



Max. Marks: 100

USN

Third Semester B.Arch. Degree Examination, June/July 2023 **Building Services - I**

Time: 3 hrs.

estions, choosing one full question from each module.

	N	ote: 1. Answer any FIVE full questions, choosing one full question from each	mount.
		2. Sketches shall be written wherever required.	
Module-1			
1	•	How is water borne diseases caused? Explain.	(06 Marks)
1	a. b.	What is Hygiene? Discuss personal hygiene.	(04 Marks)
	c.	Explain the points of importance in any water supply scheme.	(10 Marks)
	С.	Explain the points of importance in any warrants	
		OR «	
2		Explain with the help of a bubble diagram the process of Water Purification.	(20 Marks)
-		Zapam vim ma yr	
		Module-2	
3		Distinguish between:	
		i) Inspection chamber and Manhole (with neat sketches)	(20.75 1)
		ii) Gully trap and Bottle trap.	(20 Marks)
		OR	(10.3/
4	a.	With help of neat sketch, explain the working of septic tank.	(10 Marks) (10 Marks)
	b.	What is rain water harvesting in a domestic house?	(10 Marks)
		Modulo 2	
_		Module-3	(08 Marks)
5	a. L	Mention the principles of house drainage.	(00 Marks)
	b.	With neat sketches explain i) Single stack system	
		i) Single stack systemii) One pipe system partially ventilated	
		iii) Two pipe system.	(12 Marks)
		my 1 wo pipe system.	(,
		OR	
6	a.	With help of neat sketch briefly explain:	
Ü	٠	i) Tap and mixer	
		ii) Indian water closet, European water closet.	
		iii) Flush tank and Flush valve	(12 Marks)
	b.	Explain Air relief valve and pressure relief valve.	(08 Marks)
		Modulo 4	

Module-4

- What is Solid Waste Management? List the various sources from where the waste is generated. (13 Marks) What is Wormi composting explain. (07 Marks)

OR

With help of neat sketch explain working of oxidation pond. 8

(10 Marks)

- Indicate the standard heights from the finished floor level for the following fixtures with sketches:
 - i) Wash basin
 - ii) **EWC**
 - iii) Hot and Cold diverter
 - iv) Shower unit
 - v) Geyer.

(10 Marks)

Module-5

- 9 Draw a schematic fire escape staircase and list mandatory dimensions to
 - Riser i)
 - ii) Tread
 - iii) Landing
 - iv) Headroom
 - v) Staircase railing.

(20 Marks)

OR

10 List class of fire extinguishers for various fire hazards.

(10 Marks)

- Explain the use and importance of
 - Fire alavaen i)
 - Wet riser in fire safety. ii)

(10 Marks)

2 of 2