

5th Civil

BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY

SIVARAM VIHAR, GHATAKESWAR HILLS
MOHADA, BERHAMPUR (GM.)



STUDENT'S ATTENDANCE REGISTER

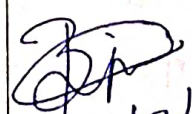
Time	9:05	10:45	12:25		
Day	9:55	11:30	1:15		
MON		✓			
TUE	✓				
THU		✓			
FRI	✓				
SAT			✓		

Year/ Session	: 15.9.22 to 22.12.22
Semester & Branch	5th sem, civil department
Subject with Code	Th-4 water supply & waste water engineering
Name of the Faculty Member	Sunita Samantasingh

B.I.E.T.






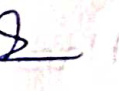


SYLLABUS COVERAGE

TOPIC	DATE	SIGNATURE OF THE FACULTY	SIGNATURE OF THE H.O.D.
<u>SECTION A: WATER SUPPLY</u>			
<u>CHAPTER-1</u>	<u>SEPTEMBER</u>		
<u>INTRODUCTION TO WATER SUPPLY, QUALITY & QUANTITY OF WATER:-</u>			
- Necessity of treated Water supply.	15.09.22	<u>S</u>	
- Per capita demand, Variation in demand & Factors affecting demand.	16.09.22	<u>S</u>	
	19.09.22	<u>S</u>	
- Methods of Forecasting population, Numerical problems using different methods	20.09.22	<u>S</u>	
	21.09.22	<u>S</u>	
- Impurities in Water - Organic & Inorganic, Harmful effects of impurities	22.09.22	<u>S</u>	
	23.09.22	<u>S</u>	
- Analysis of Water - Physical, Chemical & bacteriological	24.09.22	<u>S</u>	
	24.09.22	<u>S</u>	
- Water quality standards for different Uses.	26.09.22	<u>S</u>	


 12/9/22
 Verified
 12/9/22


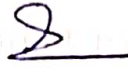

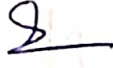
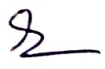
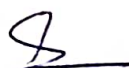
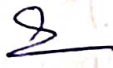
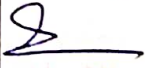


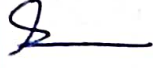

B.I.E.T.

SYLLABUS COVERAGE

TOPIC	DATE	SIGNATURE OF THE FACULTY	SIGNATURE THE H.O.D.
<p><u>CHAPTER - II</u></p> <p><u>SOURCES & CONVEYANCE OF WATER :</u></p>			
- Surface sources - Lake, stream, river & impounded reservoir	27.9.22		
- Underground sources - Aquifer type & occurrence - Infiltration gallery, Infiltration well, spring, well	28.09.22		
- Yield from well - method of determination, Numerical problems using yield formulae	29.09.22		
	30.09.22		
- Intakes - types, description of river intake, reservoir intake, Canal intake	01.10.22		
- Pumps for conveyance & distribution - types, selection & installation	01.10.22		
- Pipe materials - necessity, suitability, merits & demerits of each type	12.10.22		
- Pipe joints - necessity, types of joints, suitability, methods of jointing	13.10.22		
Laying of pipes - method			





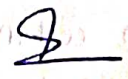



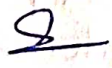
B.I.E.T.

SYLLABUS COVERAGE

TOPIC	DATE	SIGNATURE OF THE FACULTY	SIGNATURE OF THE H.O.D.
<u>CHAPTER - III</u>			
<u>TREATMENT OF WATER</u>			
Flow diagram of conventional water treatment system.	14.10.22		
- Treatment process / units:	15.10.22		
• Aeration: Necessity	17.10.22		
• Plain sedimentation: Necessity, Working principles, Sedimentation tanks - types, essential features, operation & maintenance.	18.10.22		
• Sedimentation with coagulation: Necessity, principles of coagulation, types of coagulants, Flash mixer, Flocculator, Clarifier.	20.10.22		
• Filtration - Necessity, principles, types of filters, Slow sand filter, Rapid sand filter & pressure filter - essential features.	21.10.22		
• Disinfection: Necessity, methods of disinfection, Chlorination, - free & combined chlorine demand, available chlorine, residual chlorine, pre-chlorination, break point chlorination, Super-chlorination.	22.10.22		
	25.10.22		
	27.10.22		
	28.10.22		
	29.10.22		 12/9/22

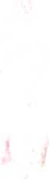


B.I.E.T.

SYLLABUS COVERAGE

TOPIC	DATE	SIGNATURE OF THE FACULTY	SIGNATURE OF THE H.O.
<ul style="list-style-type: none"> Softening of Water - necessity, methods of softening - Lime soda process & ion exchange method <p style="text-align: center;"><u>CHAPTER - IV</u></p> <p style="text-align: center;"><u>DISTRIBUTION SYSTEM & APPURTENANCE IN DISTRIBUTION SYSTEM -</u></p> <ul style="list-style-type: none"> General requirements, types of distribution system - gravity, direct & combined. Methods of supply - intermittent & continuous. Distribution system layout - types 	31.10.22		
	31.10.22		
	1.11.22		
	1.11.22		
	3.11.22		
Comparison Suitability	4.11.22		
	5.11.22		
	07.11.22		
	7.11.22		
<ul style="list-style-type: none"> Valves types, features, uses, purposes Sluice valves, check valve, Air Valves, scum valves, Fire hydrants Water meters. 			


