Assignment 1

The due date for submitting this assignment has passed. Due on 2018-02-05, 23:59 IST.

Submitted assignment

Multiple choice questions each carrying one mark.

1. Water Economics and Governance Managements should be studied as

   a) Engineering discipline
   b) Managements discipline
   c) Economics discipline
   d) Interdisciplinary

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

2. The correct order of locations, showing decreasing residence time of water, is:

   a) Oceans > Glaciers > Groundwater > Rivers
   b) Glaciers > Oceans > Groundwater > Rivers
   c) Glaciers > Groundwater > Oceans > Rivers
   d) Oceans > Groundwater > Glaciers > Rivers

No, the answer is incorrect.
Score: 0
Accepted Answers:
   b) Glaciers > Oceans > Groundwater > Rivers

3. The change in surface water storage in a watershed using water budget equation would be given as (ignoring any stream water inflow):

   a) Precipitation – Infiltration - Evapotranspiration – Net runoff from watershed

Score: 0
Accepted Answers:
   a) Precipitation – Infiltration - Evapotranspiration – Net runoff from watershed
4. Which of these continents receive the highest precipitation per unit area:
   a) Europe
   b) Asia
   c) Africa
   d) South America

   No, the answer is incorrect.
   Score: 0

5. Which of these are NOT a river of the Deccan plateau:
   a) Narmada
   b) Krishna
   c) Brahmaputra
   d) Mahanadi

   No, the answer is incorrect.
   Score: 0

6. Water audit is very essential for the effective water management, because:
   a) It helps in identifying specific issues related to sectoral water consumptions and losses
   b) It arranges finance for dealing with the water management challenges
   c) It suggests technical and engineering solutions for the effective water management
   d) All of the above

   No, the answer is incorrect.
   Score: 0

7. The rapid reduction in groundwater table in several regions in India is primarily the result of:
   a) Climate Change
   b) Over exploitation of groundwater for irrigation
   c) Groundwater abstraction for domestic uses
   d) Lack of artificial groundwater recharge

   No, the answer is incorrect.
   Score: 0

8. The most influential driver for increasing water demand from domestic sector in India, is:
   a) Increasing per capita water consumption
   b) Population growth
   c) Industrialization with water intensive industries
9. Which state has the highest percentage of total annual replenishable ground water resources in India?

- a) Andhra Pradesh and Telangana combined
- b) Karnataka
- c) Madhya Pradesh
- d) Uttar Pradesh

No, the answer is incorrect.
Score: 0
Accepted Answers: 
- d) Uttar Pradesh

Multiple choice questions each carrying two marks.

10. “India has more than 17% of the world’s population, but has only 4% of world’s renewable water resources with 2.6% of world’s land area”. Based on the fact above, identify if the following statements are correct: A. India has lesser fresh water availability per unit land area compared to the world average B. India has higher fresh water availability per unit land area compared to the world average C. India has lesser per capita fresh water availability compared to the world average D. India has higher per capita fresh water availability compared to the world average

- a) Statements A and C are correct, while B and D are incorrect
- b) Statements A and D are correct, while B and C are incorrect
- c) Statements B and C are correct, while A and D are incorrect
- d) Statements B and D are correct, while A and C are incorrect

No, the answer is incorrect.
Score: 0
Accepted Answers: 
- c) Statements B and C are correct, while A and D are incorrect

11. A 400 hectares sub-catchment receives 1100mm annual rainfall and generates 600m$^3$ of average daily runoff from the sub-catchment. If there is no water flow into the sub-catchment, what would be the net annual change in the surface storage, considering evapotranspiration and infiltration as 42% and 36% of precipitation, respectively:

- a) 2333000m$^3$
- b) 3213000m$^3$
- c) 4181000m$^3$
- d) 7490000m$^3$

No, the answer is incorrect.
Score: 0
Accepted Answers: 
- d) 7490000m$^3$
A lake had a water surface elevation of 103.200m above datum at the beginning of a certain month. In that month the lake received an average inflow of 6.0m³/s from surface runoff sources. In the same period the outflow from the lake had an average value of 6.5m³/s. Further, in that month, the lake received a rainfall of 145mm and the evaporation from the lake surface was estimated as 6.10cm. What will be the water surface elevation of the lake at the end of the month assuming no contribution to or from the groundwater storage? The average lake surface area may be taken as 5000 hectares.

a) 103.780m
b) 103.258m
c) 103.205m
d) 109.000m

No, the answer is incorrect.

Score: 0

Accepted Answers:
b) 103.258m