

ISRO SAC Tech Asst. (Civil) 21 Jun 2023







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भारत सरकार GOVERNMENT OF INDIA अंतरिक्ष विभाग DEPARTMENT OF SPACE

भारतीय अंतरिक्ष अनुसंधान संगठन INDIAN SPACE RESEARCH ORGANISATION





अंतरिक्ष उपयोग केंद्र SPACE APPLICATIONS CENTRE अहमदाबाद AHMEDABAD

Participant Id	
Participant Name	
Test Center Name	
Test Date	21/06/2023
Test Time	8:30 AM - 10:30 AM
Subject	Technical Assistant Civil

Section: Technical Assistant Civil

- Q.1 The most widely used pump for lifting sewage is
 - a) Centrifugal pump
 - b) Reciprocating pump
 - c) Pneumatic ejector
 - d) Air pressure pump

Ans



X B. b **X** C. c

X D. d

Question ID: 2141272131

Status : **Answered**

Chosen Option : A



- A simply supported beam of span 4.0 m has a cross section 200 mm (width) x 300 mm (depth). If the maximum permissible bending stress in the material of beam is 20 N/m2, what will be the maximum uniformly distributed load it can carry?
 - a) 60 kN/m
 - b) 300 kN/m
 - c) 150 kN/m
 - d) 30 kN/m

X A. a

X B. b

X C. c

৵ D. d

Question ID: 2141272150 Status: Answered Chosen Option : D

- For concreting of tunnel linings transportation of concrete is done by____
 - a) Pans
 - b) Wheel borrows
 - c) Containers
 - d) Pumps

Ans **X** A. a

X B. b

X C. c

✓ D. d

Question ID: 2141272140 Status: Answered

Chosen Option : **D**



Q.4	For given water content, workability of concrete is good if aggregate used
	are
	a) Rounded aggregates
	b) Irregular aggregate
	c) Angular aggregates
	d) Flaky aggregates
Ans	✓ A. a
	★ B. b
	X C. c
	X D, d
	Question ID : 2141272142
	Status : Answered
	Chosen Option : A
Q.5	Raft foundation are generally preferred to when the area required for
	individual footing is more than
	a) 25% of total area
	b) 30% of total area
	c) 40% of total area
	d) 50% of total area
Ans	X A. a
	X B. b X ○ a
	★ C. c✔ D. d
	D. U
	Question ID : 2141272104 Status : Answered
	Chosen Option : D



Q.6	3.T	1 0	,		1 1.	1 .
	Newton's	law of	V1SCOS1tV	is a re	lationship	between

- a) Pressure, velocity and temperature
- b) Shear stress and rate of shear strain
- c) Shear stress and velocity
- d) Rate of shear strain and temperature

Ans X A.

✓ B. b

X C. c

X D. d

Question ID : 2141272195 Status : Answered

Chosen Option : **B**

Q.7 One Pascal (Pa) is equal to_____

- a) 1 N/m2
- b) 1 kg/cm2
- c) 1 N/cm2
- d) 1 N/mm2

Ans 🗼 A. a

X B. b

X C. c

Question ID : 2141272120 Status : Answered

Chosen Option : **D**



Q.8	To support a heavy structure in sandy soil, the foundation generally used
	is
	a) Combined footing
	b) Raft footing
	c) Pier footing
	d) Strap footing
Ans	X A. a
	★ B. b
	✓ C. c
	X D. d
	Question ID : 2141272105 Status : Answered Chosen Option : B
Q.9	Moment of Inertia of a triangular section, about an axis passing through
	its centre of gravity and parallel to base is
	a) $bh^3/12$
	b) bh ³ /36
	c) $bh^3/32$
	d) bh3/24
Ans	X A. a
	✓ B. b
	X C. c
	▼ D. d
	Question ID : 2141272187



Q.10	By boiling water hardness can be removed if it is due to t	he presence of
	a) Calcium sulphate	
	b) Magnesium sulphate	
	c) Calcium nitrate	
	d) Calcium bicarbonate	
Ans	X A. a	
	X B. b	
	X C. c	
	✓ D. d	4.20
		Question ID : 2141272159
		Status : Answered
		Chosen Option : D
Q.11	The portion of the brick left after removing the corner e	gual to half the
	width and half the length is called	quin to hair the
	a) Closer	
	b) Queen closer	
	c) King closer	
	d) Squint brick	
Ans	X A. a	
	★ B. b	
	✓ C. c	
	X D. d	
		Question ID : 2141272101
		Status: Answered
	I	Glatas: Allowered
		Chosen Option : C



