of LED Light by Machine, Testing of LED Light, Circuit of LED, Array of LED, Production of Decorative LED devices.



Course Objectives

1. To understand the basics of power electronics and its usages in lighting controls, or LED power supplies and LED drivers.
2. To know about Special safety and handling precautions to be taken during LED Luminary testing.
3. Identify dysfunctional components through visual inspection and by use of multi-meter
4. To understand, various electronic & electrical components, materials and their specific properties & usages
5. Production of LED Bulb, LED Based Devices

COURSE DESIGN & EVALUATION

Total 30 contact hours which may be covered by combining 18 hrs. of theory and 12 hrs. of practical classes. The scores secured by students out of 50 should be graded in A, B, C, D, E, NQ status.

Announcement

The class of first batch of Course will start on June, 2023.

Eligibility

10+2 with Science Background with Physics is a Major Subject

Contact Details: 9734531749
Email: phytk@narajolerajcollege.ac.in



NARAJOLE RAJ COLLEGE
NAAC Accredited "B" Grade Govt. Aided College
Narajole, Paschim Medinipur, West Bengal
Pin-721211

VALUE ADDED CERTIFICATE COURSE ON
"LED BASED DEVICE PRODUCTION"

organized by

INNOVATION HUB & Department of
Physics

Aim of the Course:

LED bulbs are electric lamps that produce light through light emitting diodes and are used in lighting fixtures. These contain a cluster of LEDs, which are mounted on a single base and are packed in diffuser lenses to spread light across a defined space. LED bulbs produce light approximately 90% more efficiently than incandescent bulbs. These bulbs are based on solid state lighting, which emits the light from semiconductor chip, thereby generating lesser heat than incandescent bulbs. The useful life of these lamps is defined differently than other light sources such as compact fluorescent light (CFL) or incandescent bulbs. LED bulbs do not fail or burn out, instead they face lumen depreciation in which the brightness of the bulb decreases over time. The global LED bulbs market is expected to expand at a significant growth rate owing to the strict regulation norms regarding the banning of inefficient light bulbs. Owing to the longer durability and higher efficiency it is expected that the light market will be occupied by LED bulb very soon.

However, production of LED bulbs needs to increase, and cost should be reduced. Keeping this in mind the course is designed to train young people for production of LED bulb locally. It is believed that this course will help in generation of entrepreneur and energy conservation.

DR. TAPANENDU KAMILYA, Ph. D
Course Coordinator

About Course Coordinator

Dr. Tapanendu Kamilya is an Associate Professor in Physics of Narajole Raj College having 15 Years Teaching and 18 Years Research Experience in the field of Nanotechnology and Nanobiology. He has Published more than 50 Research Papers in Reputed International Journals. He has Published Many International Books. Two Research Scholars have Awarded PhD Degree under his Guidance. His total Citations of Papers is 962 with h-index 18 & i-10 index 28.



Registration

Students shall register for the course on a 'First Come, First Served' basis by submitting the duly filled registration from through the concerned Head of the Department/Institution to which the student belongs. The total number of seat is 20. This VAC is open to students of Science Stream with 10+2 passed certificate. Registration forms will be obtained from Innovation Hub. Department of Physics/College Office.



Faculty Information:

Dr. Tapanendu Kamilya

Associate Professor, Department of Physics
Narajole Raj College
Coordinator

Dr. Avradip Pradhan

Assistant Professor, Department of Physics
Narajole Raj College

Mr. Sumanta Hait

SACT, Department of Physics
Narajole Raj College

Mr. Surajit Dhara

SACT, Department of Physics
Narajole Raj College



Type text here



About the Innovation Hub of Physics

The Innovation Hub of Department of Physics started his journey on 2016. Firstly, students of Department of Physics prepared different small hand made instruments for practical. Then student have prepared many electronic devices. In 2023 with an **Initiative by IQAC**, the Innovation Hub of Department of Physics started Value Aided Course (VAC) on **LED BASED DEVICE PRODUCTION** to train young people for production of LED bulb locally. It is believed that this course will help in generation of entrepreneur and energy conservation.





