

Q : A fast centrifugal pump impeller has wallet of the following?

[UPPCL JE 2015]

- A : Radial blades
- B : Backwards facing blades
- C : Propeller types blades
- D : Forwards facing blades

Q : Which of the following is used to measured the discharge?

[UPPCL JE 2015]

- A : Current meter
- B : Hotwire anemometer
- C : Pitot tube
- D : Venturimeter

Q : If a vertical circular plate of diameter 'd' submerged in water, what is the depth of centre of pressure from the water surface?

[UPPCL JE 2016]

- A :  $d/2$
- B :  $3d/5$
- C :  $5d/8$
- D :  $4d/7$

Q : Capillary action is due to:

[UPPCL JE 2016]

- A : Adhesion
- B : Cohesion
- C : Adhesion and cohesion both
- D : Neither adhesion and cohesion both

Q : Euler Critical buckling load for a prismatic column of length L, flexural rigidity EI, hinged at both

- A:  $\frac{2\pi^2 EI}{L^2}$   
B:  $\frac{4\pi^2 EI}{L^2}$   
C:  $\frac{\pi^2 EI}{4L^2}$   
D:  $\frac{\pi^2 EI}{L^2}$

Q: The point of contraflexure in a beam is that location where\_\_\_\_\_:

[UPPCL AE 2018]

- A: The shear force change sign  
B: The deflection changes sign  
C: The slope of the elastic curve change sign  
D: The bending moment change sign

Q: With respect to temperature, viscosity of liquid:

[UPPCL JE 2016]

- A: Increase  
B: Decrease  
C: May increase or decrease  
D: Remains unchanged

Q: When the flow is such that one static head is consumed in pipe friction, the delivery by the given pipeline will be:-

[UPPCL JE 2016]

- A: Zero  
B: Unity  
C: Same as always  
D: Maximum

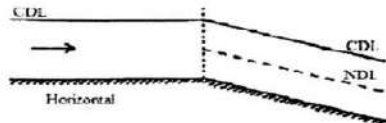
YouTube CHANNEL

Q : For laminar flow through a circular pipe, the ratio of maximum velocity to the average velocity is \_\_\_\_

[UPPCL AE 2018]

- A : 2.0
- B : 2.5
- C : 1.5
- D : 1.25

Q : The figure below shows gradually varied flow in an open channel with a break in bed slope:



The types surface profiles occurring from left to right are:

[UPPCL JE 2015]

- A :  $H_2 . S_2$
- B :  $H_3 . M_2$
- C :  $H_2 . M_2$
- D :  $H_3 . S_3$

Q : The primary mode of force transmission in HSFG bolts is \_\_\_\_\_:

[UPPCL AE 2018]

- A : Friction
- B : Shearing
- C : Bearing
- D : Tension

Q : At an internal hinge \_\_\_\_\_:

[UPPCL AE 2018]

- A** : Slope is always discontinuous  
**B** : Deflection is always discontinuous  
**C** : Bending moment is always discontinuous  
**D** : Shear force is always discontinuous

**Q** : If area of the catchment is 62.5 sq.mm and axial length of the catchment is 10 mm, the form factor will be:-

[UPPCL JE 2016]

- A** : 0.625  
**B** : 0.31  
**C** : 6.25  
**D** : 1

**Q** : Where does the Mach number finds its maximum significance?

[UPPCL JE 2016]

- A** : Flow in closed conduit pipe  
**B** : In cavitation studies  
**C** : Where did compressibility is important  
**D** : In capillary studies.

**Q** : If both ends of a 20 m long column are fixed, for Euler's load calculations, its effective length is taken to be:-

[UPPCL JE 2016]

- A** : 20 m  
**B** : 40 m  
**C** : 10 m  
**D** :  $20\sqrt{2}$

YouTube CHANNEL

EVEREXAM