Q.12	The moment diagram for a cantilever bear uniformly distributed load will be a	m which is subjected to	
	a) Triangle		
	b) Rectangle		
	c) Parabola		
	d) Cubic parabola		

> Question ID : 2141272114 Status : Answered Chosen Option : C

Q.13 The value of poisson's ratio always remain –

- a) Greater than one
- b) Less than one
- c) Equal to one
- d) None of the above

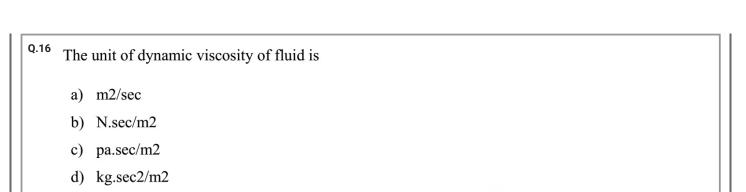
> Question ID : 2141272118 Status : Answered Chosen Option : B

Q.14	If the capillary rise of water in a 1 mm diameter tube i	s 3 cm, the height
	of capillary rise of water in a 0.2 mm diameter tube in	centimetre will be
	a) 1.5	
	b) 7.5	
	c) 15	
	d) 75	
Ans	X A. a	
	★ B. b	
	✓ C. c	
	X D. d	
		Question ID : 2141272185 Status : Answered Chosen Option : C
Q.15	In a simply supported slab, alternate bars are curtailed	ed at
	a) One fifth of the span	
	b) One sixth of span	
	c) One seventh of the span	
	d) One eight of the span	
Ans	X A. a	
	X B. b	
	✓ C. c	
	X D. d	
		Question ID : 2141272177



Status: Answered

Chosen Option : ${\bf C}$



Ans X A. a

X C. c

Question ID : 2141272194 Status : Answered Chosen Option : C

Q.17 Wall constructed for the stability of a back filling portion of road on the downhill side, is known as

- a) Retaining wall
- b) Breast wall
- c) Parapet wall
- d) All the above

Ans A. a

** A. a

✗ C. c✗ D. d

Question ID : 2141272171 Status : Answered Chosen Option : B



Q.18	Hooke's law states that stress and strain are	
	a) Directly proportional	
	b) Inversely proportional	
	c) Curvilinearly related	
	d) None of the above	
Ans	✓ A. a	
	※ B. b	
	X C. c	
	X D. d	
		Question ID : 2141272115 Status : Answered Chosen Option : A
Q.19	The specific speed of a turbine is speed of an imaginary to	urbine, which is
	identical with the given turbine, and	
	a) delivers unit discharge under unit head	
	b) delivers unit discharge under unit speed	
	c) produces unit power (1 kw) under unit head (1 m)	
	d) develops unit horse power under unit speed	
Ans	X A. a	
	★ B. b	
	✓ C. c	
	X D. d	
		Question ID : 2141272153
		Status : Answered Chosen Option : B
1		Onoscii option . B



Q.20	An activity of the project is graphically represented by	on the
	network diagram.	
	a) A circle	
	b) A straight line	
	c) An arrow	
	d) None of these	
Ans	X A. a	
	★ B. b	
	✓ C. c	
	X D. d	
		Question ID : 2141272192
		Status : Answered
		Chosen Option : C
Q.21	Elastic limit is the point	
	a) up to which stress is proportional to strain	
	b) At which elongation takes place without applica	tion of additional
	load	tion of additional
		1.1
	c) Up to which, if the load is removed, original vol	ume and snapes
	are regained	
	d) None of the above	
Ans	X A. a	
	★ B. b	
	✓ C. cX D. d	
	№ D. d	
		Question ID : 2141272160
		Status : Answered Chosen Option : C
		onoscii option . •



Q.22 A pitot tube is used to measures ---

- a) Pressure
- b) Difference in pressure
- c) Velocity of flow
- d) None of the above

