

Total No. of Questions : 8]

[Total No. of Printed Pages : 2

Roll No

CE-603 (GS)**B.E. VI Semester**

Examination, December 2017

Grading System (GS)**Environmental Engineering - I***Time : Three Hours**Maximum Marks : 70*

- Note:** i) Attempt any five questions.
ii) All questions carry equal marks.

1. Discuss "Logistic curve method" for forecasting population. Derive standard equation for such a curve.
2. With the help of following data predict population of a city for the year 2050, by incremental increase method.

Year	1970	1980	1990	2000	2010
Population	3,41,000	4,15,000	4,70,500	5,45,000	6,10,000
3. Write IS standards of drinking water.
4. Explain bacteriological examination of water for finding M.P.N. of E-coli.
5. Differentiate between slow-sand and rapid-sand filter.
6. Explain with sketch "Back-washing" operation of rapid gravity filter.

[2]

7. Explain graphical method of calculating capacity and height of a service reservoir.
8. Answer any four of the following:
 - a) What are the factors affecting l.p.c.d.?
 - b) Draw the sketch of "River-Intake" showing all its components.
 - c) Explain break-point chlorination.
 - d) Describe leak-detection test for water supply mains.
 - e) Enlist sanitary appliances used in general.
 - f) What are different types of plumbing?
