UPSSSC JE
RECORDED
QUESTION PRACTICE BATCH

☞ Start- 22 Sep 2021
☞ Validity- Till The Exam
☞ Enroll Now

At Just
355/-

🌐 www.everexam.org 📞 8595517959, 7827455078

Q :) Spire test is used for the permanent adjustment of a theodolite for

A : Adjustment of horizontal axis

B : Adjustment of vertical axis

C : Adjustment of plate levels

D : Adjustment of line of sight

Q :) The distance formula for finding distances using a theodolite, for a horizontal line of sight, is (K is multiplying constant, is intercept and C is additive constant)-

A : K + CS

B : KS + C

C : K/S + C

D : K + C/S

Q :) Theodolite is an instrument used for

A : Tightening the capstan-headed nuts of level tube

B : Measurement of horizontal angles only

C : Measurement of vertical angles only

D : measurement of both horizontal and vertical angles

Q :) A Vernier theodolite consists of

A : Levelling head assembly

B : Horizontal - circle assembly

C : Alidade assembly

D : All of these

Q :) If the image of a triangulation station of R.L. 500 m is 4cm from the principal point of a vertical photo taken from an altitude of 2000 m above datum, the height of displacement will be:

A : 6 mm

B : 8 mm

C : 10 mm

D : 12 mm

Q :) The multiplying constant of a tacheometer is given by:

A : $\dfrac{f}{i}$

B : $\dfrac{i}{f}$

C : f + d

D : $\dfrac{f+d}{i}$

Q :) Tacheometric formula for horizontal distances using inclined sights through θ is obtained by multiplying:

A : The constants by $\sin^2 \theta$

B : The constants by $\cos^2 \theta$

C : The constant by $\cos \theta$

D : The multiplying constant by $\cos^2 \theta$ and additive constant by $\cos \theta$

Q :) In aerial vertical photography, the longitudinal overlap is normally kept as:

A : 50%

B : 60%

C : 70%

D : 75%

Q :) The main plate of a theodolite is divided into 1440 equal divisions. 60 division of the Vernier equal to 59 division of the main scale. The least count of the theodolite is:

A : 5"

B : 10"

C : 15"

D : 20"

Q :) θ_1 and θ_2 are the angles of elevation from 'A' to the top of a vertically held rod of length 'S' at B. The horizontal distance AB will be:

A : $\dfrac{S}{tan\theta_1 - tan\theta_2}$

B : $\dfrac{S}{tan\theta_1 + tan\theta_2}$

C : $\dfrac{S}{tan\theta_2 - tan\theta_1}$

D : $S (tan\,\theta_1 - tan\,\theta_2)$

Q :) The latitude coordinate relates to:

A : North and South

B : North and East

C : North and West

D : East and West

Q :) The value of multiplying constant of a techeometer is kept about:

A : 1000

B : 1.0

C : 0.5

D : 100

Q :) If the focal length of tacheometer is 20 cm, stadia interval is 2.5 mm and the distance between the vertical axis and the lens is 20 cm, the multiplying constant and additive constant will be respectively :

A : 100 and 1

B : 100 and 0.4

C : 80 and 0.4

D : 80 and 0.5

Q :) Circumpolar stars are those starts:

A : Which are visible at the poles only

B : Which are in the plane of equator

C : Which are always above the horizon and do not set

D : None of the above

Q :) The great circle which the sun appears to describe on the celestial sphere with the earth as centre, in the course of a years, is called:

A : Hour circle

B : Celestial meridian

C : Celestial ecliptic

D : Prime vertical

Q :) In the movable hair method of tacheometric surveying:

A : The staff intercept vary

B : The stadia interval is constant

C : Both the staff intercept and stadia interval are constant

D : None of the above

Q :) The error eliminated by face left and right observation in a theodolite is:

A : Index error

B : Eccentricity error

C : Both of the error

D : None of these

Q :) Latitude and departure of a station with respect to the preceding station is called:

A : Dependent coordinates

B : Consecutive coordinates

C : Both of the above

D : None of these

Q :) A theodolite fitted with optical plumet:

A : Increases the accuracy of reading of angles

B : Increases the accuracy of centering

C : Increases the accuracy of bisection of signal

D : Helps in the process of levelling

Q :) In triangulation the best shape o triangle is isosceles with base angles equal to:

A : 60º14'

B : 58⁰14'

C : 56º14'

D : 60º00'

Q :) By the method of repetition, the observational errors, eliminated are:

A : Line of collimation error

B : Trunnion axis error

C : Graduation error

D : Parallax error

Q :) Log sine formula is used in triangulation to check:

A : Apex condition

B : Angle condition

C : Side condition

D : All of the above

Q :) Given that

Scale of photograph is 1 cm = 100 m

Size of photograph = 23 cm × 23 cm

Area to be covered = 150 sq.km

Longitudinal overlap = 60%

Side overlap = 30%

The total number of photograph required
for covering the above area is:

A : 143   B : 101

C : 58   D : 43

Q :) The process of turning the telescope about the vertical axis in horizontal plane is known as :