Ans X A. a

🗙 B. b

✓ C. c

X D. d

Question ID : 2141272123 Status : Answered Chosen Option : C

 $^{\mathrm{Q.23}}$ The ratio of shearing stress to shearing strain within elastic limit is known

as

- a) Modulus of elasticity
- b) Shear modulus of elasticity
- c) Bulk modulus of elasticity
- d) Tangent modulus of elasticity

Ans X A. a

✓ B. b

X C. c

X D. d

Question ID : 2141272147 Status : Answered

Chosen Option : **B**



Q.24	Traps
	a) Are water seals preventing foul gases from sewers entering the
	house
	b) Are used to trap the rats entering sewers
	c) Dissolve the foul gases
	d) Create siphonic action to increase the quick disposal of sewerage
Ans	✓ A. a➤ B. b
	X C. c
	➤ D. d
	Question ID : 2141272163 Status : Answered Chosen Option : A
Q.25	According to I.S.: 456, the number of grades of concrete mixes, is

a) 3b) 4

c) 5

d) 7

✗ B. b✗ C. c✔ D. d

Ans X A. a

Question ID : 2141272199 Status : Answered

Chosen Option : C



Q.26 The point of the contra flexure occurs in______ a) Cantilever beam

- b) Simply supported beam
- c) Over hanging beam only
- d) All the above

Ans X A. a

X B. b

✓ C. c

X D. d

Question ID : 2141272117 Status : Answered Chosen Option : C

Q.27 The point of contra flexure is the point ____

- a) Where Bending Moment changes sign
- b) Where Bending Moment is maximum
- c) Where Bending Moment is minimum
- d) Where Shear Force is zero

Ans 🕜 A. a

X B. b

X C. c

X D. d

Question ID : 2141272174 Status : Answered

Chosen Option : ${\bf A}$



Q.28	The ratio of young's modulus to modulus of rigidity for a material	
	having Poisson's ratio 0.2 is	
	a) 2.4 b) 0.416 c) 0.357 d) 2.8	
Ans		
	X B. b	
	X C. c	
	X D. d	
	Question ID : 2141272186	
	Status : Answered	
	Chosen Option : A	
Q.29	Roughness index of road is expressed as	
	a) Size of the stone on the pavement	
	b) Number of patches on the pavement	

c) Cumulative deformation of surface per horizontal distance

d) Type of road surface

Ans X A. a

✗ B. b✔ C. c✗ D. d

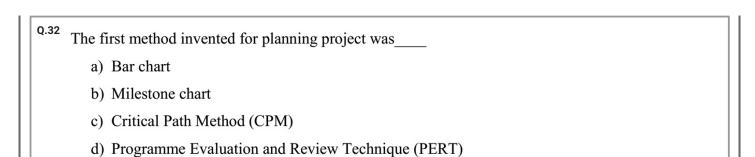
Question ID : 2141272172 Status : Answered

Chosen Option : ${\bf C}$



30	Sand which normally required a high-water cement ratio belong to
	a) Zone I
	b) Zone II
	c) Zone III
	d) Zone IV
ıns	✓ A. a
	X B. b
	X C. c
	★ D. d
	Question ID : 2141272143
	Status : Answered
	Chosen Option : D
31	Which of the following levelling is carried out to determine the
	elevation difference between two points on the surface of earth?
	a) Reciprocal levelling
	b) Simple levelling
	c) Longitudinal levelling
	d) Differential levelling
ns	🗙 A. a
	★ B. b
	★ C. c
	✓ D. d
	Question ID : 2141272190
	Status : Answered Chosen Option : D







