PLANE TABLE SURVEYING

.Plane Tabling Is _____ Method Of Surveying
A) Graphical)
B) Analytical)
C) Mathematical)
D) None Of Above)

._____ The Principle Of Plane Tabling Is
A) Trigonometry)
B) Similarity)
C) Contouring)
D) Parallelism)

The Size Of Plane Table Is
750mm X 900mm
600mm X 750mm
550mm X 600 Mm
300mm X 450mm

Alidade Is Used For_____
A) Sighting
B) Levelling
C) Transferring Point To Ground
D) Drawing Lines

Which Of The Following Methods Can Be Useful In Having An Enlarged Output?
A) Intersection
B) Resection
C) Traversing
D) Radiation

Which Of The Following Can Give The Best Output?
A) Traversing
B) Intersection
C) Resection
D) Radiation

Which Of The Following Methods Required Two Instrument Stations?
A) Radiation
B) Intersection
C) Resection
D) Traversing

What Are The Types Of Plane Tables ?
(A) Simple Plane Table
(B) Johnson Plane Table
(C) Coast Survey Table
(D) All Of Above

Which Is The Method Of Plane Tabling ?
(A) Ranging
(B) Traversing
(C) Both A And B
(D) None Of The Above

_____ Must Be Done When The Plane Table Is Set Up At More Than One Station.
(A) Marking The North Line
(B) Orientation
(C) Both A And B
(D) None Of Above

_____ Method Of Plane Tabling Is Suitable For Locating Inaccessible Points.
(A) Radiation
(B) Resection
(C) Intersection
(D) All Of Above

Which Of Following Is Not An Instrument Used In Plane Tabling ?
(A) Alidade
(B) U - Fork
(C) Trough Compass
(D) None Of Above

What Are Advantages Of Plane Table Surveying ?
(A) Rapid Method
(B) Can Be Used In All Weather
(C) Re-Ploting Can Be Done Easily
(D) All Of Above

_____ Is Used For Sighting The Objects And Drawing The Rays In Plane Table Surveying.
(A) Plain Alidade
(B) Telescopic Alidade
(C) Both A And B
(D) None Of Above

Plane Table Survey Is Used For _____
(A) Small To Medium Scale Works
(B) Plotting Topographical Maps
(C) Filling In Interior Details Of Traverse
(D) All Of Above

U Fork Is Primarily Used For

(A) Centering The Table
(B) Transferring The Ground Point On To Table
(C) Both A And B
(D) None Of Above

Which Type Of Plane Table Have A Ball And Socket Joint To Facilitate The Titling Which Is Useful In Leveling The Table ?
(A) Simple Plane Table
(B) Johnson Plane Table

(C) Coast Survey Table
(D) All Of Above

If Accurate Orientation Of Plane Table Is To Be Done In Area Prone To Local Attraction, It Is Done By _____.
(A) By Backsighting
(B) By Magnetic Needle
(C) Both A And B
(D) None Of These

The Principle Of Resection Method Is _____ To That Of The Intersection Method.
(A) Same
(B) Different (No Relation With Each Other)
(C) Opposite
(D) None Of These

Plane Table Survey Carries A Lot Of Accessories With It Which Are Likely To Be Lost.
(A) True
(B) False
(C) Cannot Say
(D) None Of Above

In Plane Table _____ Are Adjustable/Avoidable.
(A) Climatic Errors
(B) Instrumental Errors
(C) Personal Errors
(D) None Of Above

In Plane Table Survey, An Incorrect Scale Used By Mistake Is An Example Of _____.
(A) Errors In Plotting
(B) Instrumental Error
(C) Both A And B
(D) None Of Above

Normally While Working With Plane Table, Is There Any Possibility To Overlook Any Important Object ?
(A) Yes
(B) No
(C) Cannot Say
(D) None Of Above

While Executing Survey With Plane Table, If Alidade Was Not Pivoted On The Same Side Of Station Through Out The Work , Then It Will Be Regarded As _____.
(A) Instrumental Errors
(B) Errors In Plotting
(C) Personal Errors
(D) All Of Above

In Plane Table Survey, Errors In Plotting Are Generally _____ In Nature.
(A) Cumulative
(B) Compensating

(C) Both A And B
(D) None Of Above

Theodolite Surveying

?Which type of survey done by theodolite

A) Chain Surveying)

B) Compass Surveying)

C) Plantable Surveying)

D) All of the above)

Which instrument is precise and speedy in survey?

