Assignment 4

The due date for submitting this assignment has passed. **Due on 2018-02-21, 23:59 IST.**

Submitted assignment

1) Identify the correct sequence of priority of water use:  
   - a) Water for life > water for development > water for citizen
   - b) Water for citizen > Water for life > Water for development
   - c) Water for development > Water for life > Water for citizen
   - d) Water for life > Water for citizen > Water for development

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

   d) Water for life > Water for citizen > Water for development

2) Which of the following uses of water can be considered passive?  
   - a) Industrial Usage
   - b) Municipal Water Supply
   - c) Biodiversity conservation
   - d) Irrigation

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

   c) Biodiversity conservation

3) Fishery and aquaculture belong to which category of economic value of water:  
   - a) Consumptive Use value
   - b) Non-consumptive Use value
   - c) Bequest value
   - d) Altruist Value

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

   a) Consumptive Use value

4) Which of the following methods assumes that consumers choose a commodity based on their level of well-being when facing an environmental health risk:  
   - a) Contingent Valuation Method
   - b) Travel Cost Method
   - c) Choice Modeling Method
   - d) None of the above

**Score: 0**  
**Accepted Answers:**  

   a) Contingent Valuation Method

---

https://onlinecourses.nptel.ac.in/noc18_oe02/unit?unit=9&assessment=121
No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
1) Market inputs do not bias the estimate.  
2) Water is treated as an input to the production of good.  
3) Total Returns + Non-Water Expenses = Water Input.  
4) All the above statements are incorrect.

No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
5) Which of the following statements about Residual Analysis is correct?  
1 point

a) Market inputs do not bias the estimate.  
b) Water is treated as an input to the production of good.  
c) Total Returns + Non-Water Expenses = Water Input.  
d) All the above statements are incorrect.

No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
6) Which of the following pricing methods is based on discussions and consensus building  
1 point

a) Averting Method  
b) Deliberative Monetary Valuation  
c) Residual Analysis  
d) Substitute Cost Method

No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
7) Unaccounted water due to metering inaccuracies are considered as:  
1 point

a) Apparent losses  
b) Real losses  
c) Physical losses  
d) Not considered as loss

No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
8) Which of these statements are correct about NRW and UFW:  
1 point

a) UFW is a subset of NRW  
b) NRW is a subset of UFW  
c) NRW and UFW have partial overlap  
d) UFW and NRW are mutually exclusive

No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
9) Match the following columns related to different metering regimes:  
0 points

<table>
<thead>
<tr>
<th>1.</th>
<th>All connections are metered</th>
<th>a. Decentralized Metering</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Only selected meters are installed targeted towards ensuring socially equitable distribution</td>
<td>b. Universal Metering</td>
</tr>
<tr>
<td>3.</td>
<td>Only selected meters are installed targeted towards increasing revenue generation</td>
<td>c. Optimal Metering</td>
</tr>
</tbody>
</table>

a) 1-c,2-a,3-b  
b) 1-c,2-b,3-a
10) In the State of Maharashtra, the gross value of agricultural output with and without irrigation was estimated as ₹ 1,00,000 per hectare and ₹ 45,000 per hectare, respectively. The input expenses with and without irrigation was estimated as ₹ 65,000 per hectare and ₹ 30,000 per hectare, respectively. If the annual water consumption used in irrigation is 5000 m$^3$/hectare, the in-use value of irrigation water would be:

a) ₹ /m$^3$

b) ₹ /m$^3$

c) ₹ /m$^3$

d) ₹ /m$^3$

No, the answer is incorrect.
Score: 0
Accepted Answers:
c) ₹ /m$^3$

11) For an industrial supply scheme, the cost and values (in ₹/m$^3$ of water used) of water services was estimated as: Capital cost = 8, Operation and maintenance cost = 6.5, Opportunity cost from urban sector = 4, Economic externalities (negative) = 1.0, Environmental externalities (negative) = 1.5, Net value of the additional product output/features = 12.2, Net value from the return flow = 1.5, and Intrinsic value = 2.0. Considering all other components of cost and value as zero, estimate the following (in ₹/m$^3$ of water):

a) Full supply cost ₹ _______/m$^3$ of water

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 14-15

b) Full economic cost ₹ _______/m$^3$ of water

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 19-20

12) With reference to Q.11,

b) Full economic cost ₹ _______/m$^3$ of water

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

13) With reference to Q.11,

c) Total economic value ₹ _______/m$^3$ of water

No, the answer is incorrect.
Score: 0
Accepted Answers:
1.14) A water meter installed at mains of a housing society shows a total consumption of 50 MLD for domestic uses. However, the meter at the mains is wrongly calibrated which reads 0.8 kL for every kL of water flow. In addition, the pipeline feeding water to the society has a leakage at a rate of \(0.5 \text{ m}^3/\text{s}\) (occurring before the meter). If the rate of supply water is \(2.5/kL\), compute the following:

a) The total water loss is _______ MLD

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 54-57

b) The total Non-Revenue Water is _______ MLD

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 54-57

c) The total water losses are _______ % of supply

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 51-54

d) The total monetary value of apparent losses is \(\text{₹} _____\) lakhs/day

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 0.25-0.35

e) The total monetary value of real losses is \(\text{₹} _____\) lakhs/day

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 1-1.2