

**PANCHAKOT MAHAVIDYALAYA**  
**SARBARI, NETURIA, PURULIA**

Affiliated to Sidho Kanho Birsha University, Purulia



**Department of Chemistry**

Add-on/ Certificate Course

**Certificate Course on Water Quality  
Testing**

Session: 2022-2023



# Brochure



## Panchakot Mahavidyalaya

SARBARI, NETURIA, PURULIA, WEST BENGAL

### Certificate Course on Water Quality Testing

Add On Course, Dept. of Chemistry

Duration: 30 hrs.

**About:** Clean fresh water is one of the most vital natural resources. Since quality of water is susceptible to changes with time and other factors, continuous monitoring of water is essential. Water quality assessment provides the base line information on water safety. Qualitative and quantitative measurements are needed to guarantee the purity of water from various sources of supply. This course on water quality assessment is an attempt to equip students with theoretical background and practical skills to participate in water quality ensuring practices.

**Aim of the Course:**

The course intends to prepare a student in acquiring skills on the art of water monitoring and quantitative analysis of critical water quality parameters. It also brings in those aspects of chemistry which are important for water quality management and pollution control.

**Course Content:**

Water Quality Fundamentals (8 hours) Chemistry of water, Physical and chemical properties, Water resources, water pollution, Important water Quality parameters and methods for their determination - turbidity, color, taste, pH, acidity, alkalinity, chemical constituents, hardness, dissolved oxygen etc., water sampling, standard for drinking water as per BIS specifications, household water treatment and safe storage. II. Practical - Laboratory tests for water quality monitoring (15 hours) Determination of pH and conductivity, Test for acidity and alkalinity, Test for total hardness, Test for chloride, calcium, iron etc., calculation of magnesium content and total solids. III. Project (7 hours) Quality assessment of water samples collected from different localities.

**Outcome:**

- General properties of water, resources, conservation.
- Awareness of water quality and standards, their relation to health, and environment
- Parameters for measuring water quality.
- Methods for the determination of water quality

**Course Coordinator: Dr. S M Wahidur Rahaman, HOD, Dept. of Chemistry**

For detailed schedule log-on to: [www.panchakotmv.ac.in](http://www.panchakotmv.ac.in)



To  
The Principal  
Panchakot Mahavidyalaya  
Sarbari, Neturia, Purulia

Applicant: Dr. S. M. Wahidur Rahaman, Department of Chemistry

Subject: Proposal for certificate course in 'Certificate Course on Water Quality Testing' for the session 2022-2023

Respected Sir,

The above mentioned subject, I am submitting herewith the proposal to conduct the certificate course in 'Certificate Course on Water Quality Testing' the department of Chemistry of our college. This course will discuss about the intends to prepare a student in acquiring skills on the art of water monitoring and quantitative analysis of critical water quality parameters.

Hope you will consider my application and I kindly request you to sanction the same.

Date: 4.3.2023

Place: Sarbari



Your sincerely,  
HOD, Chemistry

Enclosure: (1) Proposal  
(2) Curriculum of the course



# PANCHAKOT MAHAVIDYALAYA

## SARBARI, NETURIA, PURULIA

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### Proposal for conducting Short Term Certificate Courses Session: (2022-2023)

#### 1. Details of the applicant department:

- I. Name of the college: Panchakot Mahavidyalaya,
- II. Address of the college: Sarbari, PO: Neturia, District: Purulia, Pin: 723121
- III. Name of the applicant department: Chemistry

#### 2. Details of the course proposed:

- I. Name of the course: *Certificate Course on Water Quality Testing*
- II. Target participants: Undergraduate students from any stream
- III. Duration of the course: 30 hrs.
- IV. Medium of instruction: English

#### 3. Details of the faculty:

- I. Whether the college provides degree related to the proposed course: No
- II. Whether the course is prepared by experts from related field: yes (by departmental faculty)
- III. Information of course coordinator:

Name	Department	Qualification
Dr. S. M. Wahidur Rahaman	Chemistry	Ph. D. (Chemistry)

#### IV. Details of faculty members to be appointed for this course:

Sr. No.	Name	Department	Qualification
1	Dr. S. M. Wahidur Rahaman	Chemistry	Ph. D. in Chemistry
2	Dr. Sourav Chatterjee	Chemistry	Ph.D. in Chemistry