NARAJOLE RAJ COLLEGE
NAAC Accredited “B” Grade Govt. Aided College
Narajole, Paschim Medinipur, West Bengal, Pin-721211

**VALUE ADDED CERTIFICATE COURSE ON
“LED BASED DEVICE PRODUCTION”**

Organized by

INNOVATION HUB & Department of Physics

Course Coordinator: Dr. Tapanendu Kamilya

Associate Professor, Department of Physics & Coordinator, Innovation Hub, Department of Physics

Syllabus	Contact Hours	Mode	No of Classes 1 hr Classes	Teacher
Unit 1: Basic Electronics: Basic Semiconductor, P- n junction diode, LED, Transistor, Biasing of transistor, Current amplification circuit, Designing of filter. Identification of circuit components	4 hrs	Theory	4	Dr. Tapanendu Kamilya
Unit 2: Understanding the electrical properties of different components, Understand the functionality of coil, winding of coil, Understand the	4 hrs	Theory	4	Dr. Avradip Pradhan



functionality of multi-meter, Explain different modes of testing in multi-meter. Handling of regulated power supply, precautions dealing with AC & DC current.				
Unit 3: SMT machine, reflow oven, Soldering of semiconductor devices, Manual screen printer, Soldering Iron, Soldering and Desoldering, AC to DC regulated power supply, AC to AC regulated power supply, LED Driver Tester.	5 hrs	Theory	5	Sri Sumanta Hait
Unit 4: Principal of illumination from a LED, properties of LED, identifying the reason of LED malfunctioning, various blocks of a LED, Analyzing the fault by approaching each block, Selection of alternate spare in case of unavailability of components, Array of	5 hrs	Theory	5	Sri Surajit Dhara



LED				
Practical: Measurement through Multimeter, LED Circuit	1 hrs	Practical	1	Dr. Tapanendu Kamilya
Soldering & Desoldering of Semiconductor Device, Rectifier Circuit, AC to DC regulated power supply	3 hrs	Practical	3	Dr. Avradip Pradhan
LED Driver Tester, Production of LED Light by Machine, Repairing	4 hrs	Practical	4	Sri Sumanta Hait
Testing of LED Light, Circuit of LED, Array of LED, Production of Decorative LED devices.	4 hrs	Practical	4	Sri Surajit Dhara





NARAJOLE RAJ COLLEGE

Entrepreneurship Cell & Gender Equity Cell of Narajole Raj College

invite you to a Webinar on

Indian Women across the Legal and Entrepreneurial Axes
23rd June, 2023 at 7 pm



Dr. Basudev Mandal
Chief Patron & Principal, Narajole Raj College



Aftab Alam, Research Scholar, IIT Kharagpur
Exploiting Entrepreneurship in the Vibrant Indian Entrepreneurial Ecosystem



Dr. Kathakali Bandopadhyay, Asst. Professor, Subarnarekha Mahavidyalaya
The Protection of Women from Domestic Violence Act, 2005



Pragna Paramita Mondal, Convener, Entrepreneurship Cell
IQAC Coordinator, Narajole Raj College



Baisali Guha, Convener, Gender Equity Cell, Narajole Raj College

Please join through the Google Link: <https://meet.google.com/awo-oxet-qsd>

Technical Support: **Technology Sub-Committee, Narajole Raj College**

ALL ARE WELCOME



1.3.1. Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the curriculum.

1. Samples of Seminars/ Webinars/Invited Lectures/Tuesday Lectures on Professional Ethics, Gender, Human Values, Environment and Sustainability organized by the institution:

Environment & Sustainability

01. A Drive for Eradication of *Parthenium* from college campus and adjoining areas organized in collaboration with NSS Unit-I and NSS Unit-II held on 29.6.2022.

Summary report of *Parthenium* eradication

When the college opened after lockdown during Covid pandemic, we observed our college campus and surrounding area were full of *Parthenium* as the college closed due to lockdown trespassers were limited in that locality which allowed the *Parthenium* to grow and polluted the entire atmosphere.

