

**SAMANTA CHANDRASEKHAR INSTITUTE
OF TECHNOLOGY & MANAGEMENT**
SEMILIGUDA-764 036, KORAPUT

DEPT. OF. CIVIL ENGINEERING
(DIPLOMA.)

LESSON PLAN AND PROGRESS REGISTER

(To be maintained by all members of the teaching staff)

SESSION.. 2023 (ODD SEMESTER) DIPLOMA
3rd SEMESTER (2023-2024)

NAME SRUTISHA PANDA
DESIGNATION LECTURER
DEPT. CIVIL ENGINEERING

Srutisha Panda
SIGNATURE

BIO-DATA OF THE TEACHER / FACULTY

1. Name SRUTISHA PANDA
2. Designation LECTURER Dept. CIVIL ENGINEERING
3. Date of Birth 05/05/1993
4. Date of entry into service at any other organisation —
5. Name of initial college —
Date of joining at SCITM (Ref. No. & Date) 01/02/2023
6. Date of placement in present grade 01/02/2023
7. Educational qualification M. TECH (GEOTECHNICAL ENGINEERING)

Degree	University	Year
M. TECH	OUTR	2022
B. TECH	CUTM	2016

8. University Regd. No.: —
9. Date of completion of M.Tech. / M.E.: 03/9/2022
10. Present Scale of Pay : —
(AICTE/State/Management)
11. Date of last Increment : —
12. Research Activities: —
 - (a) Project being Pursued/Research Conducted: —
 - (b) No. of Ph.D., scholars produced: —
 - (c) No. of Scholars registered at present: —
13. Publications: —
 - (a) No. of Books Published: —
 - (b) No. of Research Papers Published: —
 - (c) Other Publications: —
14. Any other Information: —
15. Permanent Address: AT - Saraswati Nagar, Semiligunda
Koraput, Odisha
16. Present Residential / Postal Address —
PIN 764036 Telephone No. 8093762815

Counter Signature of H.O.D.

Srutisha Panda
Signature of the Teacher/Faculty

Signature of the Admn. Officer/Registrar

This Lesson Plan and Progress Register is to be submitted to the Director for verification and counter signature twice in every semester. The H.O.D. must verify and sign this Register before submission.

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FOR DIFFERENT BRANCHES & SEMESTER (Degree/Diploma/+2 Science)

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N.B. : Submission of Annual Lesson Plan-cum-Progress Register and performance Report for Assessment are responsibility of each faculty member.

LESSON PLAN

Degree/Diploma/+2 Science
(Theory/Pract/Lab/Workshop)

Semester 3rd Semester

Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
AUGUST 14/8/2023	Th. 4 ESTIMATION AND COST	1. Introduction 1.1. Types of estimates - Plinth area, floor area / carpet area	
16-08-23 ↑ do ↓	↑	1.2 Units and modes of measurements as per IS 1200.	
17-08-23		1.3 Accuracy of measurement for different item of work.	
18-08-23		QUANTITY ESTIMATE OF BUILDING 2.1 Short wall long wall method	
to 22-08-23		and Centre line method, deductions in masonry, plastering, white washing, painting etc.	
↑	do	multiplying factor (paint coefficient) for painting of	
do ↓		doors and windows (paneled / glazed), grills etc.	
24-08-23 to		2.2 Detailed estimate of single storied flat roof building with	
31-08-23		Shallow foundation and RCC roof slab with leak proof	
↑ do ↓		treatment over it including staircase and masonry work.	
1-09-23		3. ANALYSIS OF RATES AND VALUATION	
to 8-09-23		3.1 Analysis of rates for cement concrete, brick	
↑ do ↓		masonry in cement Mortar, laterite stone masonry	
do ↓	↓	in cement mortar, cement plaster, white washing, Aslified	

LESSON PLAN

Degree/Diploma/+2 Science
(Theory/Pract/Lab/Workshop)

