



LESSON PLAN OF 5TH SEMESTER(2026-27) CIVIL ENGINEERING

Semester:-5 TH		Name of the Teaching Faculty JAYALAXMI BEHERA (LECTURER)
No of Days/per Week Class Allotted :-03		Semester From:- <u>01/07/2026</u> To:- <u>05/11/2026</u>
No of Weeks:- 19		
Week	Class Day	Theory/ Practical Topics
1 st	1 st	UNIT- I Overview of Building Services Introduction to building services, Classification of buildings as per National Building code, Necessity of building services,
	2 nd	Functional requirements of building, Different types of building services
	3 rd	HVAC (Heat, Ventilation and Air Conditioning),
2 nd	1 st	Escalators and lifts, fire safety, protection and control,
	2 nd	plumbing services, rain water harvesting,
	3 rd	solar water heating system, lighting,
3 rd	1 st	acoustics, sound insulation and electric installation etc.
	2 nd	Role and responsibility of Building Service Engineer,
	3 rd	Introduction to BMS (Building Management Services),
4 th	1 st	Role of BMS,
	2 nd	concept of smart building.
	3 rd	UNIT-II Modes of vertical communication Objectives and modes of vertical communication in building.
5 th	1 st	Lifts: Different types of lifts
	2 nd	Uses of lift
	3 rd	Component parts of Lift- Lift Well,
6 th	1 st	Travel, Pit, Hoist Way of lift.
	2 nd	Machine, Buffer, Door Locks, Suspended Rope, Lift Car,
	3 rd	Landing Door, Call Indicators, Call Push etc
7 th	1 st	Design provisions for basic size calculation of space enclosure to accommodate lift services, Safety measures.
	2 nd	Escalators: Different Types of Escalators Uses of escalator.
	3 rd	Components of escalators
8 th	1 st	Design provisions for basic size calculation of space enclosure to accommodate escalator services, Safety measures.
	2 nd	Ramp: Necessity, design consideration
	3 rd	gradient calculation, layout of Ramp.
9 th	1 st	Special features required for physically handicapped and elderly
	2 nd	UNIT-III Fire Safety Fire protection requirements for multistoried building,
	3 rd	causes of fire in building,
10 th	1 st	Fire detecting and various extinguishing systems,
	2 nd	Working principles of various fire protection systems.
	3 rd	Safety against fire in residential and public buildings (multistoried building),
11 th	1 st	National Building Code provision for fire safety,
	2 nd	Fire resisting materials and their properties
	3 rd	Fire resistant construction,
12 th	1 st	procedures for carrying out fire safety inspections of existing buildings
	2 nd	Provisions for evacuation of fire safety.
	3 rd	

13 th	1 st	UNIT-IV Plumbing Services
	2 nd	Importance of plumbing
	3 rd	AHJ (Authority Having Jurisdiction) approval, Plumbing Terminology and fixtures:
14 th	1 st	Terms used in plumbing,
	2 nd	Different types of plumbing fixtures,
	3 rd	shapes/ sizes, capacities, situation and usage,
15 th	1 st	Traps, Interceptors.
	2 nd	System of plumbing for building water supply
	3 rd	storage of water, hot and cold water supply system.
16 th	1 st	System of plumbing for building drainage
	2 nd	Types of drainage system such as two pipe sys- tem,
	3 rd	one pipe system
17 th	1 st	types of Vents
	2 nd	purpose of venting
	3 rd	Concept of grey water and reclaimed water.
18 th	1 st	Different pipe materials,
	2 nd	jointing methods, fittings, hanger, supports
	3 rd	valves used in plumbing and their suitability
19 th	1 st	Discussion
	2 nd	Discussion
	3 rd	Discussion

Mjw
25.06.26
LECTURER

ll
PRINCIPAL 25.06.26
Principal
GIET (Polytechnic)
Jagatpur, Cuttack

BD
25.06.2026
SR.LECTURER
Sr. Lecturer
Civil Engg. Dept.
G.I.E.T(Poly), Jagatpur, Ct