

APPSC

AEE (Notification No.06/ 2016) General Recruitment

Civil Engineering (Mains) Question Paper & Key

CIVIL ENGINEERING

Group Number :	1
Group Id :	57996521
Group Maximum Duration :	0
Group Minimum Duration :	150
Revisit allowed for view? :	No
Revisit allowed for edit? :	No
Break time:	0
Mandatory Break time:	No
Group Marks:	150

CIVIL ENGINEERING

Section Id :	57996521
Section Number :	1
Section type :	Online
Mandatory or Optional:	Mandatory
Number of Questions:	150
Number of Questions to be attempted:	150
Section Marks:	150
Display Number Panel:	Yes
Group All Questions:	No

Sub-Section Number:	1
Sub-Section Id:	57996533
Question Shuffling Allowed :	Yes

**Question Number : 1 Question Id : 5799653030 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct : 1 Wrong : 0

As per Indian standard code 1077, the burnt clay building bricks having compressive strength less than ____ N/mm² are known as common burnt clay bricks

Options :

3.5

12.5

30

40

Question Number : 2 Question Id : 5799653031 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

After 24 hours immersion in cold water, water absorption by weight shall not exceed _____ percent of the dry weight of the brick.

Options :

40

20

25

30

Question Number : 3 Question Id : 5799653032 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Maximum slenderness ratio allowed as per Indian standard for an unreinforced load bearing wall (using Portland Cement or Portland Pozzolana Cement in mortar) is

Options :

13

20

27

35

Question Number : 4 Question Id : 5799653033 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The test conducted for the calculation of basic compressive stress of masonry is

Options :

Vibration test

Prism test

CBR test

Slump cone test

Question Number : 5 Question Id : 5799653034 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Efflorescence test is conducted for burnt clay bricks to find out the

Options :

presence of alkaline substance

Hardness

soundness

presence of cracks or holes

Question Number : 6 Question Id : 5799653035 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The apparatus used for determining the Soundness of cement is

Options :

Slump cone

Le Chatelier apparatus

Vicat's needle

UTM

**Question Number : 7 Question Id : 5799653036 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct : 1 Wrong : 0

Cement used for railway sleepers is designated as

Options :

40-S

53-S

46-S

48-S

**Question Number : 8 Question Id : 5799653037 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct : 1 Wrong : 0

The main constituent of cement which is responsible for initial setting of cement is

Options :

Dicalcium silicate

Tricalcium silicate

Tricalcium aluminate

None of the given answers

**Question Number : 9 Question Id : 5799653038 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct : 1 Wrong : 0

For testing compressive strength of hydraulic cement other than masonry cement as per IS 4031 - Part 6, the size of cube used is

Options :

150 mm

100 mm

70.6 mm

50 mm

**Question Number : 10 Question Id : 5799653039 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct : 1 Wrong : 0

Plywood has the advantage of

Options :

Greater tensile strength in longer direction

Greater tensile strength in shorter direction

same tensile strength in both directions

None of the given answers

**Question Number : 11 Question Id : 5799653040 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct : 1 Wrong : 0

A queen closer is

Options :

Full brick

Longitudinally $\frac{1}{2}$ brick

¾ brick

Crosswise ½ brick

Question Number : 12 Question Id : 5799653041 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The artificial seasoning method that causes timber to become brittle and easy to break is

Options :

Boiling

Chemical seasoning

Electrical seasoning

Kiln seasoning

Question Number : 13 Question Id : 5799653042 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The age of tree can be known by examining

Options :

Cambium layer

Annular rings

Medullary rays

Heart wood

Question Number : 14 Question Id : 5799653043 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Inadequate compaction during concrete casting results in

Options :

Honey combing

Bleeding

Segregation

Bleeding and Segregation

Question Number : 15 Question Id : 5799653044 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

If characteristic compressive strength at 28 days is 40N/mm² and the standard deviation is 5 N/mm², the target strength at 28 days for concrete mix proportioning

Options :

40 N/mm²

45 N/mm²

43.25 N/mm²

48.25 N/mm²

Question Number : 16 Question Id : 5799653045 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A statistically indeterminate structure is the one which

Options :

cannot be analysed using equations of statics alone

cannot be analysed at all

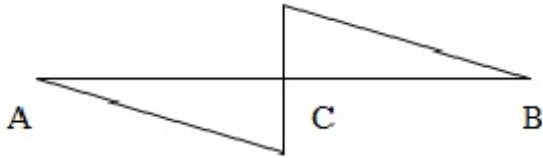
is not stable for general loading

Can be analysed with the equations of statics alone

Question Number : 17 Question Id : 5799653046 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

If the BMD for a simply supported beam is as shown below, the load on the beam will be



