Assignment 0

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

1) The unit of Specific Energy
   - A. m
   - B. m/s
   - C. m/s²
   - D. no unit
   Note: The answer is incorrect.
   Score: 0
   Accepted Answers:
   - A.

2) At what condition the flow becomes subcritical in terms of Froude number
   - A. Fr > 1
   - B. Fr = 1
   - C. Fr < 1
   - D. Does not depend on Froude number
   Note: The answer is incorrect.
   Score: 0
   Accepted Answers:
   - C.

3) The average width of Ganga River at Patna is 1.5 km and the average flow depth is 5 m. A physical scale model of 1:100 scale needs to be developed. The width and depth of the model are
   - A. 0.15 m and 1.5 cm
   - B. 15 m and 15 cm
   - C. 1 m and 15 cm
   - D. None of the above
   Note: The answer is incorrect.
   Score: 0
   Accepted Answers:
   - D.

4) As given in Question 3, the average flow velocity is 2 m/s. Estimate the discharge and Froude number
   - A. 4.5 m³/s and 1.65
   - B. 2 x 10⁻³ m³/s and 0.21
   - C. 4000 m³/s and 9.165
   - D. None of the above
   Note: The answer is incorrect.
   Score: 0
   Accepted Answers:
   - C.

5) Based on Froude number similarity and data given in Questions 3 and 4, the discharge requirement for conducting the physical model is
   - A. 2.22 m³/s
   - B. 22 m³/s
   - C. 4.5 x 10⁻³ m³/s
   - D. 4.5 m³/s
   Note: The answer is incorrect.
   Score: 0
   Accepted Answers:
   - A.

6) As fanaka barrage, the water from the Ganga river is directed to a feeder channel. The discharge is 2000 m³/s. Estimate total annual volume of the diverted water in million m³?
   - A. 7.3411
   - B. 73.419
   - C. 63.872
   - D. 63.672
   Note: The answer is incorrect.
   Score: 0
   Accepted Answers:
   - B.

7) The sediment concentration at the fanaka barrage is 300 mg/l and the average discharge is 3000 m³/s. The total daily sediment load in terms of ton/day is
   - A. 10.416
   - B. 77.763
   - C. 92.000
   - D. 30.000
   Note: The answer is incorrect.
   Score: 0
   Accepted Answers:
   - C.

8) As given Question 7. If sediment trap efficiency is 80%. The average daily sediment deposition at the fanaka barrage is
   - A. 62,208 ton/day
   - B. 62,208 ton/year
   - C. 97,333 ton/day
   - D. 97,333 ton/year
   Note: The answer is incorrect.
   Score: 0
   Accepted Answers:
   - D.

9) What is approximate flow Reynold's number of a river
   - A. 1 x 10
   - B. 1 x 10⁵
   - C. 1 x 10⁶
   - D. 1 x 10⁷
   Note: The answer is incorrect.
   Score: 0
   Accepted Answers:
   - B.

10) Why does a river meander?
    - A. Formation of turbulences structures
    - B. Energy dissipation minimisation
    - C. Increase sediment transportation
    - D. Velo city reduction
    Note: The answer is incorrect.
    Score: 0
    Accepted Answers:
    - C.