Semester 3rd Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
11-09-23 to 12-09-23 do ↑ do ↓	TH-4 ESTIMATION AND COST EVALUATION -1 ↑	Stone flooring, Tile flooring, concrete flooring, R.C.C. with centering and shuttering, reinforcing steel, Painting of doors and windows etc as per OPWD.	
13-09-23 to 15-09-23 ↑ do ↓		3.2 Calculation of Lead, lift, conveyance charges, royalty of materials, etc. as per Orissa P.W.D. System (Concept of C.P.W.D / Railways provision)	
18-09-23 to 22-09-23 ↑ do ↓ ↑ do ↓	do	3.3 Abstract of cost of estimate 3.4 Valuation - value and cost, scrap value, salvage value, assessed value, sinking fund, depreciation and obsolescence, methods of valuation.	
25-09-23 to 28-09-23 ↑ do ↓		Administrative Set-up of Engineering Organisations: 4.1. Administrative set-up and hierarchy of Engineering dependent in state Govt./ central Govt./ PSU's / Private Sectors etc. Duties and responsibilities of Engineers at different positions / levels.	

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COURSES ALLOTTED

FOR DIFFERENT BRANCHES & SEMESTER (Degree/Diploma/+2 Science)

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LESSON PLAN

Degree/Diploma/+2 Science
(Theory/Pract/Lab/Workshop)

Semester 5th Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
AUGUST 14 th	TH. 4 WATER SUPPLY AND WASTE WATER ENGINEERING	<u>SECTION - A: WATER SUPPLY</u> 1. Introduction to water supply, Quantity and Quality of water.	01
14-08-23			
16-08-23	↑	1.1. Necessity of treated water supply	1
17-08-23		1.2 Per capita demand, variation in demand and factors affecting demand.	1
↑ do ↓			
18-08-23		1.3 Methods of forecasting population, Numerical problems using different methods	} 4
22-08-23			
23-08-23	do	1.4. Impurities in water - organic and inorganic, Harmful effects of impurities.	} 1
↑ do ↓			
24-08-23		1.5 Analysis of water - physical chemical and bacteriological	1
25-08-23		1.6 Water quality standards for different uses.	1
28-08-23		2. Sources and Conveyance of water.	} 01
↑ do ↓		2.1. Surface sources - Lake, stream, river and impounded reservoir.	
29-08-23		2.2. Underground Sources - aquifer type and occurrence - Infiltration gallery, infiltration well, springs, well	} 1
↑ do ↓			

LESSON PLAN

Degree/Diploma/+2 Science
(Theory/Pract/Lab/Workshop)

Semester 5th Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
31-08-23	TIT-4 WATER SUPPLY AND	2.3 Yield from well- methods of determination, Numerical	} 02
1-09-23	WASTE WATER ENGINEERING	problems using yield-formulae (deduction excluded)	
4-09-23	↑	2.4 Intakes- types, description of river intake, reservoir intake, canal intake	} 01
↑ do ↓			
5-09-23		2.5 Pumps for conveyance and distribution- types, selection, installation.	} 01
↑ do ↓			
7-09-23		2.6 Pipe materials- necessity, suitability, merits and demerits of each type	} 01
↑ do ↓	do		
8-09-23		2.7 Pipe joints- necessity, types of joints, suitability, methods of jointing laying of pipes - method	} 01
↑ do ↓			
11-09-23		3. Treatment of water Note:-	} 01
↑ do ↓		1. Design of treatment unit excluded.	
12-09-23		3.1 Flow diagram of conventional water treatment system.	01
13-09-23		3.2.1 Aeration; Necessity 3.2.2 Plain Sedimentation;	} 02
14-09-23	↓	Necessity, working principles, Sedimentation tanks- types, essential features, operation and maintenance.	

LESSON PLAN

Degree/Diploma/2nd Sem
(Theory/Pract/lab/Workshop)

Semester 5th Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
↑ do ↓	TH-4 WATER SUPPLY AND WASTE WATER ENGINEERING	3.2.3 Sedimentation with coagulation Necessity, principles of coagulation	01
15-09-23	↑	types of coagulants, Flash mixer, Flocculator, clarifier (Definition and Concept only)	
do	↑	do.	
↓		3.2.4 Filtration: Necessity, principles, types of filters, slow sand	01
18-09-23		Filter, Rapid Sand Filter and Pressure Filter - essential	
↑		features	
do			
↓		3.2.5 Disinfection: Necessity, Principles, types of filters	01
21-09-23		Slow sand filter, Rapid Sand Filter and Pressure Filter - essential features.	
↑	do		
do			
↓		3.2.6 Softening of water - Necessity, Methods of	01
22-09-23		softening - lime soda process and ion exchange method	
↑		(Concept only)	
do			
↓		4. Distribution System and Appurtenances in distribution	01
25-09-23		System:-	
↑		4.1. General requirements, types of distribution system - gravity, direct and combined.	
do			
↓			
26-09-23			