(A) Theodolite

(B) Plan table

(C) Compass

(D) All of the above

Which is the most precise instrument designed for the measurement of horizontal and vertical angles?

(A) Chain

(B) Dumpy level

(C) Theodolite

(D) Telescope

Which of the following cannot be done with the help of theodolite in surveying?

(A) Laying off horizontal angles

(B) Locating points on lines

(C) Prolonging survey lines

(D) Measuring horizontal distances

Which of the following theodolite based on movement of telescope on horizontal axis in vertical plan through ?

(A) Non-transit

(B) Transit

(C) Y

(D) All of the above

Which of the following cannot be done with the help of non-transit theodolite?

(A) Back sighting

(B) Face left to Face right

(C) Transiting

(D) All of the above

how many the least reading for angles can be measured by vernier theodolite ?

(A) 1”

(B) 10”

(C) 20”

(D) 20’

How many the least reading for angles can be measured by micrometer theodolite ?

(A) 20’

(B) 1”

(C) 1’

(D) 20”

What is the full form of E.D.M ?

(A) Electronic Distance Measuring

(B) Electronic Digital Meter

(C) Electronic Distance Meter

(D) Electronic Digital Measuring

How many types do theodolites classified?

(A) 2

(B) 3

(C) 4

(D) 5

Which size of theodolite can be use in ordinary surveying ?

(A) 8 to 10 cm

(B) 8 to 12 cm

(C) 8 to 15 cm

(D) 8 to 18 cm

Which diameter theodolite was used in Indian triangulation survey ?

(A) 91.4 cm

(B) 36”

(C) 91.4 mm

(D) Both A and B

Horizontal axis is also called _____.

(A) Vertical Axis

(B) Outer Axis

(C) Trunnion Axis

(D) Line of sight

Which of the following is an integral part of the theodolite and is mounted on a spindle known as a horizontal axis?

(A) Telescope

(B) Index frame

(C) Horizontal Circle

(D) Vernier

The vertical circle is a circular graduated arc attached to the _____ axis of the telescope.

(A) Vertical Axis

(B) Outer Axis

(C) Trunnion Axis

(D) Line of sight

The index frame is _____ shaped frame.

(A) U

(B) V

(C) T

(D) A

In the theodolite, Two standards resemble letter A are mounted on the _____

(A) Upper plate

(B) Lower plate

(C) Both A and B

(D) None of the above

Which of the following is not a function of levelling head?

(A) To support the main part of the instrument

(B) To attach the theodolite to the trip

(C) To provide a mean for levelling the theodolite

(D) To provide the exact centering over the station mark

Which type of screw used for plate level centered ?

(A) Focusing screw

(B) Foot screw

(C) Tangent screw

(D) Clip screw

Parallax can be elimiated by focusing on the_____

(A) eye piece

(B) Objective glass.

(C) Both A and B

(D) None of the above

In modern theodolite, centering of theodolite is done by _____.

(A) Optical plummet

(B) Plumb bob

(C) Foot screw

(D) Stone

Which part an arrangement in theodolite it has made for quick and accurate centering of the theodolite?

(A) Lower plate

(B) Telescope

(C) Shifting head

(D) Spindles

The bubble of altitude level tube centered by_____.

(A) Foot screw

(B) Clamp screw

(C) Clip screw

(D) Slow-motion screw

The graduation on the horizontal scale are mark from 0° to _____

(A) 0°

(B) 90°

(C) 180°

(D) 360°

What is the first thing done by the surveyor after setting up the instrument?

(A) releasing all clamps

(B) levelling instrument

(C) turning plates

(D) clamping the plates

After levelling of an instrument is done what is the next up?

(A) releasing all clamps

(B) levelling instrument

(C) turning plates

(D) clamping the plates

Which axis is known as when theodolite is rotated in a horizontal plane ?

(A) Horizontal

(B) Vertical

(C) Axis of bubble

(D) Trunnion

Which line is passing through the intersection of the cross hair of the diaphragm and the optical center of the objective?

(A) Line of axis

(B) Vertical axis

(C) Axis of bubble

(D) None of the above

What is said when vertical circle is to the left of the observer ?

(A) Face left

(B) Telescope normal

(C) Inverted telescope

(D) Both A and B

Which of the following step should be required for temporary adjustment of theodolite?

