

Diploma in Civil Engineering (DCLE(G))

DCLEVI

Term-End Examination

December, 2013

BCE-033 : ENVIRONMENTAL ENGINEERING

Time : 2 hours

Maximum Marks : 70

Note : Question no. 1 is compulsory. Answer any five questions.

7x2=14

1. (a) What are the characteristic differences between surface water and ground water ?
(b) What is MPN ? What is its significance ?
(c) Differentiate between coagulation and Flocculation.
(d) Write the different methods of disinfection ?
(e) What are the purposes of water filtration ?
(f) What is meant by DWF ?
(g) Differentiate between Combined Sewer and Partially Seperate sewer.

2. (a) Describe the necessity of having a Planned Water Supply Scheme for a town. How are such schemes financed, planned and executed ? 7
(b) Describe how you would arrive at the total quantity of water to be supplied to a metro politan city ? 7

3. (a) Discuss in detail the different sources of water supply. 7
(b) Write a note on water borne diseases and their control. 7
4. Write short notes on the following : 4x3.5=14
(a) pH of water
(b) Turbidity
(c) Hardness
(d) B - coli
5. (a) How will you estimate the quantity of water to be stored in the distribution reservoir ? 7
(b) Write a short note on Hardy Cross Method. 7
6. (a) Draw a neat sketch of standard egg shaped sewer. Under what circumstances, it is more advantageous compared to a circular one ? 7
(b) Differentiate between manhole and drop manhole. 7
7. (a) What is meant by activated sludge ? Describe with sketches the treatment of sewage by activated sludge process. 7
(b) Compare Activated sludge process with Trickling Filter. 7
8. Write short notes on (any two) : 2x7=14
(a) Oil and grease removal
(b) Flootation
(c) Catch Basins
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