Question ID : 2141272173 Status : Answered Chosen Option : A

Q.33 A type of cast-in-situ pile which has an enlarged base and corrugated item

- a) Simple pile
- b) Franky pile
- c) Vibro-pile
- d) Raymond pile



Question ID : 2141272108
Status : Answered
Chosen Option : B



Q.34	In case of two-way slab, the limiting deflection of	the slab is
	a) Primarily a function of the long span	
	b) Primarily a function of the short span	
	c) Independent of long or short span	
	d) Dependent on both long or short span	
Ans	• •	
	→ B. b	
	X C. c	
	★ D. d	
		Question ID : 2141272178
		Status : Answered Chosen Option : B
		Chosen option . B
Q.35	The rate of accumulation of sludge per person per	year is
Q.35	The rate of accumulation of sludge per person per a) 10 litres	year is
Q.35	The face of accumulation of studge per person per	year is
Q.35	a) 10 litres	year is
Q.35	a) 10 litres b) 15 litres c) 20 Litres	year is
Q.35	a) 10 litres b) 15 litres	year is
Q.35	a) 10 litres b) 15 litres c) 20 Litres d) 30 litres	year is
	a) 10 litres b) 15 litres c) 20 Litres d) 30 litres X A. a X B. b	year is
	a) 10 litres b) 15 litres c) 20 Litres d) 30 litres X A. a X B. b C. c	year is
	a) 10 litres b) 15 litres c) 20 Litres d) 30 litres X A. a X B. b	year is
	a) 10 litres b) 15 litres c) 20 Litres d) 30 litres X A. a X B. b C. c	year is Question ID: 2141272155
	a) 10 litres b) 15 litres c) 20 Litres d) 30 litres X A. a X B. b C. c	



a) Remain constant

d) is charged abruptly

Ans

✓ B. b✗ C. c✗ D. d

b) Does not remain constant

c) is subjected to fluctuations

Question ID : 2141272111
Status : Answered

Chosen Option : **B**



Q.38 In sewer, the gas generally formed is

- a) Hydrogen sulphide H2S
- b) Carbon dioxide (Co2)
- c) Methane CH4
- d) All the above

Ans X A. a

X B. b

X C. c

✓ D. d

Question ID : 2141272130 Status : Answered Chosen Option : D

Q.39 Log angle machine is used to test the aggregate for

- a) Crushing strength
- b) Impact value
- c) Abrasion resistance
- d) Water absorption

Ans X A. a

X B. b

✓ C. c

X D. d

Question ID : 2141272137 Status : Answered

Chosen Option : \boldsymbol{C}



Q.40 Size of A3 drawing sheet is ______
a) 297 mm X 420 mm
b) 210 mm X 297 mm
c) 594 mm X 420 mm

d) 1188 mm X 840 mm

Ans 🕜 A. a

X B. b

X C. c

X D. d

Question ID : 2141272149 Status : Answered Chosen Option : A

Q.41 What is the minimum compressive strength of first-class bricks?

a) 120 kg/cm2

b) 115 kg/cm2

c) 110 kg/cm2

d) 105 kg/cm2

Ans X A. a

X B. b

X C. c

✓ D. d

Question ID : 2141272124 Status : Answered

Chosen Option : D



To obtain cement dry powder, lime stones and shales or their slurry, is burnt in a rotary kiln at a temperature between a) 1100° and 1200°C b) 1200° and 1300°C c) 1300° and 1400°C d) 1400° and 1500°C **X** A. a Ans **X** B. b **X** C. c **✓** D. d Question ID: 2141272161 Status: Answered Chosen Option : ${\bf C}$ Q.43 Maximum permissible turbidity of potable water is a) 1 b) 15 c) 250 d) 1000 **X** A. a Ans **X** B. b **✓** C. c **X** D. d Question ID: 2141272158 Status: Answered Chosen Option : B



The magnitude of water hammer depends upon the

- a) Elastic properties of the pipe material
- b) Elastic properties of the liquid flowing through the pipe
- c) Speed at which the valve is closed
- d) All of the above

Ans X A.

※ B. b

X C. c

৵ D. d

Question ID : 2141272193 Status : Answered

Chosen Option : $\boldsymbol{\mathsf{D}}$

Q.45 A beam extending beyond the support is called

- a) Simply supported beam
- b) Fixed beam
- c) Over hanging beam
- d) Cantilever beam

Ans X A. a

X B. b

✓ C. c

X D. d

Question ID : 2141272119 Status : Answered

Chosen Option : C



Q.46 Self-cleaning velocity is ____
a) Velocity at dry weather flow
b) Velocity of water at flushing
c) Velocity at which no accumus

c) Velocity at which no accumulation remains in the drain

d) Velocity of water in a pressure filter

Ans X A. a

🗙 B. b

✓ C. c

X D. d

Question ID : 2141272162 Status : Answered Chosen Option : C

Q.47 When two plates are placed end to end and are joined by cover plates, the joint is known as

- a) Lap joint
- b) Butt joint
- c) Chain riveted lap joint
- d) Double cover but joint

