BHARATI VIDYAPEETH INSTITUTE OF TECHNOLOGY
Question Bank (K-Scheme)

Name of subject: Water and waste water engineering **Unit Test: II**
Subject code: 314314 **Course: CE**
Semester: IV

CHAPTER 3 (12 marks)
(Conveyance and Distribution of Water)

(2 Marks)

a. Enlist types of pipes.
b. Name any four types of pipe joint
c. Draw labeled sketch of grid iron system
d. Why valves are provided in pipelines.
e. State different types of valves

(4 Marks)

a. Draw a neat Sketch a pressure relief Valve
b. Explain bell and Spigot joint with Sketch
c. State functions of i) Air relief Valve ii) Non return Valve
d. Differentiate between gravity and pumping distribution System
e. Describe necessity and importance of any one type of service reservoir
f. Describe grid iron system layout of distribution of water
g. State the factors affecting the choice of pipe material for distribution of water
h. Differentiate between dead end system and circular system
i. Enlist different types of valves used in water supply pipeline explain any one with respect to use, location and function
j. Write advantages and disadvantages of gravity system and pumping system
k. Draw a neat Sketch of expansion joint provided for water pipe line

CHAPTER 4 (18 marks)

(Domestic Sewage and System of Sewerages)

(2 Marks)

a. State importance of building Sanitation
b. Define water closet
c. Define i) waste pipe ii) garbage
d. Define – trap and state different types of trap.
e. Define – self cleansing velocity and non Souring velocity

(4 Marks)

a. Differentiate between one pipe and two pipe System

b. Explain in brief the procedure of laying of sewers .

c. Draw a labelled sketch of intercepting trap state its location and function

d. Why manholes are provided in sewerage system? State its location and spacing

e. Describe water test and air test with reference to testing of sewers

f. Draw a neat sketch of European type water closet and drop manhole

g. Describe with neat sketch an inspection chamber

h. State any four qualities of good trap and draw Q and S trap

i. Enlist different types of sewers according to shape explain any one

j. Explain the working of flushing cistern

k. Describe principles of building drainage system

l. State norms for maintenance of domestic sanitary units

m.Draw a layout plan for building drainage

n.what is recycling of domestic waste.

CHAPTER 5 (12 marks)
(Characteristics and Treatment of Sewage)

(2 Marks)

a. State any four objects of sewage treatment..
b. Define anaerobic process.
c. Define BOD
d. Define C.O.D.

(4 Marks)

a. Draw layout of sewage treatment plant.

b. (b) Differentiate between (i) aerobic and anaerobic process (ii) BOD and COD

c. Describe working of trickling filter with neat sketch.

d. . Draw a neat labeled sketch of Trickling filter and explain its working.

e. Draw flow diagram of activated sludge process and explain the function of each unit.

f. Explain activated sludge process with help of neat sketch.

g. Explain working of septic tank with neat sketch.

h. Explain oxidation pond

i. Describe recycle and reuse of domestic sewage

j. State the role of Maharashtra pollution control board in prevention of pollution

k. Explain Sludge digestion tank with neat sketch

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