A : Transiting

B : Reversing

C : Swinging

D : Plunging

Q :) If the intercept on the vertical staff is observed as 0.75 m from a tacheometer, the horizontal distance between tacheometer and staff station is:

A : 7.5 m

B : 25 m

C : 50 m

D : 75 m

Q :) A curve of varying radius introduced between two branches of a compound curve is known as

A : Mean curve

B : Base curve

C : Common curve

D : Transition curve

Q :) The length of long chord in a circular curve is equal to:

A : R sin ϕ

B : R cos ϕ

C : 2R sin $\dfrac{\phi}{2}$

D : 2R cos $\dfrac{\phi}{2}$

Q :) If the length of chain is 20m, the degree of curve is given by:

A : 1146/R

B : 1546/R

C : 1519/R

D : 1119/R

Q :) Perpendicular offset from a tangent to the junction of a transition curve and circular curve is equal to:

A : S

B: 2S

C : 3S

D : 4S

Q :) The radius of a simple circular curve is 300 m and length of its specified chord is 30m. The degree of the curve is :

A : 5.73º

B : 5.37º

C : 3.57º

D : 3.75º

Q :) The radial offset at a distance 'x' from the beginning of curve of radius R is given by:

A : $\sqrt{R^2 - x^2} - R$

B : R - $\sqrt{R^2 - x^2}$

C : R - $\sqrt{R^2 + x^2}$

D : $\sqrt{R^2 + x^2} - R$

Q :) Total angle of deflection of a transition curve is given by:

A : α

B : $\alpha/2$

C : $\alpha/3$

D : $\alpha/4$

Where α = spiral angle

Q :) The linear method of laying out a simple circular curve is:

A : Rankine's method deflection angle

B : Two theodolite method

C : Tacheometric method

D : Chain and tape method

Q :) Which of the following will be the radius of 90º curve if unit chord is 30 m?

A : 19.9 m

B : 21.2 m

C : 21.9 m

D : 22.8 m

Q :) The end of a 4o circular curve are to be joined with the straight, using a transition curve of 150 m length. The radius of curvature of the curve will be above:

A : 430 m

B : 286 m

C : 143 m

D : 586 m

Q :) Setting out a circular curve by the two theodolite method involves:

A : Linear measurements only

B : Angular measurement only

C : Both angular and linear measurements

D : Linear, angular and elevation measurements

Q :) In a true spiral the total length of transition curve L and radius of this curve at its junction with the circular curve R, are related as

A : L = R

B : L/R = Constant

C : LR = Constant

D : $\sqrt{LR}$ = π

Q :) The versed sine of a curve is:

A : The distance between the vertex and tangent point

B : The distance between vertex and apex of a curve

C : The distance between apex of between apex of a curve and mid point of a long chord

D : The distance between vertex and mid-point of long chord

Q :) In a simple curve if the angle of deflection is Δ degree then angle subtended by the long chord at the centre of the curve is-

A : 180º - Δ

B : Δ

C : Δ/2

D : 2 Δ

Q :) The approximate formula for radial or perpendicular offsets from the tangent is :

A : $\dfrac{x}{2R}$

B : $\dfrac{x^2}{2R}$

C : $\dfrac{x}{R}$

D : $\dfrac{x^2}{2R}$

Where, R = Radius of curve, x = distance from tangent point along it

Q :) The following offsets were taken from a chain line to an irregular boundary line at a interval of 10 m.

The area (in m²) between the chain line, the irregular boundary line and the end offsets by trapezoidal formula is:

A : 196.67

B : 188

C : 164

D : 152

Q :) The method which gives more accurate results in the measurement of areas is

A : Average ordinate rule

B : Mid ordinate rule

C : Trapezoidal rule

D : Simpson's one third rule

Q :) Match List-I with list-II and select the correct answer using the codes given below the lists:

List-I	List-II
A. Traverse surveying	1. Weddel's sounding machine
B. Geodetic surveying	2. Alidade
C. Plane table surveying	3. Chain and compass
D. Hydrographical surveying	4. Theodolite

A : 3, 4, 2, 1

B : 1, 4, 2, 3

C : 3, 2, 4, 1

D : 1, 2, 4, 3

Q :) A surveyor made an error during the survey of a project which is associated with his skills and vigilance. Which type of error this surveyor has committed?

A : Blunders errors

B : Random errors

C : Systematic errors

D : Constant errors

Q :) The systematic errors which persist and have regular effects in the performance of a survey operation are due to…..

A : Carelessness

B : Calculation

C : Poor attention

D : Faulty instrument

Q :) Which of the following statements in respect of a map A having scale 1 : 1000 and another map B having scale 1 : 5000 is true?

A : Map A is large scale map compared map B.

B : Map B is a large scale map compared map A.

C : Map B is a more detailed map compared to map A

D : None of the above

Q :) Vertical index error is a:

A : Personal error

B : Instrumental error

C : Natural error

D : None of the above

Q :) IN which survey pacing is used for measuring the distances?