Ans X A. a

X B. b

X C. c **✓** D. d

Question ID : 2141272148
Status : Answered

Chosen Option : \boldsymbol{B}



Q.48	Higher workability of concrete is required if the structure is	
	a) Made from cement and concrete	
	b) Thick and reinforced	
	c) Thin and heavily reinforced	
	d) Thick and heavily reinforced	

> Question ID : 2141272138 Status : Answered Chosen Option : C

Q.49 The shear force on a simply supported beam is proportional to ______

- a) Displacement of the neutral axis
- b) Sum of the forces
- c) Sum of the transvers forces
- d) Algebra sum of the transverse forces

Question ID : 2141272113
Status : Answered
Chosen Option : D



Q.50	Which is the grade of ordinary Portland cement co	nforming IS 12269?
	a) 33 grade	
	b) 43 grade	
	c) 53 grade	
	d) 63 grade	
Ans	X A. a	
	★ B. b	
	✓ C. c	
	X D. d	
		Question ID : 2141272133
		Status : Answered
		Chosen Option : B
Q.51	The stress at which extension of a material takes pla	ce more quickly as
	compared to the increase in load, is called as	4
	a) Elastic point	
	b) Plastic point	
	c) Breaking point	
	d) Yielding point	
Ans	X A. a	
	★ B. b	
	X C. c	
	✓ D. d	
		Question ID : 2141272198
		Status : Answered
		Chosen Option : D



Q.52 is provided at the bottom of suction pipe for holding the water in the suction pipe a) Flush valve b) Foot Valve c) Float Valve d) Safety Valve Ans **X** A. a **✓** B. b **X** C. c **X** D. d Question ID: 2141272135 Status : **Answered** Chosen Option : ${\bf B}$ Q.53 The specific gravity of sand is approximately a) 1.6 b) 2.0 c) 2.2 d) 2.6 Ans **X** A. a **X** B. b **X** C. c **✓** D. d Question ID : 2141272165 Status: **Answered** Chosen Option : ${\bf C}$



Q.54 PERT require a) Single time estimate b) Double time estimate c) Triple time estimate d) None of these **X** A. a Ans **X** B. b **✓** C. c **X** D. d Question ID: 2141272180 Status: Answered Chosen Option : ${\bf C}$ Q.55 The mortar in which both cement and lime are used as binding material is called_ a) Cement mortar b) Lime mortar

c) Fire-resistance mortar

d) Gauged mortar

X A. a

✗ B. b✗ C. c✔ D. d

Ans

Question ID : 2141272107
Status : Answered

Chosen Option : ${\bf D}$



Q.56	For the pre-cast reinforced concrete piles, the quality of concrete
	recommended is
	a) M 100 to M 150
	b) M 150 to M 200
	c) M 200 to M 250
	d) M 250 to M 300

> Question ID : 2141272109 Status : Answered Chosen Option : C

The shape of the bending moment diagram over the length of a beam, carrying a uniformly increasing load, is always____

- a) Linear
- b) Parabolic
- c) Cubical
- d) Circular

Ans X A. a
X B. b

✓ C. c

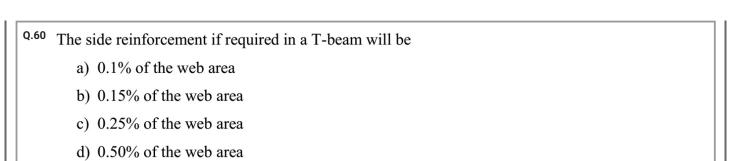
X D. d

Question ID : 2141272126 Status : Answered Chosen Option : C

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Q.58 The type of surveying in which the curvature of the earth is taken into account is called a) Geodetic surveying b) Plane surveying c) Preliminary surveying d) Topographical surveying Ans ✓ A. a **X** B. b **X** C. c **X** D. d Question ID: 2141272183 Status: Answered Chosen Option : A Q.59 Internal friction between the ingredient of concrete is decreased by using a) Less water b) Fine aggregates c) Rich mix d) More water and coarse aggregates Ans **X** A. a **X** B. b **X** C. c **⊘** D. d Question ID: 2141272136 Status: Answered Chosen Option : D





> Question ID : 2141272152 Status : Answered Chosen Option : A

Q.61 By over-reinforcing the section in tension, the moment of resistance of a beam can be increased by not more than