(A) Levelling

(B) Centering

(C) Elimination of parallax

(D) All of the above

What is the following procedure should be required for temporary adjustment of theodolite ?

(A) Centering, leveling, Elimination of parallax

(B) leveling, Centering, Elimination of parallax

(C) Centering, Elimination of parallax, leveling

(D) Elimination of parallax, leveling, Centering

The process of the turning the telescope in the vertical plane through 180° about the trunnion axis is called _____

(A) Transiting

(B) Plunging

(C) Reversing

(D) All of the above

The process of the turning the telescope in the horizontal plane about its vertical axis is called____

(A) Transiting

(B) Plunging

(C) Swinging

(D) All of the above

Which is following method for find out vertical angle ?

(A) General

(B) Repetition

(C) Reiteration

(D) None of the above

How many methods are there for prolongation of a straight line?

(A) 2

(B) 3

(C) 4

(D) 1

Theodolite can be used to____

(A) Horizontal angle

(B) To locate point of intersection

(C) to prolong straight line

(D) All of the above

What is said to when survey line makes with the prolongation of the preceding line ?

(A) Horizontal angle

(B) Vertical angle

(C) Deflection angle

(D) Pont of intersection

In order to measure the magnetic bearing of a line, the theodolite should be provided with ___.

(A) extra telescope

(B) spirit level

(C) compass

(D) tabular or trough compass

How many type of errors in theodolite work ?

(A) 1

(B) 2

(C) 3

(D) 4

Error due to imperfect adjustment of plate levels comes under _____ error.

(A) Personal

(B) Natural

(C) Instrumental

(D) personal and natural

Error due to inaccurate centering comes under _____ error.

(A) Personal

(B) Natural

(C) Instrumental

(D) personal and natural

Unequal atmospheric refraction due to high temperature comes under which sources of errors?

(A) Personal

(B) Natural

(C) Instrumental

(D) personal and natural

In which of the following transversing method angles are measured by theodolite?

(A) by fast needle

(B) by free needle

(C) by direct observation of angles

(D) by chain and compass

In which is the following angle when two survey lines are meet at one point.

(A) Transverse angle

(B) Included angle

(C) Deflection angle

(D) Deviated angle

Included angles can be measured _____.

(A) Clockwise

(B) Counter clockwise

(C) Both A and B

(D) In A or B

Co-ordinate length measured parallel to an assumed meridian direction is known as_____

(A) Bearing

(B) Latitude

(C) Departure

(D) A, B and C

Co-ordinate length measured perpendicular to an assumed meridian direction is known as_____

(A) Bearing

(B) Latitude(L = lcosθ)

(C) Departure(D = lsinθ)

(D) A, B and C

The latitude of line is –ve so its terms called by____

(A) Northing

(B) Southing

(C) Easting

(D) Westing

The departure of line is +ve so its terms called by____

(A) Northing

(B) Southing

(C) Easting

(D) Westing

The Coordinates of a point with reference to the preceding point are called___

(A) Consecutive Coordinates

(B) Independent Coordinates.

(C) Total (latitude or departure)

(D) None of the above

The Coordinates of a point with reference to the Common point are called __.

(A) Consecutive Coordinates

(B) Independent Coordinates.

(C) Total (latitude or departure)

(D) Both B and C

How to find out the length of closing error?

(A) $\sqrt{\Sigma L2+\Sigma D2}$

(B) $\sqrt{\Sigma L2-\Sigma D2}$

(C) $\sqrt{\Sigma L+\Sigma D}$

(D) $\sqrt{\Sigma L-\Sigma D}$

Which is the following relative error of closure ?

(A) p/e

(B) 1/p/e

(C) 1/e/p

(D) All of the above

How to find out angle of closure ?

(A) tanθ = ΣD/ΣL

(B) tanθ = D/L

(C) tanθ = L/D

(D) tanθ = ΣL/ΣD

What is said about that traverse when total latitude and departure are zero ?

(A) Balancing of the traverse

(B) Closed traverse

(C) Closing error

(D) Both A and B

Which is the following rule is used for balance the traverse when the angular measurements are most precise than the linear measurements.

(A) THIRD RULE

(B) Bowditch rule

(C) Transit rule

(D) NON OF ABOVE

How many latitude and departure for line when it has bearing S50°E and length 50m ?