Options :

a concentrated load at C

equal and opposite couples at the ends A and B

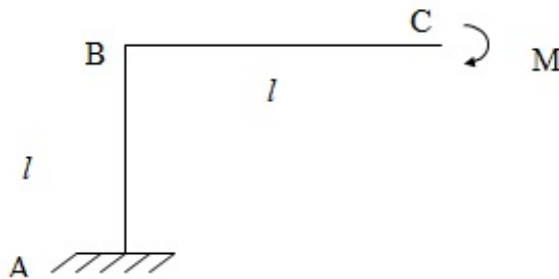
a uniformly distributed load acting on the entire span

concentrated couple at C

Question Number : 18 Question Id : 5799653047 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The ratio of maximum deflection to maximum flexural stress in a simply supported beam of span l and depth d subjected to a concentrated load at mid-span is



Options :

$12/(6Ed)$

$12/(8Ed)$

$12/(16Ed)$

$12/(60Ed)$

Question Number : 19 Question Id : 5799653048 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The horizontal deflection at C for the frame loaded and supported as shown below is (EI is constant)

Options :

$Ml^2/(4EI)$

$Ml^2/(2EI)$

$Ml^2/(3EI)$

$2Ml^2/(EI)$

Question Number : 20 Question Id : 5799653049 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The influence line for deflection at the free end of a cantilever is

Options :

a triangle with zero ordinate at fixed end and maximum ordinate at free end

a constant line

a cubic parabola with zero ordinate at fixed end and maximum ordinate at free end

a parabola with zero ordinate at fixed end and maximum ordinate at free end

Question Number : 21 Question Id : 5799653050 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A prismatic beam simply supported carries a concentrated load W at mid-span. If the same beam is fixed at its ends, what load at mid-span can produce the same deflection at mid-span?

Options :

4W

2W

3W

5W

Question Number : 22 Question Id : 5799653051 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Two concentrated loads of 50 kN each spaced at 4 m cross a simply supported girder of span 8 m. The absolute maximum bending moment in the girder is

Options :

1125 kN-m at 3m from support

112.5 kN-m at 3m from support

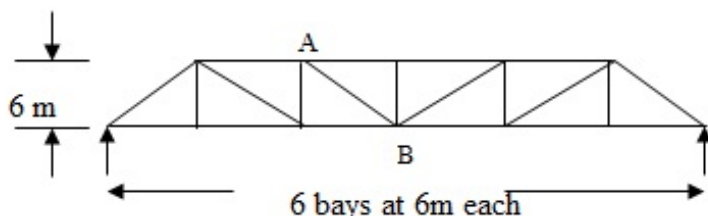
11.25 kN-m at 3m from support

93.75 kN-m at 3m from support

Question Number : 23 Question Id : 5799653052 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Influence line for member force in AB of the truss shown is obtained by



Options :

$\sqrt{2}$ times the ordinates of influence line for bending moment at A

$\sqrt{2}$ times the ordinates of influence line for shear in 3rd panel from left

$\sqrt{2}$ times the ordinates of influence line for bending moment at B

$s\sqrt{2}$ times the ordinates of influence line for shear in 3rd panel from right

Question Number : 24 Question Id : 5799653053 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A parabolic arched rib, of span 30 m, is hinged at the springing and crown and is having a central rise of 5 m. If the coefficient of thermal expansion for the arch material is 12×10^{-6} per $^{\circ}\text{C}$, the effect of a temperature rise of 300°C is

Options :

to cause thermal stresses

to cause thermal stresses as well as a central rise of 18 mm

to cause a central rise of 18 mm

to cause no effect on the structure

Question Number : 25 Question Id : 5799653054 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A temperature rise in a two hinged symmetric and parabolic arched rib causes

Options :

a uniform bending moment in the rib

no bending moment in the rib

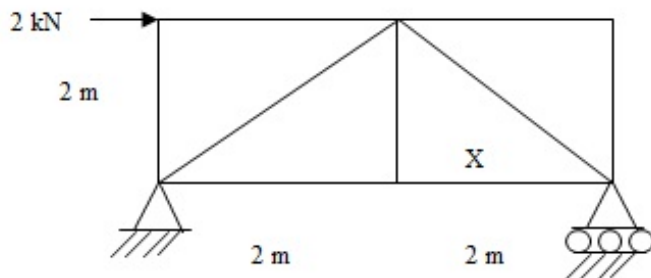
a maximum bending moment at the crown of the arch

a minimum bending moment at the crown of the arch

Question Number : 26 Question Id : 5799653055 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The force in the member 'X' of the truss supported and loaded as shown is



Options :

$\sqrt{2}$ kN , Tension

$\sqrt{2}$ kN , Compression

1 kN, Tension

1 kN, Compression

Question Number : 27 Question Id : 5799653056 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A three-span continuous beam is fixed at the ends and supported by unyielding roller supports in between. What is the size of the stiffness matrix?

