JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATIONS-2022

B.Tech-VIII Semester (Civil Engineering)

COURSE CODE: 18B11CE314   MAX. MARKS: 15

COURSE NAME: Water Supply Engineering

COURSE CREDITS: 3   MAX. TIME: 1 Hour

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means. Marks are indicated against each question in brackets.

Q.1 What are the various factors affecting per capita demand of water?   **(3 Marks)**

Q.2What are the factors that affect design period of various components in water supply scheme?

(2 Marks)

Q.3 Explain the Ideal population growth curve?   **(2 Marks)**

Q.4 Derive the expression for Population forecasting by following methods: **(2 Marks)**

- **Arithmetic Increase Method**
- **Geometric Increase Method**

Q.5 The population of 5 decades from 1930 to 1970 are given below. Find the population after one, two and three decades by using arithmetic increase method, geometric increase method and incremental increase method?   **(6 Marks)**

Year	Population
1930	25,000
1940	28,000
1950	34,000
1960	42,000
1970	47,000