(A) L = 32.13 (N), D = 38.30(W)

(B) L = 32.13 (N), D = 38.30(E)

(C) L = 32.13 (S), D = 38.30(E)

(D) L = 32.13 (S), D = 38.30(W)

Calculate length and bearing of line. When it has a latitude and departure are -50m.

(A) 70.72 and S45°E

(B) 70.72 and S45°W

(C) 70.72 and 225^0

(D) Both B and C

Independent coordinate of point A and B are (60,70) and (70,60) respectively . calculate latitude and departure.

(A) L = -10, D = -10

(B) L = -10, D = +10

(C) L = 10(S), D= 10(E)

(D) Both B and C

In a closed traverse where we were observed that it has total latitude -100m and departure 50m so calculate closing error and angle of closure.

(A) e = 111.80 m, Θ = 26.56^{0}

(B) e = 111.80 m, Θ = S26.56^{0}E

(C) both A and B

(D) None of the above

TACHEOMETRIC SURVEYING

A branch of surveying in which the horizontal and vertical distances of points are obtained by instrumental observations is known as

(A) Tacheometry surveying

(B) Hydrographic surveying

(C) Chain surveying

(D) Plane table surveying

Which of the following is propose of tacheometry ?

(A) Contouring

(B) Hydrography survey

(C) Topography map

(D) All of the above

Tacheometry is generally preferred to if ground is

(A) Flat

(B) Undulating

(C) Mountainous

(D) Deserts

Which of the instrument used for tacheometry survey

(A) Stadia road

(B) Tacheometer

(C) Chain

(D) Both A and B

A stadia telescope, in a tacheometer, is fitted with

(A) two additional vertical hairs

(B) two additional horizontal hair

(C) both A and B

(D) None of the above

If external focusing telescope is used in tacheometer when that extra lens provides is known as___

(A) Convex glass

(B) Concave glass

(C) Anallatic lens

(D) In A or C

Which of the following tacheometer constant ?

(A) Additive

(B) Multiplying

(C) Both A and B

(D) None of these

The additive constant for the tacheometer is

(A) f / i

(B) i / f

(C) f / d

(D) f + d

The multiplying constant for the tacheometer is

(A) f / i

(B) i / f

(C) f / d

(D) f + d

The multiplying constant for the tacheometer is, generally, kept a

(A) 0

(B) 100

(C) 20

(D) 50

What is the value of additive constant in anallactic lens?

(A) 100

(B) 0.3

(C) 0.1

(D) 0

Which of the following additive constant for internal focusing techeometer ?

(A) 0 cm to 5cm

(B) 5 cm to 10 cm

(C) 8 cm to 15 cm

(D) 15cm to 20 cm

Calculate the value of K and C, if the measurements are taken between two points of 50m and 130m distance apart and the stadia readings will be 0.024m, 0.824m respectively.

(A) 100, 0

(B) 100. 47.6

(C) 47.6, 100

(D) 0, 100

The magnification of the telescope in tacheometer should be at least _____ to _____ diameters.

(A) 20 to 30

(B) 20 to 40

(C) 20 to 50

(D) 20 to 60

In which is following equation show theory of stadia tacheometry.

(A) D = kS + c

(B) D = S(f/i) + c

(C) D = kS + (f + d)

(D) All of these

Which of the following principle say this : “In isosceles triangle ratio to the perpendicular to the base is constant”

(A) Surveying

(B) Plan table

(C) Tacheometry

(D) All of these

Difference between upper and lower stadia reading gives _____

(A) stadia slope

(B) stadia coordinate

(C) stadia intercept

(D) staff intercept

Difference between upper and lower stadia reading on staff it gives _____

(A) stadia slope

(B) stadia coordinate

(C) stadia intercept

(D) staff intercept

Stadia method can also be known as _____

(A) Fixed hair method

(B) Movable hair method

(C) Tangential method

(D) Both A and B

What is the formula for finding vertical distance if the staff is held vertical and line of sight is inclined?

(A) $V=KSsin^2\theta/2+Csin\theta$

(B) $V=KSsin^2\theta/2+Ccos\theta$

(C) $V=KScos^2\theta+Csin\theta$

(D) $V=KScos^2\theta+Ccos\theta$

Muvable hair method can also be known as _____

(A) Fixed hair method

(B) Subtense method

(C) Tangential method

(D) both B and C

What is the formula for finding horizontal distance if the staff is held vertical and line of sight is inclined?

