No. of Printed Pages : 4 120742/030742

Roll No. .....

4th Sem. / Civil/BT/CM/HE

Subject : Water Supply and Waste Water Engg/(W.S.U.W.W.E.)

Time : 4 Hrs. M.M. : 100

SECTION-A

Note: Very Short Answer type questions. Attempt any 15 parts. (15x2=30)

Q.1 a) Water supply Engg.

b) pH value of pure water.

c) Screening

d) Breakpoint Chlorination

e) Appurtenances

f) Stop cock

g) Bib cock

h) Sanitary sewage.

i) Sewerage

j) Invert

k) Vent Pipe

l) Drain

m) Waste

n) C.O.D

o) Sludge

p) Effluent

q) Barrel.

r) Storm water.

SECTION-B

Note: Short answer type questions. Attempt any ten parts 10x4=40

Q.2 I) Write a note on ‘ Variation of demand.

ii) Explain the factors which affect per capita demand.

iii) How you will fore cast the population by growth consumption analysis method.

iv) What are the standard of potable water as per Indian standard.

v) Write a short note on application of liquid chlorine.

vi) Describe the functions of Floculator

vii) Describe the Flanged joint.

viii) Write a short note on Air valve .

ix) Describe setting out alignment of pipe line.

x) What is the purpose of Sanitation.

xi) Draw a neat sketch of Man hole with all details.

xii) Describe is brief physical Tests for checking the quality of sewage.

xiii) What is the importance of sewage disposal.

xiv) Discuss is brief the principles of Secondary treatment.

xv) What are the requirements of building drainage.

SECTION-C

Note: Long answer type questions. Attempt any three questions. 3x10=30

Q.3 Explain in detail the chemical Tests. Which are carried out in water analysis .

Q.4 Explain in detail the different processes of feeding the coagulant into the raw water.

Q.5 What is separate system of sewage? Explain in detail its suitability, advantages and disadvantages.

Q.6 Explain in detail the operation of excavation while placing sewers at the correct alignment and gradient without any damage.

Q.7 Discuss in detail self purification of streams.