

GANPAT UNIVERSITY									
FACULTY OF ARCHITECTURE DEISGN & PLANNING									
Programme	Bachelor of Architecture				Branch/Spec.	INSTITUTE OF ARCHITECTURE			
Semester	V				Version	2.0.0.0			
Effective from Academic Year	2021-22				Effective for the batch Admitted in	June 2019			
Subject code	2VA05BS		Subject Name	Building Services-III					
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total	CE	SEE	Total	
	L	TU	P	TW					
Credit	2	-	-	-	2	Theory	40	60	100
Hours	2	-	-	-	2	Practical	-	-	-
Pre-requisites:									
Introduction of all types of main building services into which the building design and working depends. Introduction of rain water harvesting, details of drainage system, and details of plumbing systems.									
Learning Outcome:									
LO1: Understand the networking and supply chain of all services including to understand the working cycle to use the system properly and smoothly. LO2: Understanding the importance of each service in details with its designing criteria through live case studies and onsite drawings. LO3: To adapt newer and latest technology and equipment's for modern and fundamental requirement of this services and also High tech applications and services to be implemented for all type of functional areas like residential, commercial, corporate and Industrial. LO4: The brief understanding and importance of solid waste management through the understanding of drainage system should be provided.									
Theory syllabus									
Unit	Content								Hrs
1	Rain water harvesting : Its importance in today's life, design to collect the water, Norms and principle of rain water harvesting , its Advantages and Disadvantages, The rule according to GDCR								10
2	Drainage system : Concept of drainage system, Understanding of Its importance, How to maintenance the drainage system, its Design, Collection of all sort of Grey water, Waste water, Rain water, Importance and sizes of proper pipes, types of pipes, suing in different drainage systems.								10
3.	Plumbing system : Concept and its importance of plumbing system, All Trap systems, Importance of Nally trap, Gully trap, Main hole, Inspection chamber., its Maintenance, All thumb rule to provide proper plumbing system etc. Section of Water coming from Main tank to your home, Water coming from overhead water tank to your home.								12
Practical content									
Site Visits & Case Studies of above topics. Presentations, Movies, Debates & Discussions related to									

the above syllabus.

Text Books

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Reference Books

1 Water Supply and Sanitary Engineering - Birdie,

2 Water Conservation Techniques in Traditional Human Settlements - Laureano, Pietro,

3 Plumbing and Mechanical Services: A Textbook - Masterman, A H,

4. The Home Plumbing Handbook - McConnell

	SA-PO 1	SA-PO 2	SA-PO 3	SA-PO 4	SA-PO 5	SA-PO 6	SA-PO 7	SA-PO 8	SA-PO 9	SA-PSO 1	SA-PSO 2	SA-PSO 3
HAURESS - CD1	2	0	2	3	1	2	3	3	3	1	3	1
HAURESS - CD2	1	2	3	1	3	3	1	2	1	2	2	3
HAURESS - CD3	2	2	1	2	1	2	2	1	3	1	2	1