

No. of Printed Pages : 4

Roll No.

120742/30742

4th Sem. / Civil / Bricktech

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) Define Coagulation.
 - b) What is residual chlorine?
 - c) What is per capita demand?
 - d) What is the function of scour valve?
 - e) Where stop cock is used.
 - f) Draw the sketch of flange Joint
 - g) What are units of turbidity?
 - h) What is most probable number?
 - i) Define aeration.

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- j) Flow through periods.
- k) What is sullage?
- l) Where catch basin is used?
- m) What is aerobic bacteria?
- n) Define COD.
- o) What is the function of Grit chamber?
- p) Define sludge.
- q) What is the role of building drain?
- r) Where waste pipe is used?

SECTION-B

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

- Q.2
- i) What is incremental increase methods of forecasting population?
 - ii) Explain variation in demand of water.
 - iii) Give the standard of potable water as per indian standard.

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- iv) Explain break point chlorination.
- v) List the precautions to be taken in laying pipes in black cotton soil.
- vi) Compare cast iron and steel pipes.
- vii) Explain with sketch wash basin.
- viii) Name the various joints used in water supply pipes. sketch any one.
- ix) Explain conservancy method of sanitation.
- x) Give the constructional features and function of dropmanhole.
- xi) What are the physical characteristics of sewage?
- xii) How will you set out the alignment of sewers?
- xiii) Explain the principle of building drainage.
- xiv) Explain secondary treatment with the help of flow diagram.
- xv) How sewer lines are tested?

SECTION-C

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

- Q.3 Explain self purification of streams as method of sewerage disposal.
- Q.4 Explain sludge treatment and disposal.
- Q.5 Describe the construction and working of slow sand filter.
- Q.6 Discuss the methods of layout of distribution pipe.
- Q.7 Write short notes on any two of the following :-
 - (i) Causes of breaking seals.
 - (ii) Maintenance of distributing system.
 - (iii) Detritus tank.
 - (iv) Water carriage system for sewage.