## EGRA SARADA SHASHI BHUSAN COLLEGE

ESTD.: 1968

(Re-accredited by NAAC with - 'B' Grade with a CGPA of 2.32)

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

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

Principal: Dr. Dipak Kumar Tamili.

Web site - www.egrassbcollege.net : E-mail - info@egrassbcollege.net /

info@egrassbcollege.org.in

**2** - 03220-244073 / 245557

Fax - 03220245867.

Memo No.-

Date-23.11.2022

## DEPARTMENT OF BOTANY

NOTICE FOR TEN DAYS CERTIFICATE COURSE

on

STERILIZATION TECHNIQUE AND CULTURE MEDIA

It is here by notified that the Dept. of Botany of Egra S.S.B. College is going to organize an Inaugural Programme of certificate course on "Sterilization Technique and Culture Media" on 02.12.2022 to 13.12.2022 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 30.11.2022.

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

(Bignature)
Head of Separatment of Botany
Mass & B. B. College

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**DURATION: 10 Days** 

Memo No.-

Date- 23.11.2022

Name of the certificate course: Sterilization Technique and Culture Media

Duration of the course: 10 Days Date of inauguration: 02.12.2022 Date of completion: 13.12.2022

Syllabus of the course:

## EGRA SARADA SASHI BHUSAN COLLEGE CERTIFICATE COURSE ON "Sterilization Technique and Culture Media"

SESSION: 2022

#### **SYLLABUS**

SYLLABUS		DONA	ioia. 10 Days	
Course	Course Name	Teaching Scheme in hours per week		
Certificate Course	Sterilization Technique and Culture Media	Lectures	Practical	
	Unit:1 Sterilization Technique: 1. Principles of Sterilization 2. Sterilization of Equipment 3. Sterilization of production media with respect to Acid Alkali Buffer, Antifoam agent and precursors 4. Sterilization of air. Unit:2 Sterilization and Disinfection	3	2	
	Sterilization Methods			
	Red heat (Flaming)     Dry heat (Hot air)			

3. Moist heat		
a. Steam under pressure	(autoclaving)	
b. Steam not under pres	sure	
(Tyndallization)		
Unit 3: Filtration	2	2
1. Earthernware cand	lle filters –	
made of diatomace	eous earth	
or porcelain eg. Be	rkefeld	
filter, Chamberland	d	
filter Asbestos pad	filters, eg.	
Seitz filters		
2. Sintered glass filter	r – made of	
finely ground glass	fused	
together (fused jer	na glass)	
3. Membrane filters		
Unit 4: Radiation	2	2
1. Ionising radiation		
2. Non ionising radiation		
Unit 5: Photodynamic sen	sitization 2	
Unit 6: Ultrasonic and Son	nic waves 2	
Unit 7:_ Freezing	2	
Unit 8: Chemical steriliz	ation	2
Unit 9: <u>Disinfection</u>		2
Properties, agent, Mode	Of Action,	
Uses.		
Unit 10: Validation o	f sterilization 1	
processes		
Unit 11: Culture Media:	1	2
Defination, Types, Signif	icance.	





#### **Class Routine:**

# EGRA SARADA SASHI BHUSAN COLLEGE DEPARTMENT OF BOTANY

### **CERTIFICATE COURSE ON "Sterilization Technique and Culture Media"**

SESSION: 2022

DATE: 02.12.2022-13.12.2022

DAY	10.15-11.15	11.15-	12.15-	1.15-	2.15-3.15	3.15-4.15	4.15-
		12.15	1.15	2.15			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

SAN SALVENTON SA

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

#### Course Outcomes:

After successful completion of this course students are expected to: Demonstrate theory in microscopy and their handling techniques and staining procedures Know various Culture media and their applications and also understand various physical and chemical means of sterilization Know general bacteriology and microbial techniques for isolation of pure cultures of bacteria, fungi and algae Learn aseptic techniques and be able to perform routine culture handling tasks safely and effectively Comprehend the various methods for identification of unknown microorganisms Understand the modes of nutrition in microbial metabolism and able to classify the bacteria based on nutrition Know the various Physical and Chemical growth requirements of bacteria and get equipped with various methods of bacterial growth measurement.