Options :

2×2

3×3

1×1

4×4

Question Number : 28 Question Id : 5799653057 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following is displacement method?

Options :

flexibility method

moment distribution method

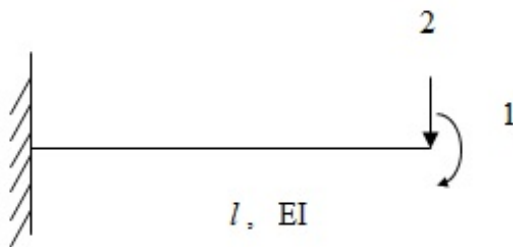
Kani's method

None of the given answers

Question Number : 29 Question Id : 5799653058 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

For the structure shown, the elements of the flexibility matrix are



Options :

$F_{11} = 1/(EI)$; $F_{21} = 12/(2EI)$; $F_{12} = 12/(2EI)$; $F_{22} = 13/(3EI)$

$F_{11} = 13/(3EI)$; $F_{21} = 12/(2EI)$; $F_{12} = 12/(2EI)$; $F_{22} = 1/(EI)$

$F_{11} = 1/(EI)$; $F_{21} = 12/(EI)$; $F_{12} = 12/(EI)$; $F_{22} = 13/(3EI)$

$F_{11} = 1/(EI)$; $F_{21} = 12/(2EI)$; $F_{12} = 12/(2EI)$; $F_{22} = 13/(4EI)$

Question Number : 30 Question Id : 5799653059 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

An agricultural land of 437 ha is to irrigate for a particular crop. The base period of the crop is 90 days and the total depth of water required by crop is 105 cm, if a rainfall of 15 cm occurs during the base period, the duty of irrigation water is

Options :

437 ha/cumec

487 ha/cumec

741 ha/cumec

864 ha/cumec

Question Number : 31 Question Id : 5799653060 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The absolute stiffness of a prismatic member with one end hinged is

Options :

$2EI/l$

$4EI/l$

$3EI/l$

EI/l

Question Number : 32 Question Id : 5799653061 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The angle of dispersion of a concentrated load on the flange to the web plate of a steel beam is

Options :

70 Degrees with horizontal

60 Degrees with vertical

45 Degrees with vertical

30 Degrees with vertical

Question Number : 33 Question Id : 5799653062 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Sway calculations and non-sway calculations are carried out in a single operation in

Options :

Kani's method

moment distribution method

unit load method

None of the given answers

Question Number : 34 Question Id : 5799653063 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The Eddy's theorem is valid for

Options :

Vertical Loads only

Horizontal Loads only

Dynamic Loads only

All Loads

Question Number : 35 Question Id : 5799653064 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

As per IS-875, where access is not provided except for maintenance, live load on roofs, while designing a truss, in respect of its plan area is adopted as

Options :

100 N/sq.m

400 N/sq.m

750 N/sq.m

1500 N/sq.m

Question Number : 36 Question Id : 5799653065 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A steel column in a multi-storeyed structure carries a load of 125 kN. It is built up of 2 ISMC 350 channels connected by lacing. The lacing carries a load of

Options :

125 kN

12.5 kN

3.125 kN

Zero

Question Number : 37 Question Id : 5799653066 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

An electric pole 5m high is fixed into the foundation. It carries a wire at the top and is free to move sideways. The effective length of the pole is

Options :

3.25 m

4 m

5 m

10 m

Question Number : 38 Question Id : 5799653067 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The maximum slenderness ratio of compression members carrying loads resulting from dead loads and superimposed loads is

Options :

100

180

150

200

Question Number : 39 Question Id : 5799653068 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The minimum thickness of web plate from corrosion point of view should be

Options :

12 mm

6 mm

3 mm

20 mm

Question Number : 40 Question Id : 5799653069 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

For compression member having the same effective length about any cross-sectional axis, the most preferred section from the point of view of strength is

Options :

a box

an I-section

a circular tube

a single angle

Question Number : 41 Question Id : 5799653070 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In Pigeaud's coefficient method for the analysis of an interior panel of a T-beam bridge

Options :

Notation for coefficient as α_x^4 and α_y^4 includes suffix 4 since panel is continuous on all the 4 edges

Poisson's ratio of concrete has no contribution

Applicability is restricted, to the case when wheel load is centrally placed

Dispersion of load is considered through wearing coat only

Question Number : 42 Question Id : 5799653071 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The members of a roof truss which carry axial compression are called

Options :

column

Beam

stanchion

Strut

Question Number : 43 Question Id : 5799653072 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Shape factor for circular section is

Options :

$4/\pi$

$16\pi/3$

$20/(3\pi)$

$16/(3\pi)$

Question Number : 44 Question Id : 5799653073 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

As per IS-800, the minimum pitch of bolts in a row of bolts is recommended as the diameter of the bolt times