(A) $D=kscos^2\theta+csin\theta$

(B) $D=kscos2\theta+csin\theta$

(C) $D=kscos^2\theta+ccos\theta$

(D) $D=kscos\theta^2+ccos\theta$

In which is following equation for the horizontal distance in tangential method of tacheometry, when both angles are angle of elevation.

(A) $D=s / tan\alpha_1-tan\alpha_2$

(B) $D=s / tan\alpha_1+tan\alpha_2$

(C) $D=stan\alpha_2 / tan\alpha_1-tan\alpha_2$

(D) None of these

How to finding R.L of staff station in tangential tacheometry for one angle elevation and other depression ?

(A) R.L of axis + V - r

(B) R.L of axis - V + r

(C) R.L of axis - V - r

(D) R.L of axis + V + r

Calculate the value of R.L for staff being vertical and possessing staff readings as follows 3m, 2m,1m, It being an analectic lens possesses an instrumental height of 1.5m with R.L 100 m. Line of sight placed at an angle of + 5°.

(A) 120.864 m

(B) 113.864 m

(C) 116.864 m

(D) 118.864 m

A tacheometer is setup at A and the readings on the staff at B are 1.m, 2.m, 3m and the inclination of line of sight is - 5°. Calculate the horizontal distance between A and B. Take k = 100, c = 0 ?

(A) 198.480 m

(B) 200.480m

(C) 197.480 m

(D) 195.480m

A tacheometer is setup at A and the readings on the staff at B are 1.m, 2.m, 3m and the inclination of line of sight is + 10°. Calculate the vertical distance. Take k = 100, c = 0 ?

(A) 34.00 m

(B) 34.202 m

(C) 35.202 m

(D) 36.202 m

SETTING OUT CURVES

?Which of the following is used on highway and railway where it is necessary to change direction of motion

A) Slope)

B) Curve)

C) Curb)

D) None of these)

_____When a curve is connected two straight lines, there be always

A) Parallel)

B) Perpendicular)

C) Tangential)

D) All of these)

?In which is following curve used for change in direction

A) Circular)

B) Transition)

C) Vertical)

D) Both A and B)

.In which are the following circular curve

A) Simple)

B) Compound)

C) Reverse)

D) All of these)

.In which are the following horizontal curve

A) Circular)

B) Transition)

C) Vertical)

D) Both A and B)

.In which are the following transition curve

A) Cubic parabola)

B) Spiral)

C) Lemniscate)

D) All of these)

? In which is following curve used for Different grades are joined together

A) Circular)

B) Transition)

C) Vertical)

D) Both A and B)

.In which are the following vertical curve

A) Summit)

B) Valley)

C) Both A and B)

D) None of these)

The curve of varying radius is known as

A) transition)

B) Compound)

C) Reverse)

D) All of these)

The curve used for ideal transition curve is a

A) Cubic parabola)

B) Spiral)

C) Lemniscate)

D) All of these)

.In which is curve has two circular arcs are in opposite direction on common tangent

A) Simple)

B) Compound)

C) Reverse)

D) All of these)

.In which is curve has different radius in same origin

A) Simple)

B) Compound)

C) Reverse)

D) All of these)

.Which of the following objective of transition curve

.A) The curvature is increased gradually from zero to specified value)

B) To provide a medium for the gradually introduction of superelevation)

C) To provide extra widening on the circular curve gradually)

D) All of the above)

? Which is following situation created for summit curve

A) Upgrade followed by a downgrade)

B) Upgrade followed by another upgrade)

C) A plane surface followed by downgrade)

D) All of the above)

? Which is the following situation created for valley curve

A) the downgrade followed by an upgrade)

B) the downgrade followed by another downgrade)

C) A plane surface followed by upgrade)

D) All of the above)

? How to find out length of vertical curve

A) Change of grade / rate of change of grade)

B) A total change of grade / rate of change of grade)

C) Rate of change of grade / total change of grade)

D) Rate of change of grade / change of grade)

_____L = (g_2-g_1) /r is equation for find out length for vertical, so in this equation 'r' is notified by

A) Rate of change of grade)

B) A total change of grade)

C) Chain length)

D) All of the above)

