

Course outline

How does an NPTEL online course work?

Week 0

Week 1

- Lecture 01 : Urban Utilities Planning Issues
- Lecture 02 : Planning Strategies
- Lecture 03 : Planning Strategies (Contd.)
- Lecture 04 : Urban Utilities
- Lecture 05 : Water Sensitive Urban Planning
- Week 1 Lecture Material
- Quiz: Week 1 : Assignment 1
- Week 1 Feedback Form

Week 2

Week 3

Week 4

Week 5

Week 6

Week 7

Week 8

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Week 10

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Week 12

Detail Solution

Live Interactive session

Week 1 : Assignment 1

The due date for submitting this assignment has passed.

Due on 2021-08-18, 23:59 IST.

As per our records you have not submitted this assignment.

- 1) Which among the given themes of the Composite Water Management Index (CWMI) accounts for the maximum weight? 1 point

- a. Source augmentation and restoration of water bodies
- b. Watershed development – Supply side management
- c. Participatory irrigation practices – Demand side management
- d. Policy and governance

- a.
 b.
 c.
 d.

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 d.

- 2) Which among the following causes decline in groundwater level? 1.5 points

- A. Uncontrolled and illegal extraction
- B. Rapid urbanization
- C. Construction of concrete surfaces
- D. Lack of enough water recharge structures

- a. A and D
- b. A, B and D
- c. A, C and D
- d. A, B, C and D

- a.
 b.
 c.
 d.

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 d.

- 3) Sustainable Development Goal 6 adopted by the United Nations envisages availability and _____ of water for all by 2030. 1 point

- a. Sustainable management
- b. Sustainable usage
- c. Equitable distribution
- d. Distribution

- a.
 b.
 c.
 d.

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 a.

- 4) Population of a district based on census data is given as follow: 2 points

Year	1991	2001	2011
Population	80500	535000	1036000

What will be the forecasted population for 2031 based on the arithmetic increase method?

- a. 1991000
- b. 1991500
- c. 1992000
- d. 1992500

- a.
 b.
 c.
 d.

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 b.

- 5) For the given population data, what is the forecasted population for 2031 based on the Incremental increase method? (Note: Round off to the closest integer) 2 points

Year	1971	1981	1991	2001	2011
Population	60000	65000	82000	105000	132000

- a. 310000
- b. 315000
- c. 322000
- d. 325000

- a.
 b.
 c.
 d.

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 c.

- 6) Which of the following statement(s) is/are correct concerning the design period of Water supply, Sewerage and Drainage infrastructure? 1.5 points

- A. Growth rate of population affects design period
- B. Growth rate of population does not affect design period
- C. Slow change in landuse increases design period
- D. Faster change in Landuse increases design period

- a. A and D
- b. A and C
- c. B and D
- d. B and C

- a.
 b.
 c.
 d.

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 b.

- 7) Which of the following statement(s) is/are incorrect concerning Mathematical models for population forecast? 1 point

- a. Mathematical models are suitable when population growth is regular
- b. Mathematical models consider that no major societal and economic changes have occurred
- c. Mathematical models consider different population age groups and gender.
- d. Mathematical models predict population using population growth rate from a past period.

- a.
 b.
 c.
 d.

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 c.

- 8) Which of the following statement(s) is/are true concerning Service level benchmarks (SLBs)? 1.5 points

- A. It helps in performance management.
- B. It does not cover Solid waste management
- C. Performance gaps cannot be identified using SLBs
- D. It increases accountability in service delivery.

- a. A and B
- b. A and D
- c. B and C
- d. C and D

- a.
 b.
 c.
 d.

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 b.

- 9) Match the various forms of Public private partnership (PPP) with its method of functioning 2 points

PPP Forms	Method of functioning
A. Divestitures	i. Private operator is responsible for both operation and investment
B. Concessions	ii. Private operator operates the publicly owned system, collects revenues and shares with the public authority which is responsible for investment
C. Leases-affermages	iii. Infrastructure assets are sold to private investors
D. Management contracts	iv. Publicly owned utility is managed by private operator

- a. A-iii; B-i; C-ii; D-iv
- b. A-ii; B-iii; C-i; D-iv
- c. A-i; B-iv; C-ii D-iii
- d. A-iv; B-iii; C-i; D-ii

- a.
 b.
 c.
 d.

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 a.

- 10) Which of the following statements is false concerning Public private partnership (PPP) in Utility provision projects. 1 point

- a. Efficiency in capital investment is poor as a result of public fund availability.
- b. PPP performance is affected by low incentive.
- c. PPP Efficiency is affected by Government policies
- d. PPP Efficiency is independent of Contract targets

- a.
 b.
 c.
 d.

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 d.

- 11) Which of the following statements is false concerning Water sensitive planning? 1 point

- a. It involves the provision of ecosystem services for the natural environment.
- b. It does not involve the provision of ecosystem services for the built environment.
- c. It involves reduction of the demand for potable water by using harvested rainwater, treated wastewater and water efficient appliances
- d. It involves adaptive multifunctional infrastructure and State urban design reinforcing water sensitive behaviours

- a.
 b.
 c.
 d.

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 b.

- 12) Water sensitive design measures can be undertaken _____ 1 point

- a. only at individual and street scale
- b. only at neighbourhood and street scale
- c. only at neighbourhood and city scale
- d. at individual, street, neighbourhood and city scale

- a.
 b.
 c.
 d.

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 d.

- 13) Which of the following is false concerning bio-remediation of waterbodies? 1 point

- a. Use of living organisms to remove organic matter in a waterbody.
- b. Involves onsite treatment to degrade pollutants to less toxic forms.
- c. Involves de-siltation of water bodies.
- d. Involves a mechanical process to remove organic content in soil

- a.
 b.
 c.
 d.

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 d.

- 14) ULB's responsibility under the Jai Shakti Abhijyan include: 1.5 points

- A. To ensure all government buildings (Central/State/ULB) and all public buildings (educational institutions, commercial establishments, hospitals, etc.) to must have working RWH structures.
- B. Persuading Group Housing Societies to develop RWH structures.
- C. Building permission to be granted on the incorporation of the RWH structures.
- D. De-concretizing of pavements around trees and laying of perforated paver blocks.

- a. A and D
- b. A, B and D
- c. A, C and D
- d. A, B, C and D

- a.
 b.
 c.
 d.

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 d.

- 15) National Urban Sanitation Policy 2008 suggests _____% of treated waste water to be reused. 1 point

- a. 10
- b. 15
- c. 20
- d. 25

- a.
 b.
 c.
 d.

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 c.