- a) 10%
- b) 15%
- c) 20%
- d) 25%

✓ D. d

Question ID : **2141272144**Status : **Answered**

Chosen Option : ${\bf C}$

Q.62	Spacing of stirrups in a rectangular beam is
	a) Kept constant throughout the lengthb) Decreased toward the centre of beamc) Increased at the ends
	d) Increased at the centre of the beam
Ans	 X A. a X B. b X C. c ✓ D. d
	Question ID : 2141272145 Status : Answered Chosen Option : D
Q.63	In a theodolite the line of collimation is a) Parallel to axis of plate levels
	b) Parallel to the vertical axis
	c) Perpendicular to the trunnion axis
	d) Parallel to the horizontal axis
Ans	X A. a
	X B. b

✓ C. c✗ D. d

Status : **Answered** Chosen Option : **C**

Question ID: 2141272179



Q.64	The argillaceous rocks have their principal constituent	as
	a) limeb) clayc) sandd) None of these	
Ans	 ★ A. a ★ B. b ★ C. c ★ D. d 	Question ID : 2141272200 Status : Answered Chosen Option : B
Q.65	without being permanently distorted is called a) Stiffness b) Proof resilience c) Proof stress d) Proof load X A. a B. b C. c	aximum load
	X D. d	Question ID : 2141272175 Status : Answered Chosen Option : D



Q.66 The capability of the entire soil of full width and depth to transmit water is

known as

- a) Porosity
- b) Permeability
- c) Transmissibility
- d) None of the above

Ans X A. a

ℯ B. b

X C. c

X D. d

Question ID : 2141272157 Status : Answered Chosen Option : C

Q.67 Flow in pipe is turbulent if Reynold number is

- a) Less than 2100
- b) More than 3000
- c) Between 2100 and 3000
- d) None of the above

Ans X A. a

✓ B. b

X C. c

X D. d

Question ID : 2141272122 Status : Answered

Chosen Option : **B**



Q.68	With usual natation's, the expression V ² /gR represent
	a) Centrifugal force
	b) Centrifugal ratio
	c) Super elevation

X D. d

Question ID : 2141272112 Status : Answered Chosen Option : C

Q.69 A stone wall provided to protect the shapes of cutting in natural ground from the action of weather; is known as

a) Retaining wall

d) Radial acceleration

- b) Breast wall
- c) Parapet wall
- d) Buttress

X D. d

Question ID : 2141272110 Status : Answered Chosen Option : B

Q.70 D.O. concentration falls down to zero in any natural drainage, it indicates-

- a) Zone of degradation
- b) Zone of Active decomposition
- c) Zone of recovery
- d) Zone of cleaner water

Ans X A. a

✓ B. b

X C. c

X D. d

Question ID : 2141272134 Status : Answered Chosen Option : B

 $^{Q.71}$ An event is indicated on the network by

- a) A straight line
- b) A number enclosed in a circle or a square
- c) A straight line with circles at the ends
- d) A dotted line

Ans X A. a

ℯ B. b

X C. c **X** D. d

Question ID : 2141272170 Status : Answered

Chosen Option : **B**



Q.72 Cohesive soils, on wetting ____

- a) Loose shear strength
- b) Gain shear strength
- c) Loose elasticity
- d) Decrease their shear strength

Ans X A. a

※ B. b

X C. c

✓ D. d

Question ID : 2141272166 Status : Answered Chosen Option : A

Q.73 A drop manhole is provided if

- a) Sewer drops from a height
- b) A branch sewer joins the main sewer at higher level
- c) A lamp is inserted to check obstruction
- d) None of the above

Ans X A. a

ℯℯ B. b

X C. c

X D. d

Question ID : 2141272129 Status : Answered

Chosen Option : B



Q.74	Distribution reinforcement in a simply supported slab is provided to
	distribute
	a) Load
	b) Temperature stress
	c) Shrinkage stress
	d) All the above
Ans	X A. a
	★ B. b
	X C. c
	✓ D. d
	Question ID : 2141272146
	Status : Answered
	Chosen Option : D
Q.75	If the PH value of sewage is 7, then
	a) It is acidic
	b) It is alkaline
	c) It is neutral
	d) None of the above