Which is the length of parabolic vertical curve when it has two uniform grade are + 1.9% and -1.5% with change .of grade is 0.25% for 100m chain length

A) -1360m)

B) 1360m)

C) 1360km)

D) All of the above)

_____ Sharpness of the curve can be determined by

A) Radius)

B) Degree of curvature)

C) Both A and B)

D) Tangent)

How to identified curve by a degree of curvature

A) Radius)

B) By chord)

C) By arc)

D) Both B and C)

___The degree of the curve is the angle subtended by a chord or arc of

A) 10 m)

B) 15 m)

C) 30 m)

D) 20 m)

?Which of the following relation between radius and degree of curve for 20m length

A) 1146 / D)

B) 1720 / D)

C) Both A and B)

D) None of the above)

.In which is degree of curve for a curve having radius equal to 250m for 30m chord

A) 4.58°)

B) 6.88°)

C) 6.58°)

D) 7.58°)

.The tangent previous to the curve is called

A) Back tangent)

B) Forward tangent)

C) Length of curve)

D) Long chord)

The angle between the back tangent and forward tangent of a curve is known as

A) Intersection angle)

B) Deflection angle)

C) Centre angle)

D) None of these)

The angle by which the forward tangent deflects from the back tangent of a curve is called

A) Intersection angle)

B) Deflection angle)

C) Centre angle)

D) None of these)

The distance between the point of curve to intersection point is called

A) Tangent distance)

B) Length of long chord)

C) Mid ordinate distance)

D) External distance)

The direct distance between Point of curve to point of tangency is called

A) Tangent distance)

B) Length of long chord)

C) Mid ordinate distance)

D) External distance)

___The distance between apex point of curve to mid point of long chord is called

A) Tangent distance)

B) Length of long chord)

C) Mid ordinate distance)

D) External distance)

?Which of the following distance between intersection point to apex point of curve

A) Tangent distance)

B) Length of long chord)

C) Mid ordinate distance)

D) External distance)

When the length of a chord is less than the peg interval, it is known as

A) Long chord)

B) Short chord)

C) Sub chord)

D) Normal chord)

_____ External distance is also known as

A) Apex distance)

B) Versed sine)

C) Both A and B)

D) In A or B)

_____ Mid-ordinate is also known as

A) Apex distance)

B) Versed sine)

C) Both A and B)

D) In A or B)

_____ The formula for length of the curve can be given as

A) l = RΔπ / 180)

Δ×B) l = R)

C) Both A and B)

D) In A or B)

_____ The formula for tangent length can be given as

A) T=R×tanΔ/2)

B) T=2R×sinΔ/2)

(C) T=R(secΔ/2-1)

(D) T=R(1-cosΔ/2)

_____ The formula for long chord length can be given as

A) L=2R×tanΔ/2)

B) L=2R×sinΔ/2)

(C) L=R(secΔ/2-1)

(D) L=R(1-cosΔ/2)

_____ The formula for mid ordinate length can be given as

A) M=2R×tanΔ/2)

B) M=2R×sinΔ/2)

(C) M=R(secΔ/2-1)

(D) M=R(1-cosΔ/2)

_____ The formula for external length can be given as

A) E=2R×tan∆/2)

B) E=2R×sin∆/2)

(C) E=R(sec∆/2-1)

(D) E=R(1-cos∆/2)

? How to find out mid ordinate length for curve

(A) O_o = R - root (R^2 - $(L/2)^2$)

(B) M= R(1-cos∆/2)

C) Both A and B)

D) None of these)

What would be the length of the curve, if the radius of the curve is 25m and the deflection angle is given as ?˚10

A) 4.36 m)

B) 250 m)

C) 4.50 m)

D) 251 m)

.Find the tangent length if the radius of the curve and its angle were given as 40m and intersection angle 40°

A) 14.55 m)

B) 33.56 m)

C) 109.89 m)

D) 219.79 m)

What would be the value of apex distance if the angle is given as 55° and the radius of the curve is given as ?20m

A) 23.318 m)

B) 2.547 m)

C) 14.904 m)

D) 29.808 m)

Find the value of mid-ordinate if the value of radius can be given as 25m and the deflection angle is given as .105°

A) 5.780 m)

B) 7.780 m)

C) 6.780 m)

D) 9.780 m)

.Find the value of long chord if the value of radius can be given as 25m and the deflection angle is given as 100°