#### 4. Details of the infrastructure needed/available for this course:

- I. Classroom: Available
- II. Books: Available in central library
- III. Computer facility: Computer lab and departmental computer facility

*Rahaman*

Signature of Course coordinator



# **PANCHAKOT MAHAVIDYALAYA**

## **SARBARI, NETURIA, PURULIA**

Affiliated to Sidho Kanho Birsha University, Purulia

### **Department of Chemistry**

#### **Certificate course in Certificate Course on Water Quality Testing Syllabus (2022-2023)**

**Duration: 30 hrs**

**Module I (8 hrs):** Water Quality Fundamentals (2 hrs),

Chemistry of water, Physical and chemical properties (3 hrs),  
Water resources, water pollution (3 hrs).

**Module II (15 hrs):** Important water Quality parameters and methods for their determination - turbidity, color, taste, pH, acidity, alkalinity, chemical constituents, hardness, dissolved oxygen etc., (8 hrs),  
Water sampling, standard for drinking water as per BIS specifications, household water treatment and safe storage (4 hrs),  
Practical - Laboratory tests for water quality monitoring (3 hrs).

**Module III (7 hrs):** Determination of pH and conductivity, Test for acidity and alkalinity (2 hrs),  
Test for total hardness, Test for chloride, calcium, iron etc. (2 hrs),  
Calculation of magnesium content and total solids (2 hrs),  
Quality assessment of water samples collected from different localities (1 hr).

**Assessment:** Written Test and/or Viva-Voce



Signature  
Course Coordinator



# PANCHAKOT MAHAVIDYALAYA

## SARBARI, NETURIA, PURULIA

Affiliated to Sidho Kanho Birsha University, Purulia

### Department of Chemistry

Certificate course in Certificate Course on Water Quality Testing  
Syllabus (2022-2023)

**Course coordinator:** Dr. S. M. Wahidur Rahaman, HOD, Chemistry

#### Details of the Course

**Course Objective:** The course intends to prepare a student to acquire skills in the art of water monitoring and quantitative analysis of critical water quality parameters. It also brings in those aspects of chemistry which are important for water quality management and pollution control.

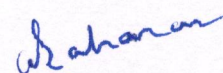
#### Schedule

Day	Hours	Timing/Duration	Resource Person	Venue	Topic
1	02	4:00-6:00 PM	Dr. S. M. Wahidur Rahaman (WR)	Dept of Chemistry	Module-I
2	02	4:00-6:00 PM	Dr. Sourav Chatterjee (SC)	Dept of Chemistry	Module-I
3	02	4:00-6:00 PM	WR	Dept of Chemistry	Module-I
4	02	4:00-6:00 PM	SC	Dept of Chemistry	Module-I
5	02	4:00-6:00 PM	WR	Dept of Chemistry	Module-II
6	02	4:00-6:00 PM	SC	Dept of Chemistry	Module-II
7	02	4:00-6:00 PM	WR	Dept of Chemistry	Module-II
8	02	4:00-6:00 PM	SC	Dept of Chemistry	Module-II
9	02	4:00-6:00 PM	WR	Dept of Chemistry	Module-II
10	02	4:00-6:00 PM	SC	Dept of	Module-II



				Chemistry	
11	02	4:00-6:00 PM	WR	Dept of Chemistry	Module-II
12	01	4:00-5:00 PM	SC	Dept of Chemistry	Module-II
13	02	4:00-6:00 PM	WR	Dept of Chemistry	Module-III
14	02	4:00-6:00 PM	SC	Dept of Chemistry	Module-III
15	03	4:00-7:00 PM	WR	Dept of Chemistry	Module-III

**Expected Outcome:** General properties of water, resources, conservation. Awareness of water quality and standards, their relation to health, and the environment. Parameters for measuring water quality. Methods for the determination of water quality



Signature  
Course Coordinator



# PANCHAKOT MAHAVIDYALAYA

## SARBARI, NETURIA, PURULIA

Affiliated to Sidho Kanho Birsha University, Purulia

Department of Chemistry

Certificate course in Certificate Course on Water Quality Testing  
Syllabus (2022-2023)

Ref No:

Date: 10/03/2023

### Notice

This is to notify that the Department of Chemistry, Panchakot Mahavidyalaya is going to conduct an Add On/Certificate courses under the title as stated above. The course will be conducted from 17/03/23 to 13/04/23 in offline mode.