LESSON PLAN

Degree/Diploma/+2 Science
(Theory/Pract/Lab/Workshop)

Semester 5th Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
27-09-23 to 30-09-23	TH.4 WATER SUPPLY	4.2- Methods of Supply-Intermittent and Continuous	02
28-09-23 30-09-23 to 2-10-23	AND WASTE WATER ENGINEERING	4.3 Distribution system layout- types, comparison, suitability	02
3-10-23 4-10-23	↑	4.4 Valves - types, features, uses, purpose - sluice valves, check valves, air valves, cone valves, fire hydrants, water meters	02
↑ do ↓			
5-10-23		5. w/s plumbing in building 5.1 Method of connection from water mains to building supply	1
↑ do ↓			
6-10-23	do	5.2 General layout of plumbing arrangement for water supply in single storied and multi-storied building as per I.S. code SECTION B.	1
↑ do ↓			
7-10-23		WASTE WATER ENGINEERING	
↑ do ↓		6- Introduction 6.1- Aims and objectives of Sanitary engineering	1
9-10-23		6.2- Definition of terms related to sanitary Engineering	1
↑ do ↓			
10-10-23 to 12-10-23		6.3 Systems of collection of wastes- Conservancy and water carriage system - features, comparison, suitability.	3
↑ do ↓			
13-10-23	↓	7- Quantity and Quality of Sewage - domestic and industrial sewage.	1

LESSON PLAN

Degree/Diploma/+2 Science
(Theory/Pract/Lab/Workshop)

Semester 5th Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
16-10-23	TH-4 WATER SUPPLY	Variation in sewage flow, minimum problem on computation quantity	02
17-10-23	AND WASTE WATER ENGINEERING	of sanitary sewage.	
18-10-23	↑	7.2 Computation of size of sewer, application of Chezy's formula.	01
↑ do ↓		Limiting velocities of flow: self-cleaning and scouring.	
19-10-23		7.3 General importance, strength of sewage, characteristics of sewage - physical, chemical and biological	02
20-10-23			
30-10-23		7.4. Concept of sewage-sampling, tests for - solids, PH, dissolved oxygen, BOD, COD.	02
31-10-23	do		
1-11-23 to		8. Sewerage system	03
3-11-23		8.1. Types of system - separate, combined, partially separate, features, comparison between the types, suitability.	
↑ do ↓			
6-11-23		8.2 Shapes of sewer - rectangular, circular, oval - features, suitability.	01
↑ do ↓			
7-11-23		8.3 Laying of sewer - setting out sewer alignment.	01
8-11-23	↓	9. Sewer appurtenances and Sewage Disposal.	01

LESSON PLAN

Degree/Diploma/+2 Science
(Theory/Pract/Lab/Workshop)

Semester 5th Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
9-11-23	TH-4 WATER SUPPLY	9.1 Manholes and Lampholes - types, features, location	} 01
↑ do ↓	AND WASTE WATER ENGINEERING	function	
10-11-23	↑	9.2 Inlets, Grease and oil trap- features, location, function	} 01
13-11-23		9.3 Storm regulator, inverted siphon - features, location, function	} 01
↑ do ↓			
14-11-23		9.4 Disposal on land - sewage farming, sewage application and dosing, sewage sickness- causes and remedies	} 01
↑ do ↓	.do		
15-11-23		9.5- Disposal by dilution - standards for disposal in different types of water bodies, self purification of stream.	} 02
17-11-23			
↑ do ↓			
18-11-23		10 - Sewage treatment 10.1 - Principles of treatment, flow diagram of conventional treatment	} 01
↑ do ↓			
20-11-23		10.2 - Primary treatment - necessity, principles, essential features.	} 05
↑ do ↓		functions.	
24-11-23		10.3 Secondary treatment - necessity, principles, essential features, functions	} 04

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Degree/Diploma/+2 Science
(Theory//Pract//Lab//Workshop)

Semester 5th Semester Branch Civil Engineering

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