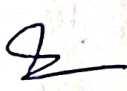






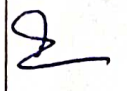

B.I.E.T.

SYLLABUS COVERAGE

TOPIC	DATE	SIGNATURE OF THE FACULTY	SIGNATURE OF THE H.O.D.
<p><u>CHAPTER - V</u> W/s PLUMBING IN BUILDING:-</p> <ul style="list-style-type: none">- Methods of connection from water mains to building supply- General layout of plumbing arrangement for water supply in single storied multi-storied building as per I.S. code	9.11.22		
	10.11.22		








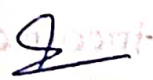

B.I.E.T.

SYLLABUS COVERAGE

TOPIC	DATE	SIGNATURE OF THE FACULTY	SIGNATURE THE H.O.D.
<u>SECTION-B</u> WASTE WATER ENGINEERING <u>CHAPTER-VI</u> INTRODUCTION:-			
- Aims & objectives of sanitary engineering.	11.11.22		
- Definition of terms related to sanitary engineering.	12.11.22		
	14.11.22		
- Systems of collection of wastes - Conservancy & Water carriage system features, comparison, suitability.	15.11.22		
	17.11.22		
<u>CHAPTER-7</u> <u>QUANTITY & QUALITY OF SEWAGE</u>			
- Quantity of sanitary sewage - domestic & industrial sewage, variation in sewage flow, numerical problem on computation quantity of sanitary sewage.	18.11.22		
	19.11.22		
- Computation of size of sewer, application of chezy's formula, Limiting velocities of flow: Self cleaning vel & Scouring.	21.11.22		
	22.11.22		
- General importance, strength of sewage, characteristics of sewage -	23.11.22		









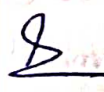


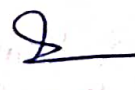

B.I.E.T.

SYLLABUS COVERAGE

TOPIC	DATE	SIGNATURE OF THE FACULTY	SIGNATURE OF THE H.O.D.
Physical, chemical & Biological.	24.11.22		
- Concept of sewage sampling, tests for - solids, pH, dissolved Oxygen, BOD, COD.	25.11.22		
<u>CHAPTER - 8</u>			
<u>SEWERAGE SYSTEM</u>			
- Types of system - separate, Combined, partially separate, features	26.11.22		
Comparison between the types, suitability.	28.11.22		
- Shapes of sewer - rectangular, circular, avoid - features, suitability	29.11.22		
- Laying of sewer - setting - out sewer alignment.	1.12.22		
	2.12.22		
<u>CHAPTER - 9</u>			
SEWER APPURTENANCES & SEWAGE DISPOSAL -			
• Manholes & Lamp holes - types, features, location, function	3.12.22		
• Inlets, Grease & Oil trap - features, location, function	5.12.22		





B.I.E.T.

SYLLABUS COVERAGE

TOPIC	DATE	SIGNATURE OF THE FACULTY	SIGNATURE THE H.C.
<ul style="list-style-type: none"> Storm regulator, inverted siphon-features, location, function 	6-12-22		
	6-12-22		
	<ul style="list-style-type: none"> Disposal on land - sewage farming, sewage application & dosing, sewage sickness- causes & remedies 	7-12-22	
8-12-22			
<ul style="list-style-type: none"> Disposal by dilution - standards for disposal in different types of water bodies, self purification of stream 	09-12-22		
	<p><u>CHAPTER-10</u> SEWAGE TREATMENT</p>		
<ul style="list-style-type: none"> Principles of treatment 	10-12-22		
	<ul style="list-style-type: none"> Flow diagram of conventional treatment. 		
<ul style="list-style-type: none"> Primary treatment - necessity, principles essential features function 	12-12-22		
	13-12-22		
	15-12-22		
<ul style="list-style-type: none"> Secondary treatment - necessity principles essential features functions 	16-12-22		
	17-12-22		
<ul style="list-style-type: none"> Secondary treatment - necessity principles essential features functions 	19-12-22		
	20-12-22		

B.I.E.T.

SYLLABUS COVERAGE

TOPIC	DATE	SIGNATURE OF THE FACULTY	SIGNATURE OF THE H.O.D.
<u>CHAPTER-11</u>			
SANITARY PLUMBING FOR BUILDING:			
<ul style="list-style-type: none"> • Requirements of building drainage Layout of lavatory blocks in residential buildings. Lay out of building drainage 	21.12.22		
<ul style="list-style-type: none"> • Plumbing arrangement of single storied & multi storied building as per I.S. Code practice 	22.12.22		
<ul style="list-style-type: none"> • Sanitary fixtures - features, function & maintenance & fixing of the fixtures - water closets, flushing cisterns, urinals, inspection chambers traps, anti-siphonage pipe 	22.12.22		
verified procedure 12.9.22.			 12/9/22