Ans X A. a

✗ B. b✗ C. c✗ D. d

Question ID : 2141272132 Status : Answered

Chosen Option : ${\bf C}$



Q.76	For compacting plain concrete road surface of thickness less than 20 cm,
	we use
	a) Internal vibrator
	b) Screed vibrator
	c) Form vibrator
	d) None of the above
Ans	X A.a
	✓ B. b
	X C. c
	★ D. d
	Question ID : 2141272141
	Status : Answered
	Chosen Option : B
Q.77	The angle of inclination of the plane at which the body begins to move
	down the plane, is called
	a) Angle of friction
	b) Angle of projection
	c) Angle of repose
	d) None of these
Ans	X A. a
	★ B. b
	✓ C. c
	★ D. d
	Outortion ID : 21/1272107
	Question ID : 2141272197 Status : Answered
	Chosen Option : C



Q.78 In a pipe line, a surge tank is provided

- a) To relieve the pressure due to water hammer
- b) To provide additional water head
- c) To overflow the pipe line when valve is suddenly closed
- d) To remove the frictional loss in pipe

Ans 🗼 A. a

X B. b

X C. c

X D. d

Question ID : 2141272125 Status : Answered Chosen Option : A

Q.79 In A-B-C analysis, which class of items are generally large in number?

- a) A
- b) B
- c) C
- d) None of these

Ans X A. a

※ B. b

✓ C. c **★** D. d

> Question ID : 2141272191 Status : Answered

Chosen Option : A

- a) Subsonic flow
- b) Supersonic flow
- c) Sonic flow
- d) Hypersonic flow

> Question ID : 2141272196 Status : Answered Chosen Option : D

chosen option . L

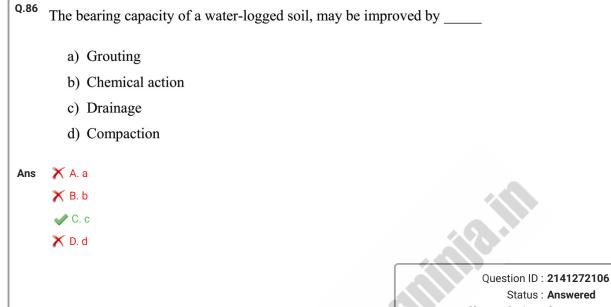


Q.82	The ratio of the volume of voids to the volume of so	il solids in a given
	soil mass is known as	
	a) Porosity	
	b) Specific gravity	
	c) Void ratio	
	d) Water content	
Ans	X A. a	
	★ B. b	
	✓ C. c	
	X D. d	
		Question ID : 2141272164
		Status : Answered
		Chosen Option : C
Q.83	The commonly used lime in white washing is	
Q.83	The commonly used lime in white washing is a) Quick lime	
Q.83	The commonly used time in write washing is	
Q.83	a) Quick lime	
Q.83	a) Quick lime b) Fat lime	
	a) Quick lime b) Fat lime c) Hydraulic lime d) None of the above	
Q.83	a) Quick lime b) Fat lime c) Hydraulic lime d) None of the above	
	a) Quick lime b) Fat lime c) Hydraulic lime d) None of the above	
	a) Quick lime b) Fat lime c) Hydraulic lime d) None of the above X A. a B. b C. c	
	a) Quick lime b) Fat lime c) Hydraulic lime d) None of the above	
	a) Quick lime b) Fat lime c) Hydraulic lime d) None of the above X A. a B. b C. c	Question ID : 2141272102
	a) Quick lime b) Fat lime c) Hydraulic lime d) None of the above X A. a B. b C. c	Question ID : 2141272102 Status : Answered Chosen Option : B



Q.84	The presence of free ammonia in sewage is detected by	,
	a) Boiling	
	b) Adding potassium permanganate	
	c) Adding sulphuric acid	
	d) Phenol-di-sulphuric acid	
Ans	s 🚀 A. a	
	★ B. b	
	X C. c	
	X D. d	
		Question ID : 2141272154
		Status : Answered
		Chosen Option : D
Q.85	The process of proper and accurate measurement of concrete	ingredient for
	uniformity of proportion is known as	
	a) Grading	
	b) Curing	
	c) Mixing	
	d) Batching	
	a) Butching	
Ans		
Ans		
Ans	★ A. a	
Ans	X A. a X B. b	
Ans	X A. a X B. b X C. c	Ouestion ID : 2141272139
Ans	X A. a X B. b X C. c	Question ID : 2141272139 Status : Answered





