

R16

Code No: 136BT

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year II Semester Examinations, November/December - 2020

ENVIRONMENTAL ENGINEERING

(Civil Engineering)

Time: 2 Hours

Max. Marks: 75

Answer any five questions
All questions carry equal marks

1. The following data have been noted from the census department.

Year	Population
1960	9,000
1970	16,000
1980	19,000
1990	32,500

Calculate the probable population in the year of 2020 and 2040.

[15]

2. What is an intake structure? With a neat sketch, describe reservoir intake.

[15]

3. Distinguish between slow and rapid gravity filters.

[15]

4. Explain the theory of chlorination.

[15]

5. A main sewer is to be designed to receive a flow from 1 square kilometre area of a community where the population density is 300 persons per hectare. The average swage flow is 150 lpcd. What is the design flow for the main sewer?

[15]

6. What are the materials used for pipe sewers? Write their merits and demerits.

[15]

7. Explain the process steps involved in a trickling filter.

[15]

8. Explain step by step design of digestion tank.

[15]

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