



Roll No.											
----------	--	--	--	--	--	--	--	--	--	--	--

PRESIDENCY UNIVERSITY

BENGALURU

Mid - Term Examinations – October 2025

Date: 09-10-2025

Time: 09.30am to 11.00am

School: SOE	Program: B.Tech Civil Engineering	
Course Code : CIV2021	Course Name: Design Concepts of Building Services	
Semester: V	Max Marks: 50	Weightage: 25%

CO - Levels	CO1	CO2	CO3	CO4	CO5
Marks	20	30			

Instructions:

- (i) *Read all questions carefully and answer accordingly.*
- (ii) *Do not write anything on the question paper other than roll number.*

Part A

Answer ALL the Questions. Each question carries 2marks.

5Q x 2M=10M

1	What is the need for planning and provisioning Building Services?	2 Marks	L1	CO1
2	List the items classified under the Mechanical System of Building Service.	2 Marks	L1	CO1
3	What is a humidifier?	2 Marks	L1	CO1
4	List the factors influencing the choice of Building Service, such as Air Conditioning.	2 Marks	L1	CO1
5	What is HVAC?	2 Marks	L1	CO1

Part B

Answer the Questions.

Total Marks 40M

6.	a.	Briefly explain various types of building services	10 Marks	L2	CO1
Or					
7.	a.	Explain the different types of artificial lighting systems	10 Marks	L2	CO1

8.	a.	Explain the differences between direct and indirect cold water supply systems with a line diagram, including their advantages and disadvantages.	15 Marks	L2	CO2
-----------	-----------	--	-----------------	-----------	------------

Or

9.	a.	Discuss the factors influencing the choice of hot water supply systems and explain how these factors guide system selection.	15 Marks	L2	CO2
-----------	-----------	--	-----------------	-----------	------------

10.	a.	Design a plan and elevation of a 3-story 2BHK building showing a direct water supply system (both hot and cold) along with its single stack sewage discharge system. Explain its working.	15 Marks	L3	CO2
------------	-----------	---	-----------------	-----------	------------

Or

11.	a.	Create a plan and elevation of a single-story 4BHK building with 2 wash rooms with a direct cold water supply system and solar solar-powered hot water supply system, along with a two-pipe sewage discharge system. Explain its working.	15 Marks	L3	CO2
------------	-----------	---	-----------------	-----------	------------