

No. of Printed Pages : 4

Roll No.

120742/030742

4th Sem. / Civil / Brick tech. / const. Mgmt. / H.E

Subject : Water Supply & Waste Water Engg.

Time : 3 Hrs.

M.M. : 100

SECTION-A

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

- Q.1
- a) Per capita Demand
 - b) Potable water
 - c) Flocculation
 - d) Scour valve
 - e) Bib cock
 - f) Back filling
 - g) Boning rod
 - h) Caulking

(1)

120742/030742

- i) Sewage
- j) Refuse
- k) Catch basin
- l) Sludge
- m) Chemical oxygen demand
- n) Soil pipe
- o) Aeration
- p) Detritus tank
- q) Seal in trap
- r) Re circulation ratio

SECTION-B

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

- Q.2 i) What is variation in demand of water?

(2)

120742/030742

- ii) Name chemical tests on water for quality determination.
- iii) Explain break point chlorination.
- iv) Explain the working of fire hydrant.
- v) What is socket and spigot joint?
- vi) How pipe lines are tested?
- vii) Name various water supply fixtures.
- viii) What is incremental increase method of population forecasting?
- ix) Explain conveyance of sewage.
- x) Give the location and functions of manhole.
- xi) How alignment of sewer is carried out?
- xii) What are the I.S. standard for analysis of sewage?
- xiii) What are the causes of breaking seals?
- xiv) What is secondary treatment of sewage?

- xv) Name the materials for sewers. Give their sizes.

SECTION-C

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

- Q.3 Describe the construction and functions of rapid sand filter.
- Q.4 Explain the methods of layout of distribution pipes.
- Q.5 Discuss disposal of sewage by land treatment. Give its merits.
- Q.6 Explain activated sludge process with the help of flow diagram.
- Q.7 What is building drainage? What are its aims and requirements.

(3) 120742/030742

(5260)

(4) 120742/030742