Rationale of the outdoor activity

Parthenium is an exotic plant which was invaded in our country. The spores of *Parthenium* usually create respiratory trouble and skin allergy in human body. Therefore, the herb is injurious and this is why the eradication of the *Parthenium* programme had been taken.

Plan of work

We, the members of Green Club, have discussed the issue with the NSS (unit I and II), teachers and students of botany department. We decided to eradicate the herb *Parthenium* from our college campus and the surrounding area manually with the help of the said members under guidance of Mr. Pashupati Maity (gardener). We fixed the date on 29.6.2022. We planned to purchase gloves, masks and head cap sufficiently for security of the members.

Schedule of the programme



We reached the college campus right at 10 am and considering the security aspect we wore gloves, caps and facial masks. After that all of us started the job by identifying the herb *Parthenium* and eradicate them. All of us including students involved in the job with great enthusiasm. We finished the job around 2 pm.

Outcome of the activity

We observed that the locality was abundantly covered with *parthenium* plant which is dangerous for human being and



grazing animals. After the programme our college campus and surrounding area became almost *Parthenium* free.

02. Observation of International Plastic Free Day organised by Green Club on 4.7.2022



03. A Postering Programme on ‘Different Environmental Movements of India in Harirajpur Primary School by the students of Narajole Raj College’ organized in collaboration with Extension Services Sub-Committee, NRC, held on 16.06.2023.

Rationale of the outdoor activity

Due to shortage of Environmental Awareness among peoples specially in countries like us, different Environmental Movements raised by different Environmental Activists in our country. To maintain Nature’s originality, everyone should be a sustainable user and sustainable developer of Natural Resources. In this context, the kids should be learned from beginning about Nature and its different issues.

Plan of Work

On that day, Dr. Arpita Chakraborty along with Prof. Baisali Guha, Sk. Ashiruddin Chisty and 12 students acted as volunteers were present in the school. Postering was started at 12.30pm in different areas of school wall.

Schedule of the programme

Dr. Chakraborty described lucidly, as fit for kids, about Nature, different Environmental movements of India, the leading personality of each movement and the final result of the movements. Sk. Ashiruddin Chisty said about the different conservation methods of natural resources. Prof. Baisali Guha gave a lucid speech among students how the Natural Resources reduces with the advancement of civilization from pre-historic time to present era. After the completion of lectures of three teachers, students of NRC, started their postering work in different places of school.





Outcome of the Activity

From our activity, students became enthusiastic about sustainable uses of Nature, its conservation methods and policies. In the era of Global Warming the activity is most appropriate. Seeing the different posters they got knowledge to make such different extra-curricular activities.

Students 'feedback

Students were very happy. They were enthusiastic and interact with their friends about poster. Our volunteers were instructed the kids to maintain the

hall properly. They were very happy to spent time with children.

04. Awareness Programme on Solid Waste Disposal and Management organised by Green Audit Cell and Green Club on 08.01.24

Waste management or waste disposal includes the processes and actions required to manage waste from its inception to its final disposal. This includes the collection, transport, treatment, and disposal of waste, together with monitoring and regulation of the waste management process and waste-related laws, technologies, and economic mechanisms.



Waste can be solid, liquid, or gaseous and each type have different methods of disposal and management. Waste management deals with all types of waste, including industrial, biological, household, municipal, organic, biomedical, radioactive wastes. In some cases, waste can possess a threat to human health. Health issues are associated with the entire process of waste management. Health issues can also arise indirectly or directly: directly through the handling of solid waste, and indirectly through the consumption of water, soil, and food. Waste is produced by human activity, for example, the extraction and processing of raw materials. Waste management is intended to reduce the adverse effects of waste on human health, the environment, planetary resources, and aesthetics.

The aim of waste management is to reduce the dangerous effects of such waste on the environment and human health. One of the ways to put that plan into action is through the 3 ways of waste management — Reduce, Reuse, Recycle.



Type text here