



End Semester Examination, December 2024

BID, B.Sc.ID – Third Semester

BUILDING SERVICES-I (DRAINAGE, PLUMBING)-(ADID205)

Time: 2.5 hrs.

Max Marks: 50

Note: *All Questions are compulsory. In Q.1 attempt any five questions. Marks are indicated against each question.*

PART-A

Q.1 Answer the following questions:

- (a) What are the different sources of water? [CO-1] [L-1] 2
- (b) What are the qualities of potable water? [CO-1] [L-1] 2
- (c) What are reservoirs? What are the benefits of reservoirs? [CO-1] [L-1] 2
- (d) What is pumping system for supply of water? [CO-1] [L-1] 2
- (e) What are the different types of water impurities? [CO-1] [L-1] 2
- (f) Write function of catch basin. [CO-1] [L-1] 2
- (g) Write function of valve. [CO-1] [L-1] 2

2x5

PART-B

Q.2 Explain the process of water treatment in septic tank. Illustrate with diagram. [CO-2] [L-2] 10

OR

Explain the process of disposal of wastewater by one pipe and two pipe system. [CO-2] [L-2] 10

Q.3 Illustrate the dead end and ring layouts of water distribution network with the help of diagram. [CO-3] [L-3] 10

OR

Illustrate the different sanitary appliances with the help of diagrams. [CO-3] [L-3] 10

Q.4 Examine how the water is purified for drinking purpose. Draw the circuit diagram to support the process. [CO-4] [L-4] 10

OR

Calculate the payment made by the consumer by the end of the year. [CO-4] [L-4] 10

Month	Present reading, cu.m.	Cubic m consumed	Payment made (Rs 30 per cu.m.)
January	57.9		
February	60.5		
March	65.8		
April	70.4		
May	72.9		
June	85.6		
July	84.8		
August	82.5		
September	76.9		
October	73.8		
November	68.3		
December	63.9		

Q.5 Develop the layout of girls and boy's toilet in a kindergarten and show how the wastewater is disposed off from the building to the main sewer line. [CO-4] [L-5] 10

OR

Develop the layout of a one BHK unit and show how the wastewater is disposed off from the building to the main sewer line. [CO-4] [L-5] 10