Options :

2

2.5

3

4

Question Number : 45 Question Id : 5799653074 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Loss of stress with time at constant strain in steel is called

Options :

relaxation

creep

shrinkage

Ductility

Question Number : 46 Question Id : 5799653075 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In a footing, it is usual to assume that the maximum value of transverse bending will occur at a distance, equal to (measured from the face of the column)

Options :

half the effective depth

effective depth

twice the effective depth

None of the given answers

Question Number : 47 Question Id : 5799653076 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The minimum and maximum % of reinforcement in RCC short column are

Options :

0.8 and 6

6 and 0.8

0.8 and 4

4 and 6

Question Number : 48 Question Id : 5799653077 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A simply supported RC beam carries UDL and is referred as beam A. A similar beam is prestressed and carries the same UDL as the beam A. This beam is referred as beam B. The mid-span deflection of beam A will be

Options :

more than that of beam B

less than that of beam B

the same as that of beam B

generally less but sometimes more depending upon the magnitude of UDL

Question Number : 49 Question Id : 5799653078 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

As the span of a bridge increases, the impact factor

Options :

decreases

increases

decreases up to a critical value of span and then increases

increase up to a critical value of span and then decreases

Question Number : 50 Question Id : 5799653079 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The neutral axis of the reinforced beam passes through

Options :

centre of gravity of the concrete section

meta-centre of the concrete section

centroid of the transformed section

centroid of the concrete section

Question Number : 51 Question Id : 5799653080 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The minimum size of the reinforcement bar in RCC column is

Options :

8 mm

6 mm

12 mm

10 mm

Question Number : 52 Question Id : 5799653081 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Lateral ties in RC columns are provided to resist

Options :

bending moment

shear

buckling of longitudinal steel bars

both bending moment and shear

Question Number : 53 Question Id : 5799653082 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The section in which concrete is not fully stressed to its maximum permissible value while stress in steel reaches its maximum value, is called

Options :

Under reinforced section

Critical section

Over reinforced section

Balanced section

Question Number : 54 Question Id : 5799653083 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In a slab, the transverse reinforcement is provided at ____ to the span of the slab.

Options :

45 degrees

60 degrees

75 degrees

Right angle

Question Number : 55 Question Id : 5799653084 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

When the ratio of effective length of the column to its least lateral dimension does not exceed 15, it is termed as a

Options :

Long column

Short column

Plain column

None of the given answers

Question Number : 56 Question Id : 5799653085 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

What type of stresses are artificially induced by Prestressed concrete in a structure before it is loaded?

Options :

Tensile
Torsional
Shear
Compressive

Question Number : 57 Question Id : 5799653086 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In a prestressed concrete member,

Options :

High strength concrete should be used.

Normal strength concrete should be used.

High strength concrete and low tensile steel should be used

High strength concrete and high tensile steel should be used

Question Number : 58 Question Id : 5799653087 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Drops are provided in flat slab to resist primarily

Options :

bending moment

thrust

shear

torsion

Question Number : 59 Question Id : 5799653088 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Total amount of shrinkage strain for a pretensioned member is

Options :

3×10^{-4}

3×10^{-5}

3×10^{-6}

3×10^{-7}

Question Number : 60 Question Id : 5799653089 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The important events located on the activities in a bar chart are known as

Options :

Key events

Key stones

Milestones

Key points

Question Number : 61 Question Id : 5799653090 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

PERT stands for

Options :

Programme evaluation and research technique

Programme examination and review technique

Programme examination and research technique

Programme evaluation and review technique

Question Number : 62 Question Id : 5799653091 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Fulkerson's rule stands for

Options :

Planning the events

Scheduling the events

Numbering the events

Controlling the events

Question Number : 63 Question Id : 5799653092 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

If the values of t_o , t_L , t_p are 8, 12 and 18, the value of t_e is

Options :

12.1

12.3

12.6

13

Question Number : 64 Question Id : 5799653093 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In time estimates PERT follows

Options :

Probabilistic approach

Deterministic approach

Possibility approach

Non-Probabilistic approach

Question Number : 65 Question Id : 5799653094 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

If the values of t_o , t_p of an activity are 4 and 15, what is the variance of the activity?

Options :

3.22

3.36

3.87

3.92

Question Number : 66 Question Id : 5799653095 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The difference between the total float and free float is known as

Options :

Free float

Total float

Independent float

Interfering float

Question Number : 67 Question Id : 5799653096 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The duration of an activity i-j is 8. The (EPO)_j is 18. The EST is 5. What is the Free float of i-j.