Chosen Option : C

- Q.87 Under-reamed piles are generally
 - a) Driven piles
 - b) Bored piles
 - c) Precast piles
 - d) All the above

Ans X A. a

✓ B. b

★ C. c★ D. d

Question ID : 2141272168
Status : Answered

Chosen Option : **B**



What is the ratio of area of flow and wetted perimeter is termed as a) hydraulic radius b) hydraulic diameter c) hydraulic circular diameter d) hydraulic velocity **X** B. b **X** C. c **X** D. d Question ID: 2141272181 Status: Answered Chosen Option : A Q.89 Plaster of Paris can be obtained from the calcinations of a) Lime stone b) Gypsum c) Dolomite d) Dolomite Ans **X** A. a **/** B. b **X** C. c **X** D. d Question ID: 2141272176 Status: Answered Chosen Option : **B**



- Q.90 Which one of the following options is termed as water hammer in a pipe flow?
 - a) The sudden rise of pressure in a long pipe due to sudden closure of valve
 - b) The fall of pressure in a pipe flow due to constant closure of valve
 - c) The rise of negative pressure
 - d) None of the above

Ans 🚀 A. a

X B. b

X C. c

🗙 D. d

Question ID : 2141272182 Status : Answered Chosen Option : A

- Q.91 Strain energy of any member may be defined as
 - a) Work done on it to deform it
 - b) Work done on it to resist elongation
 - c) Work done on it to resist shortening
 - d) All the above

Ans 🕜 A. a

X B. b

X C. c

X D. d

Question ID : 2141272116 Status : Answered Chosen Option : D



Q.92 Centre of buoyancy is

- a) Centroid of the floating body
- b) Centroid of the fluid displaced
- c) Centre of pressure of displaced liquid
- d) None of the above

Ans X A. a

✓ B. b

X C. c

X D. d

Question ID : 2141272127 Status : Answered

Chosen Option : B

Q.93 45 litres water per person per day is provided in

- a) Office building
- b) Hotels
- c) Hostels
- d) Nursing home

Ans 🕜 A. a

X B. b

X C. c

X D. d

Question ID : 2141272156

Status: Answered

Chosen Option : A



An odd shaped body weighing 7.5 kg and occupying 0.01 cubic metre volume will be completely submerged in a fluid having specific gravity of _____

- a) 1
- b) 1.2
- c) 0.8
- d) 0.75

Ans X A. a

X B. b

X C. c

✓ D. d

Question ID : 2141272184 Status : Answered

Chosen Option : ${\bf D}$



Q.96 An ideal flow of liquid must fulfil the following –

- a) Continuity equations
- b) Newton's law of viscosity
- c) Newton's second law of motion
- d) Velocity of boundary must be zero

Ans 🗼 A. a

X B. b

X C. c

X D. d

Question ID : 2141272121 Status : Answered Chosen Option : B

A body of soil is said to be plastic equilibrium if it _____

- a) Is stressed to maximum
- b) Is on the verge of failure
- c) Is in plastic stage
- d) Start flowing

Ans X A. a

✓ B. b

X C. c **X** D. d

> Question ID : 2141272167 Status : Answered

Chosen Option : ${\bf B}$



Q.98	The longitudinal shearing stress acting on the surface between the steel and
	concrete are called
	a) Bond stress
	b) Tensile stress
	c) Compressive stress
	d) None of these
Ans	✓ A. a
	★ B. b
	X C. c
	X D. d
	Question ID : 2141272151
	Status : Answered
	Chosen Option : A
Q.99	Fire hose nozzle is generally of
	The nose nozzie is generally of
	a) Divergent shape
	b) Convergent shape
	c) Convergent divergent shape
	d) Cylindrical shape
Ans	X A. a
	✓ B. b
	X C. c
	X D. d
	Question ID : 2141272128
	Status : Answered
	Chosen Option : C



Q.100 Good quality cement contains higher percentage of ______.

a) Tricalcium silicate

b) Di-calcium silicate

c) Tri-calcium aluminate

d) All the above

Ans A. a

B. b

C. c

D. d

Question ID: 2141272103

Status: Answered
Chosen Option: A