Unit 12 - Week 10

Week 10 Assignment 10

The due date for submitting this assignment has passed. Due on 2018-10-10, 23:59 IST.
As per our records you have not submitted this assignment.

1) The discharge passing over an ogee spillway is given by

A) $CLH^{3/2}$
B) $CHL^{3/2}$
C) $CLH^{5/2}$
D) $CLH^{1/2}$

Where, $L$ is effective length of spillway crest and $H$ is the total head over the spillway crest including velocity head

- [ ] A)
- [ ] B)
- [ ] C)
- [ ] D)

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

2) Coefficient of discharge of an ogee spillway

A) Depends on depth of approach and upstream slope
B) Depends on downstream apron interference and downstream submergence
C) Remains Constant
D) Both (A) and (B)

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Funded by
3) Which of the following spillways is the least suitable for an earthen dam?
   A) Ogee spillway
   B) Chute spillway
   C) Side channel spillway
   D) Shaft spillway

   No, the answer is incorrect.

4) In a chute spillway, the flow is usually
   A) Uniform
   B) Subcritical
   C) Critical
   D) Supercritical

   No, the answer is incorrect.

5) The flow of water after spilling over the weir crest in chute spillway and side channel spillway, respectively are
   A) At right angle and parallel to weir crest
   B) Parallel and at right angle to weir crest
   C) Parallel to weir crest in both
   D) At right angle to weir crest in both

   No, the answer is incorrect.
6) No, the answer is incorrect.

Score: 0

Accepted Answers:
- A)

7) The effective length of an ogee spillway will be different from its actual length, in case of:

A) Gated spillway
B) Ungated spillway
C) Both gated and Ungated spillway
D) None of these

No, the answer is incorrect.

Score: 0

Accepted Answers:
- A)
Which one of the following is the correct equation for calculating Froude number?

A) \( F_1 = \frac{V}{\sqrt{y_1}} \)

B) \( F_1 = \frac{V}{\sqrt{g y_1}} \)

C) \( F_1 = \frac{V}{\sqrt{g^2 y_1}} \)

D) \( F_1 = \frac{V}{\sqrt{g y_1^2}} \)

- A)
- B)
- C)
- D)

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

9)

Which one of the following is the correct equation for calculating critical depth?

A) \( y_c = \frac{z^2 q^2}{\sqrt{g}} \)

B) \( y_c = \frac{z^2 q^2}{g} \)

C) \( y_c = \frac{z}{2} \frac{q^2}{g} \)

D) \( y_c = \frac{1}{2} \frac{q^2}{\sqrt{g}} \)

- A)
- B)
- C)
- D)

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

10)
Which one of the following is the correct equation for calculating ‘q’ for use in the critical depth equation?

A) \[ q = \frac{Q}{\text{Length of spillway}} \]

B) \[ q = \frac{2Q}{\text{Length of spillway}} \]

C) \[ q = \frac{Q}{\frac{1}{2} \times \text{Length of spillway}} \]

D) None of the above

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