Options :

5

13

10

8

Question Number : 68 Question Id : 5799653097 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Acoustics of an auditorium is considered to be excellent when its reverberation time is between

Options :

0.50 and 1.50 s

1.50 and 2.00 s

2.00 and 3.00 s

3.00 and 5.00 s

Question Number : 69 Question Id : 5799653098 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The difference between the latest allowable time and earliest expected time of an event is known as

Options :

Float

Normal Deviate

Free Float

Slack

Question Number : 70 Question Id : 5799653099 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

With the increase of time, the direct costs of the project

Options :

increase

decrease

remain constant

decrease and then increase

Question Number : 71 Question Id : 5799653100 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Resource smoothing will be adopted when

Options :

resources are unlimited

resources are limited

resources are constant

in all the cases

Question Number : 72 Question Id : 5799653101 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A 6 hour storm with intensities of 5, 7, 12, 20, 16, and 2 mm/ hr produced a runoff of 30 mm. Then Φ -index is

Options :

6.25 mm/hr

5.33 mm/hr

6.00 mm/hr

5.00 mm/hr

Question Number : 73 Question Id : 5799653102 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Sprinkler irrigation is not suitable to

Options :

Rice

Fodder

Lawn

None of the given answers

Question Number : 74 Question Id : 5799653103 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

For irrigation, water having SAR above 26

Options :

Can be used for all soils and for all crops

Can be used for all soils except fine textured soils

Can be used for all soils if some precautions are taken

is not used for any irrigation

Question Number : 75 Question Id : 5799653104 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

As per IS 4987 , $N = (Cv/P)^2$ where N = optimum number of raingauge stations in a basin, Cv = coefficient of variation of the rainfall values of the existing raingauge stations , then P is

Options :

Highest discharge at the basin outlet

Annual average rainfall of the basin

desired degree of percentage error in the estimate of the basin mean rainfall.

Highest rainfall recorded in the basin

Question Number : 76 Question Id : 5799653105 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Defective air circulation in plant's root zone is an effect of

Options :

Mixed cropping

Fall in soil moisture content

Water logging

High temperatures

Question Number : 77 Question Id : 5799653106 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In the design of impervious apron by Khosla's theory for weirs, the horizontal length of the apron is found by the consideration of

Options :

Velocity of flow over the weir

Permissible exit gradient

Scouring depth

Design discharge

Question Number : 78 Question Id : 5799653107 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

For no tension to develop in the gravity dam the resultant of all the external forces should always lie

Options :

At the centre of the base

Within the middle third portion of the base

Within the d/s third portion

With the u/s third portion

Question Number : 79 Question Id : 5799653108 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The first watering given to a crop, when the crop is a few centimeters high, is called

Options :

Paleo irrigation

Kor watering

Leaching

None of the given answers

Question Number : 80 Question Id : 5799653109 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Specific capacity of a confined well

Options :

Is constant at all drawdowns

Increases with increasing discharge

Decreases with increasing discharge

Is constant at all discharges

Question Number : 81 Question Id : 5799653110 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Field capacity and optimum moisture content of a soil of density 1.3g/cc are 28% is 16% respectively. If effective depth of root zone is 70 cm, water available for evapotranspiration is

Options :

- 25.4 cm
- 22.29 cm
- 14.56 cm
- 10.92 cm

Question Number : 82 Question Id : 5799653111 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Flow duration curve is a convenient tool to assess the available at the site

Options :

- Firm power
- Secondary power
- Tertiary power
- Average power

Question Number : 83 Question Id : 5799653112 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The best method of estimating runoff is

Options :

- Unit Hydrograph
- Runoff-Coefficient Method
- Rational formula
- Infiltration index method

Question Number : 84 Question Id : 5799653113 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Blue baby disease may be caused in infants due to drinking water containing higher concentrations of

Options :

- Nitrites
- nitrates
- Lead
- arsenic

Question Number : 85 Question Id : 5799653114 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Sedimentation is the process related to

Options :

- Floating material in rivers
- Bed material carried by flowing water
- Cutting land for channeling
- Seepage into Embankments

Question Number : 86 Question Id : 5799653115 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

If uplift is not considered, base width of elementary profile of gravity dam of height H and specific gravity ρ is given by

Options :

$b = H/\sqrt{\rho}$

$b = H/\sqrt{(\rho-1)}$

$b = H/\sqrt{2\rho}$

$b = H\sqrt{(\rho+1)}$

Question Number : 87 Question Id : 5799653116 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

An important hydraulic failure of earth dams is

Options :

Piping

Sloughing

Upstream slope failure due to sudden drawdown

Overtopping

Question Number : 88 Question Id : 5799653117 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The ratio of rate of change of discharge of a canal outlet to the rate of the change of the discharge of the distributing channel is known as

Options :

Proportionality

Flexibility

Sensitivity

Drowning ratio

Question Number : 89 Question Id : 5799653118 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Three turbines each of capacity 10,000 kW are installed at a hydel power station. If the peak load and the average load produced during a certain period are 25,000 kW and 15,000 kW respectively, then load factor and plant factor are respectively equal to