A : Preliminary surveys

B : Location survey

C : Reconnaissance surveys

D : All of the above

Q :) Comparative scale is a pair of scale having a common

A : Unit

B : Representative

C : Length of scale

D : Least count

Q :) The surveying used to determine additional details such as boundaries of fields, is called:

A : Location surveying

B : Cadastral surveying

C : City surveying

D : Topographical surveying

Q :) Survey plotting can be done with an accuracy of

A : 0.25 mm

B : 0.5 mm

C : 1 mm

D : 1 cm

Q :) Survey of India was publishing toposheets using a scale of-

A : 1 : 1000

B : 1 : 5000

C : 1 : 10000

D : 1 : 50000

Q :) Match List-I with list-II and select the correct answer using the codes given below the lists:

List-I	List-II
A. Geographical map	1. 1 cm = 2.5 km
B. Topographical map	2. 1 cm = 0.25 km
C. Location map	3. 1 cm = 160 km
D. Forest map	4. 1 cm = 5 m to 25 m

A : 1, 3, 4, 2

B : 3, 1, 4, 2

C : 1, 3, 2, 4

D : 3, 1, 2, 4

Q :) The method mainly adopted in reconnaissance survey is:

A : Chaining

B : Direct measurement

C : Judging

D : Ranging by eye

Q :) When a 10 m long line is shown in a drawing by a line 10 mm, the scale used is known as:

A : Full size scale

B : Reducing scale

C : Enlarging scale

D : Plain scale

Q :) In case of a direct Vernier scale ……….

A : Graduations increase in opposite direction in which graduations of the main scale increase

B : Smallest division is longer than smallest division of the main scale

C : Graduations increase in the same direction in which graduations of the main scale increase

D : None of these

Q :) …………. Does not belong to the classification based on the object of surveying.

A : Engineering survey

B : Traverse survey

C : Military survey

D : Geological survey

Q :) An average length of pace is:

A : 80 cm

B : 50 cm

C : 100 cm

D : 130 cm

Q :) The object of surveying is to procedure a:

A : Drawing

B : Cross section

C : Sketch

D : Map

Q :) For preparing nautical charts for navigation, the survey usually done is known as-

A : Tachometric surveying

B : Geodetic surveying

C : Topographic surveying

D : Hydrographic surveying

Q :) Compensating errors are proportional to:

A : L

B : L²

C : $\sqrt{L}$

D : $2\sqrt{L}$

Q :) Limiting length of offset is :

A : Should not be longer than 15 m

B : should not be longer than 10 m

C : Should not be longer than 5 m

D : None of these

Q :) Positive error is caused if-

A : Length of chain is shorter than the standard

B : Slope and sag corrections is not applied

C : Measurements are made along the incorrectly

D : All options are correct

Q :) Hypotenusal allowance is given by the expression (adopting standard conventions)-

A : $(1-\sec\theta) \times$ Measured distance

B : $(1-\cos\theta) \times$ Measured distance

C : $(\sec\theta-1) \times$ Measured distance

D : $(\cos\theta-1) \times$ Measured distance

Q :) In an optical square, the angle between the first incident ray and the last reflected ray is-

A : 60º

B : 90º

C : 120º

D : 150º

Q :) The error in measured length due to sag of a chain or tape is known as:

A : Negative error

B : Positive error

C : Instrumental error

D : Compensating error

Q :) The maximum tolerance in a 20 m chain is

A : $\pm$ 4 mm

B : $\pm$ 2 mm

C : $\pm$ 5 mm

D : $\pm$ 6 mm

Q :) Minimum number of ranging rod required for indirect ranging is :

A : 2

B : 1

C : 5

D : 4

Q :) According to BIS, the length of folding staff is …………… meter

A : 2

B : 6

C : 4

D : 8

Q :) The huygen's telescope eye piece

A : Is aplanatic

B : Achromatic

C : Both (a) and (b)

D : Neither (a) nor (b)

Q :) Chromatic aberration in a telescope is reduced by using

A : A convex lens

B : Compound lens convex and concave lenses

C : A concave lenses

D : Two convex lenses

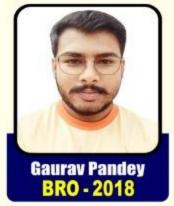# Heartiest *Congratulations* To All Selected Candidates From EverExam

Maneesh Kumar
CPWD - 2018

Vaibhav Gupta
CPWD - 2018

Mehefuz Hossain
CPWD - 2018

Pooja Garg
CWC - 2018

Gaurvendra Singh
CWC - 2018

Kunal Panchal
MES - 2018

Satyam Gupta
BRO - 2018

Gaurav Pandey
BRO - 2018

Rajbhadur Prajapati
BRO - 2018

Suman Shankar
BRO - 2018

Many More....

60+ Selection In Civil SSC JE 2018

TELEGRAM CHANNEL **EVEREXAM TECH** | DOWNLOAD EVEREXAM APP

GET IT ON
Google Play