## CIVLL ENaINEERING

## QUESTION PRACTICE PROGRAM

SSH IF PRIE 2019 3000+ QUESTION PRAGTIGE malsturne 2000 QUESTION PRAGTIOE
 - Live Online Course BY SOURAB SIR \& AUVISHSIR
$\mathrm{Q}: ~)$ The intensity of pressure developed by surface tension of $0.075 \mathrm{~N} / \mathrm{m}$ in a droplet of water of 0.075 mm diameter is
A: $0.8 \mathrm{~N} / \mathrm{cm}^{2}$
B: $0.6 \mathrm{~N} / \mathrm{cm}^{2}$
C: $0.4 \mathrm{~N} / \mathrm{cm}^{2}$
D: 400N $/ \mathrm{cm}^{2}$

Q: ) Pressure of 200 kPa is equivalent to a head of x meters of carbon tetra-chloride of relative density 1.59 where x is Equal to
A: 11.62
B: 11.92
C: 12.82
D: 13.12

Q: ) An open tank contains a $m$ deep water with 50 cm depth of oil of specific gravity 0.8 above It. The intensity of pressure at the bottom of tank will be

A: $4 \mathrm{KN} / \mathrm{m}^{2}$
B : $10 \mathrm{KN} / \mathrm{m}^{2}$
C: $12 \mathrm{KN} / \mathrm{m}^{2}$
D : $14 \mathrm{KN} / \mathrm{m}^{2}$

Q: ) The pressure intensity is same in all directions at a point a. $1 \mathrm{~N} / \mathrm{mm}^{2}$
b. $1000 \mathrm{~N} / \mathrm{m}^{2}$

A : Only when fluid is frictionless and in compressible
B : Only when fluid is frictionless and is at rest
C : Only when fluid is frictionless
D : When there is no relative motion of one fluid layer relative to other

Q: ) The increase in metacentric height

1. Increases stability
2. Decreases stability

Increases comfort for passengers
Decreases comfort for passengers the correct answer is
A : (i) and (ii)
B: (i) and (iv)
C: (ii) and (iii)
D : (ii) and (iv)

Q: ) A rectangular block 2 m long, 1 m wide and 1 m deep floats in water, the depth of Immersion being 0.5 m . if water weight $10 \mathrm{KN} / \mathrm{m}^{3}$, then the weight of the block is

A: 5 KN
B: 10 KN
C: 15 KN
D: 20 KN

Q: ) If a vessel containing liquid moves downward with a constant acceleration equal to than

A : The pressure throughout the liquid mass is atmospheric
$B$ : There will be vacuum in the liquid
C : The pressure in the liquid mass is greater than hydrostatic pressure
D: None of the above

Q: ) When a liquid rotates at a constant angular velocity about a vertical axis as a rigid body The pressure intensity varies

A : linearly with radial distance
$B$ : as the square of the radial distance
C : inversely as the square of the radial distance
D : inversely as the radial distance

Q: ) The eddy viscosity for turbulent flow is
A : a function of temperature only
B : a physical property of the fluid
C : dependent on the flow
$D$ : independent of the flow

Q : ) The equation $\mathrm{P} / \mathrm{W}+\mathrm{V}^{2} / 2 \mathrm{q}+\mathrm{z}=$ constant
A : steady, frictionless, incompressible and along a streamline
$B$ : Steady, frictionless, uniform and along a streamline
C : Steady, incompressible, uniform and along a streamline
D : Steady, frictionless, incompressible and uniform

Q: ) When the velocity distribution is uniform over the cross-section the correction factor for momentum is

A: 0
B: 1
C: 4/3
D: 2

Q: ) If the velocity is zero over half of the cross-sectional area and is uniform over the remaining half, then the momentum correction factor is

A:1
B: 4/3
C: 2
D: 4

Q: ) If velocity is zero over $1 / 3$ rd of a cross-section and is uniform over remaining $2 / 3$ rd of the cross-section then the correction factor fro kinetic energy is
A: 4/3
B : 3/2
C: 9/4
D: 27/8

Q: ) The magnitude of the component of velocity at point $(1,1)$ for a stream function \&Psi $=\mathrm{X}^{2}-\mathrm{y}^{2}$ is equal to
A : 2
B : $2 \sqrt{2}$
C: 4
D $: 4 \sqrt{2}$

Q: ) In a forced vortex motion, the velocity of flow is
A : Directly proportional to its radial distance from axis of rotation
B : Inversely proportional to its radial distance from the axis of rotation
C : Inversely proportional to the square of its radial distance from the axis of rotation

D : Directly proportional to the square of its radial distance from the axis of rotation

Q: ) Stream lines and path lines always coincide in case of
A : Steady flow
B : Laminar flow
C: Uniform flow
D : Turbulent flow

Q: ) In steady flow of a fluid, the total accede-ration of any fluid particle
A: Can be zero
B : Is never zero
C: Is always zero
D: Is independent of coordinates

Q: ) A fluid jet discharge from a 4 cm diameter orifice has a diameter 3 cm at its vena contract. If the coefficient of velocity is 0.98 the coefficient of discharge for the orifice will be

A : $0.98 \times(0.75)^{2}$
B : $\frac{(0.75)^{2}}{0.98}$
C : $0.98 \times(1.33)^{2}$
D : $\frac{0.98}{(1.33)^{2}}$

Q: ) Coefficient of contraction for an external cylindrical mouthpiece is
$A: 1$
$B: 0.855$
$C: 0.711$
$D: 0.611$