Options :

60% and 50%

50% and 60%

40% and 50%

50% and 40%

Question Number : 90 Question Id : 5799653119 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In design of alluvial channels , for computing mean velocity of flow , Kennedy used

Options :

Chezy's formula

Manning's formula

Kutter's formula

Bazin's formula

Question Number : 91 Question Id : 5799653120 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The design period for clear water conveying mains is

Options :

15 years

30 years

50 years

100 years

Question Number : 92 Question Id : 5799653121 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Slow sand filters require

Options :

Finer sand

Coarser sand media

Medium sand media

Any type of sand media

Question Number : 93 Question Id : 5799653122 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A sudden change in the flow velocity or pressure created in water pipe line due to sudden closure of valve is called

Options :

Boiling

Implosion

Vibration

Water hammer

Question Number : 94 Question Id : 5799653123 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The minimum dia for public sewer in hilly areas where steep slopes are prevalent is

Options :

300

150

100

50

Question Number : 95 Question Id : 5799653124 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Due to incomplete combustion of fuels from petrol engines, the gas liberated is

Options :

CO₂

CO

N₂

He

Question Number : 96 Question Id : 5799653125 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Design period for slow sand filters as suggested by CPHEEO is

Options :

50 years

30 years

25 years

10 years

Question Number : 97 Question Id : 5799653126 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Treatment required for raw water containing only carbon dioxide and odourous gases is

Options :

Plain sedimentation and chlorination

Chlorination only

Aeration followed by disinfection

Softening and chlorination

Question Number : 98 Question Id : 5799653127 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In connection line from water main to building, goose-neck is provided to

Options :

quickly open or stop the flow to building

avoid stresses and strains on the joint due to temperature variations and vibrations

detect leakages in pipe line

to provide additional connections in future

Question Number : 99 Question Id : 5799653128 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Sludge digestion is done by the _____ bacteria

Options :

pathogenic

facultative

anaerobic

aerobic

Question Number : 100 Question Id : 5799653129 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The sluice valves used for dewatering the pipe line are called

Options :

Scour valve

Safety valve

Sectionalizing valve

Discharge control valve

Question Number : 101 Question Id : 5799653130 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The collapsible soil is associated with

Options :

Dune sands

laterite soils

Loess

Black cotton soils

Question Number : 102 Question Id : 5799653131 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The probability that a 100 yr flood is equalled or exceeded at once in 100 yr is

Options :

0.99

0.64

0.36

0.1

Question Number : 103 Question Id : 5799653132 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The gaseous pollutants such as hydro carbons and carbon monoxides can be effectively controlled by

Options :

Combustion or incineration

Electrostatic precipitators

Gravity settling chambers

Fabric filters

Question Number : 104 Question Id : 5799653133 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

According to ambient air quality standards in respect of noise (MOEF) mention noise limits for silence zone in day time

Options :

40 dB (A) Leq

45 dB (A) Leq

50 dB (A) Leq

75 dB (A) Leq

Question Number : 105 Question Id : 5799653134 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Disposal of refuse by Bangalore method involves

Options :

Aerobic method of composting

Anaerobic method of composting

pulverization

pyrolysis

Question Number : 106 Question Id : 5799653135 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Degree of saturation (s) of a soil mass is expressed in terms of volume of water (V_w) and volume of voids (V_v) as

Options :

$$S = (V_v V_w) / 100$$

$$S = 100 (V_w / V_v)$$

$$S = 100 (V_v / V_w)$$

$$S = 100 (V_v - V_w)$$

Question Number : 107 Question Id : 5799653136 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A sample of saturated soil has a water content of 29.6%. If the specific gravity of solids is 2.7, the dry unit weight (in gr/cm^3) of the soil is equal to

Options :

0.5

0.75

1

1.5

Question Number : 108 Question Id : 5799653137 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Lacustrine soils according to geological classifications are

Options :

Transported by ice

Transported by wind

Deposited in seas

Deposited in lakes

Question Number : 109 Question Id : 5799653138 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

If two soils S1 and S2 tested in the laboratory are having liquid limits 38% and 60% and plastic limits 18% and 20% respectively. If natural moisture content for S1 and S2 is 40% and 50% respectively, which soil is a better foundation material when remoulded.