Interested students are requested to contact the concerned teacher(s) of the department/course coordinator for further course details (such as course duration, schedule, module etc.) as well as enrollment in the course.

HOD, Department of Chemistry  
Principal,

PANCHAKOT MAHAVIDYALAYA  
Sarbari • Neturia • Purulia

Panchakot Mahavidyalaya

Sarbari, Neturia, Purulia



# PANCHAKOT MAHAVIDYALAYA

## SARBARI, NETURIA, PURULIA

Affiliated to Sidho Kanho Birsha University, Purulia

Department of ...*Chemistry*...

Certificate Course Name ...*Water Quality Testing*.....  
Session: (20*22*-20*23*...)

### List of Enrolled Students

Sr. No.	Students Name	Roll Number	Seme ster	Student Signature
1	SACHIN GORAI	220000426	2	Sachin Gorai
2	SUJAL RAJAK	220000608	2	Sujal Rajak
3	AMAN DUSADH	220001675	2	Aman Dusadh
4	MRITUNJOY BAURI	220000915	2	Mritunjoy Bauri
5	RAMANANDA BAURI	220001700	2	Ramananda Bauri
6	APARNA GORAI	210000464	4	Aparna Gorai
7	ANKITA CHAR	210000916	4	Ankita char
8.	DEBJANI GOPE	210000770	4	Debjani Gope

*Saty*  
Principal  
PANCHAKOT MAHAVIDYALAYA  
Sarbari • Neturia • Purulia

*Debjani*  
Signature  
Course Coordinator



**PANCHAKOT MAHAVIDYALAYA  
SARBARI, NETURIA, PURULIA**

Affiliated to Sidho Kanho Birsha University, Purulia

Department of *Chemistry*

Certificate Course : *on Water Quality Testing*

Session: (20.22-20.23.....)

**Attendance Sheet**

Sr. No.	Name of Student	Day and Month															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	SACHIN GORAI	P	P	P	P	P	P	P	P	.	P	P	P	P	P	P	
2	SUJAL RAJAK	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
3	AMAN DUSADH	P	P	P	P	.	P	P	P	P	P	P	P	P	P	P	
4	MRITUNJOY BAURI	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
5	RAMANANDA BAURI	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
6	APARNA GORAI	P	P	P	.	P	P	P	P	P	P	P	P	P	P	P	
7	ANKITA CHAR	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
8	DEBJANI GOPE	P	P	P	P	P	P	P	P	.	P	P	P	P	P	P	

*SLG*  
Principal  
**PANCHAKOT MAHAVIDYALAYA**  
Sarbari-Neturia-Purulia

*Dhanan*  
Course Coordinator



# PANCHAKOT MAHAVIDYALAYA

## SARBARI, NETURIA, PURULIA

Affiliated to Sidho Kanho Birsha University, Purulia

Department of ... *Chemistry* .....

Certificate Course:


..... on *Water Quality Testing* .....


Session: (20.22....-20.23..)

### Result

Full Marks:

Sr. No.	Name of Student	Marks Obtained
1.	SACHIN GORAI	A
2.	SUJAL RAJAK	A
3.	AMAN DUSADH	B
4.	MRITUJOY BAURI	A
5.	RAMANANDA BAURI	B
6.	APARNA GORAI	B
7.	ANKITA CHAR	A
8.	DEBJANI GOPE	A

  
Principal  
PANCHAKOT MAHAVIDYALAYA  
Sarbari • Neturia • Purulia

  
Signature  
Course Coordinator





Affiliated to Sidho Kanho Birsha University, Purulia  
**PANCHAKOT MAHAVIDYALAYA**  
**SARBARI, NETURIA, PURULIA**  
Add On/ Certificate Course

Organized by: Department of *Chemistry*.....

## **CERTIFICATE OF COMPLETION**

Session: (20*22*..-20*23*..)

This is to certify that Mr./Ms *SACHIN GORAI*.....

of *Bengali (Program)*..... Department has successfully completed Add

On/Certificate course entitled:

*Certificate Course on Water Quality Testing*.....  
for session *2022-2023*.....

*Rhuma*

Course Coordinator

*Rhuma*

HOD (Organizing Dept)

*Self*

Principal

Principal

**PANCHAKOT MAHAVIDYALAYA**  
Sarbari, Neturia, Purulia