Unit 4 - week 2

Assignment 2

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-02-12, 23:59 IST.

1) 1 point

As per CPHEEO, for average size cities with piped water supply and existing sewerage system, the recommended per capita water demand is considered as:

a) 70 lpcd
b) 100 lpcd
c) 135 lpcd
d) 150 lpcd

a.
b.
c.
d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
c.

2) 1 point

A city's municipal water supply system typically aims to provide water for:

a) Commercial and institutional water demand
b) Fire-fighting demand
c) Domestic water demand
d) All of the above

a.
b.
c.
d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
d.

3) 1 point

Which is the correct statement regarding per capita demand expressed in LPCD?

a) Average quantity of water required by an individual in a year
b) Total quantity of water required by an individual in a year
c) Annual average amount of daily water required by one person
d) None of the above

a.
b.
c.
d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
c.

4) 1 point

Which of the following factors DO NOT impact the domestic water demand of a household?

a) Income class of the household
b) Religious and cultural practices
c) Compensation losses
d) Number of house-dwellers

a.
b.
c.
d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
c.

5) 1 point

Which of the following activities is usually recognized as the highest contributor to the domestic water consumption?

a) Toilet Flushing
b) Washing of cloths
c) Cooking
d) Bathing

a.
b.
c.
d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
d

6) 1 point

If the annual average hourly demand of the city is 2000 m^3/h, what is the maximum hourly consumption (assume daily peak factor as 1.8 and hourly peak factor as 1.5)?

a) 5400 m^3/h
b) 54000 m^3/h
c) 3600 m^3/h
d) 36000 m^3/h

a.
b.
c.
d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
a.

7) 1 point

Firefighting demand for a city/town is usually estimated, based on:

a) Population
b) Area of the city
c) Climatic conditions
d) All of the above

a.
b.
c.
d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
a.

8) 1 point

Design period for the components of water supply system is estimated based on,

a) Useful life of the components
b) System's capacity
c) Age of the city
d) None of the above

a.
b.
c.
d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
a.

9) 1 point

For a population of 1 lakh having per capita demand of 150 lpcd, the average daily water demand of the city, in m^3/d, would be:

a) 15
b) 1,500
c) 15,000
d) 15,000,000

a.
b.
c.
d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
c.

10) 1 point

Geometric increase method of population growth is better suited for

a) Large and established cities
b) Cities of moderate size and age
c) New cities with unlimited scope of expansion
d) Cities with limited space and economic opportunity.

a.
b.
c.
d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
c

11) 1 point

For cities which are planned into various zones and regulated by local bodies, the population forecasting must be done using:?

a) Geometric increase method
b) Incremental increase method
c) Logistic growth method
d) Master Plan Method

a.
b.
c.
d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
d.

12) 1 point

Which of the following would be better estimate of the design capacity of water distribution system for a town?

a) Annual average hourly demand
b) Peak hourly demand
c) Fire flow demand
d) Average hourly demand on a maximum day

a.
b.
c.
d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
b.

Main Data:
The population record of a city is as follows:

Year	Population (in thousands)
1971	8
1981	13
1991	19
2001	25

Based on the given data, answer questions 13, 14 and 15.

13) 1 point

What is the population for the year 2031 using arithmetic increase method?

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 40000,44000

14) 1 point

What is the population for the year 2031 using incremental increase method?

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 43000,47000

15) 1 point

Estimate the fire demand for the year 2031 using National Board of Fire Underwriters' Formula (unit: kL/min).

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 27,31