Options :

S1

S2

S1 and S2

Neither S1 nor S2

Question Number : 110 Question Id : 5799653139 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Neutral stress within a soil mass is also known as

Options :

Pore water pressure

Effective stress

Geostatic stress

Static shear stress

Question Number : 111 Question Id : 5799653140 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The maximum force per unit area that needs to be placed over an expansive soil to prevent volume increase is known as

Options :

Pore water pressure

Swelling pressure

Safe bearing capacity

Plastic limit

Question Number : 112 Question Id : 5799653141 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The diameter of enlarged bore or bulb for underreamed piles used in expansive soils is generally taken as

Options :

0.3 - 0.6 times the length of the pile

1.5 - 1.2 times the pile shaft dia

2 to 3 times the pile shaft dia

1000 mm

Question Number : 113 Question Id : 5799653142 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The latitude and departure of a line AB are +78 m and -45.1 m respectively. The whole circle bearing of the line AB is

Options :

30°

150°

210°

330°

Question Number : 114 Question Id : 5799653143 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

What is the angle between two plane mirrors of an optical square

Options :

30°

45°

60°

90°

Question Number : 115 Question Id : 5799653144 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The sum of specific yield and specific retention is equal to

Options :

Porosity

Permeability coefficient

Storage coefficient

Saturation percentage

Question Number : 116 Question Id : 5799653145 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A layer of soil having $G=2.67$ and $e=0.67$ is subjected to an upward head of 1.5m due to seepage of water. The depth of the soil layer required to provide a factor of safety 2 against piping is

Options :

1.5m

2.0m

3.0m

0.75m

Question Number : 117 Question Id : 5799653146 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Boussinesque's solution for the stresses in soil caused by a point load at the surface is based on some assumptions. One of which is

Options :

Soil medium is finite medium

Soil medium is plastic

Soil medium obeys Hook's law

Soil medium is not homogeneous

Question Number : 118 Question Id : 5799653147 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The failure plane in direct shear test is

Options :

Horizontal

Vertical

Inclined at 45° to the horizontal

Unpredictable

Question Number : 119 Question Id : 5799653148 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

When retaining wall is stationary, the coefficient of earth pressure at rest is equal to (taking Poisson's ratio of soil as μ)

Options :

$\mu/(1-\mu)$

$\mu/(1+\mu)$

$2\mu/(1-\mu)$

$\mu/(1-\mu)^2$

Question Number : 120 Question Id : 5799653149 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In sands, during earthquakes, instantaneous pore pressures are likely to develop leading to sudden and total loss of shearing strength. This phenomenon is known as

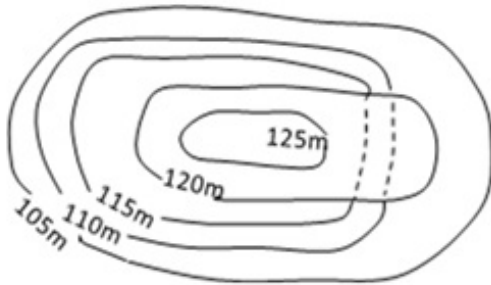
Options :

quicksand
liquefaction
damping
scouring

Question Number : 121 Question Id : 5799653150 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The contours given below represent



Options :

- Depression
- Summit
- Saddle
- Over hanging cliff

Question Number : 122 Question Id : 5799653151 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Digital elevation model is generated using

Options :

- Digitisation
- Contour interpolation
- Hydrographic analysis
- Thiessen polygon method

Question Number : 123 Question Id : 5799653152 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Remote sensing work where system has no energy source of its own but depends on external source of energy is called

Options :

- Active remote sensing
- Passive remote sensing
- SLAR
- LIDAR

Question Number : 124 Question Id : 5799653153 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In triangulation, the best shape of a triangle from the following is

Options :

- Isosceles with base angle $56^{\circ}14'$
- Isosceles with base angle $65^{\circ}14'$

Isosceles with base angle $36^{\circ}14'$

Isosceles with base angle $76^{\circ}14'$

Question Number : 125 Question Id : 5799653154 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The number of GPS Satellites required for GPS receiver to correctly draw 3 D map to locate the geo graphical position of the object over the earth surface is

Options :

- 1
- 2
- 3
- 4

Question Number : 126 Question Id : 5799653155 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

An electronic theodolite combined with EDM is popularly known as

Options :

- GPS
- Total station
- Auto Level
- Compass

Question Number : 127 Question Id : 5799653156 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

It is a common practice to design a highway to accommodate the traffic volume corresponding to

Options :

- 30th hour
- peak hour
- none
- 15-min peak period

Question Number : 128 Question Id : 5799653157 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The poles of the celestial horizon are called

Options :

- Zenith and nadir
- North and South poles
- Perihelion and aphelion
- Perigee and apogee

Question Number : 129 Question Id : 5799653158 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The RL of th floor in a building is 100.00 m and the staff reading on the floor is 1.40 m. If the reading on the staff when held inverted with bottom touching the T-Beam of the slab is 3.60 m, then the height of the T-Beam bottom above the floor is equal to

Options :

2.20 m

2.50 m

5m

95 m

Question Number : 130 Question Id : 5799653159 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

An error in observations of either fore or back bearing or both may be due to

Options :

Magnetic declination

Dip

Local attraction

Inclination

Question Number : 131 Question Id : 5799653160 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In a theodolite, if line of altitude bubble is not parallel to the line of collimation when verniers of vertical circle read zero, the error is known as

Options :

Vertical axis error

Lateral collimation error is

Horizontal axis error

Vertical collimation error

Question Number : 132 Question Id : 5799653161 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The plane table method which is suitable for locating inaccessible points is

Options :

Resection method

Intersection method

Radiation method

Traversing method

Question Number : 133 Question Id : 5799653162 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

If the stadia interval and the focal length of tacheometer are 12 mm and 24 cm respectively, then the multiplying constant of the tacheometer is equal to

Options :

0.005

20

100

200

Question Number : 134 Question Id : 5799653163 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

If L denotes latitude and D denotes departure, then the direction of closing error is given by

Options :

$\tan^{-1}(\Sigma D/\Sigma L)$

$\operatorname{cosec}^{-1}(\Sigma D/\Sigma L)$

$\cos^{-1}(\Sigma D/\Sigma L)$

$\sin^{-1}(\Sigma D/\Sigma L)$

Question Number : 135 Question Id : 5799653164 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In leveling, curvature correction is given by

Options :

$C_c = D^2/(R)$

$C_c = D/(2R)$

$C_c = D^2/(2R)$

$C_c = D/R$

Question Number : 136 Question Id : 5799653165 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The absolute minimum radius for a horizontal curve designed for a speed of 80 kmph , given the permissible values of super elevation and coefficient of friction are 0.05 and 0.15 respectively

Options :

252 m

458 m

150 m

105 m

Question Number : 137 Question Id : 5799653166 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The longitudinal gradient on a road is 1 in 20. If the radius of curve is 76 m, compensated gradient is

Options :

0.01

0.015

0.04

0.05

Question Number : 138 Question Id : 5799653167 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The maximum super elevation to be provided on a road curve is 1 in 15. If the rate of change of super elevation is specified as 1 in 120. and the road width including widening is 12 m then the minimum length of the transition curve is (when the outer edge is raised with respect to inner edge)

Options :

180m

125m

96m

48m

Question Number : 139 Question Id : 5799653168 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The gradient which in the normal course must never be exceeded in any part of the road is called as

Options :

Ruling gradient

Limiting gradient

Exceptional gradient

Escape gradient

Question Number : 140 Question Id : 5799653169 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following is not considered as design vehicles in IRC-3-1983?

Options :

Single unit truck

Semi trailer combination

Truck trailer combination

Passenger car

Question Number : 141 Question Id : 5799653170 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which type of coordinated signal system is not conducive to give continuous movement of all vehicles as given in IRC 93-1985?

Options :

Flexible progressive system

Limited progressive system

Simple progressive system

Simultaneous system

Question Number : 142 Question Id : 5799653171 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Bed width (B) and depth (D) of roof economical section for a rectangular drains as per IRC guidelines on urban drainage shall be related as

Options :

$B = D$

$B = 1.5D$

$B = 2D$

$B = 2D/3$

Question Number : 143 Question Id : 5799653172 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Widening at curves provided to compensate the extra width occupied by a vehicle on the curve due to tracking of the rear wheels is called

Options :

Mechanical widening

Psychological widening

Super widening

Extra widening

Question Number : 144 Question Id : 5799653173 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

As per IRC code for flexible pavements, designed life for National Highways and State Highways should be

Options :

20 years

15 years

10-15 years

<10 years

Question Number : 145 Question Id : 5799653174 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The multiplier applied to convert the number of commercial vehicles of different axles loads and axle configuration to the number of standard axle load repetitions is called

Options :

Lane distribution factor

Vehicle damage factor

Safe load factor

Load distribution factor

Question Number : 146 Question Id : 5799653175 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Value of camber provided for straight sections of roads in areas of high intensity of rainfall is _____ than/ to that provided for the areas of low intensity of rainfall.

Options :

Steeper

Milder

Equal

None of the given answers

Question Number : 147 Question Id : 5799653176 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The safe stopping distance for a two way traffic in a two lane road is 61.4 m, then for a two way traffic in a single lane road when other conditions are unaltered the safe stopping distance will be taken as

Options :

30.7 m

61.4 m

92.1 m

122.8 m

Question Number : 148 Question Id : 5799653177 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Map cracking is the common type of failure in

Options :

Rigid pavements

Cement concrete pavements

Gravel roads

Bituminous surfacing

Question Number : 149 Question Id : 5799653178 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The most effective and economical method to stabilize Black Cotton Soils is

Options :

Cement stabilization

Lime stabilization with suitable additives

Thermal stabilization

None of the given answers

Question Number : 150 Question Id : 5799653179 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Equivalent factor of PCU for trucks is

Options :

0.5

1

3

4