A) 49.240 m)

B) 38.302 m)

C) 59.587 m)

D) 32.139 m)

What would be the length of the curve, if the degree of curvature is 5° for 20 m arc and the deflection angle is ?˚given as 100

A) 320 m)

B) 480 m)

C) 600 m)

D) 400 m)

?In angular method of setting a curve, which of the following is used

A) Tape)

B) Chain)

C) Theodolite)

D) Compass)

?Which of the following doesn't indicate the linear method of setting out the curve

A) offsets from chords produced)

B) By offsets from the tangents)

C) By curves)

D) By offsets of long chords)

?Which of the following indicates the formula for setting a long chord by using ordinate

(A) Ox = root (R^2-x^2) - (R-Oo)

(B) Ox = root (R^2+x^2) - (R-Oo)

(C) Ox = root (R2-x2) + (R-Oo)

(D) Ox = root (R2-x2) - (R+Oo)

Which of the following formula for the radial offset can be given as

A) Ox = root (R^2-x^2) - R)

(B) Ox = R – root (R2-x2)

C) Ox = root (R^2+x^2) - R)

(D) Ox = R+ root (R^2-x^2)

Which of the following formula for the perpendicular offset can be given as

A) Ox = root (R^2-x^2) - R)

(B) Ox = R – root (R^2-x^2)

C) Ox = root (R^2+x^2) - R)

(D) Ox = R+ root (R^2-x^2)

?Which of the following indicate the angular method of setting out the curve

A) Tacheometric method)

B) Rankine's method)

C) Two theodolite method)

D) All of the above)

?Which of the following method is useful for setting out curves for railway, highway with more accuracy

A) Tacheometric method)

B) Rankine's method)

C) Two theodolite method)

D) All of the above)

.Which of the following formula find out tangential angle by using Rankine's formula

A) δ =1718.9C/R minutes)

B) δ =1718.9R/C minutes)

C) δ =1719.9C/R minutes)

D) δ =1718.9π/R minutes)

If the value of length of the chord is given as 5.236 m and the radius of the curve as 100m, find the tangential .angle using Rankine's method

A) 120°)

ˈB) 1° 30)

ˈC) 130)

ˈ D) 1° 20)

MODERN SURVEYING INSTRUMENTS

(Accuracy of EDM device (In per KM

A) 3 cm to 4 cm)

B) 5 mm to 10 mm)

C) 10 cm to 18 cm)

D) 10 mm to 18 mm)

Following are not types of total station

A) Manual total station)

B) Semi-Automatic total station)

C) Mechanical total station)

D) Automatic total station)

'Full form of 'ATR

A) Auto Transparent Radiation)

B) Automatic Total Reading)

C) Automatic Target Recognition)

D) Average True Range)

Following is the not part of Total station equipment

A) Prism)

B) Prism holder)

C) Prism tackle)

D) Prism carrier)

? Which of the following is not use in Total station equipment

A) Memory Card)

B) Battery)

C) Alided)

D) Serial Cable)

? Which of the following Total Station Measured

A) Horizontal Distance)

B) Vertical Angle)

C) Slope Distance)

D) All of Above)

?Which of the following is not Advanced Survey Equipment

A) Robotic Total Station)

B) Semi Automatic Total Station)

C) Plane Table)

D) Manual Total Station)

.Which of the Following is not Brand of Digital Theodolite

A) Nikkon)

B) Sokkia)

C) Topcon)

D) Samsonite)

.Which of the following function of Electronic Theodolite

A) Measure Horizontal angle)

B) Measure Vertical angle)

C) Both A & B)

D) None of Above)

? Which of the following use of 'HOLD' key in Total Station

A) Feed Data of Temperature)

B) To Fix Horizontal Angle)

C) Feed Data of Pressure)

D) To Fix Horizontal Distance)

? 'What is the Full form of 'RDM

A) Remote Distance Measurement)

B) Ranging Distance Measurement)

C) Rapid Distance Measurement)

D) Raster Distance Measurement)

?To taking sun's observation, special filter use in total station is known as

A) Tomb's Paper)

B) Takkel Glass)

C) Troelof's Prism)

D) Transit Magnifier)

?What is the approx. cost of Automatic Total station

A) 25000 To 50000)

B) 500000 To 800000)

C) 50000 To 80000)

D) 250000 To 500000)

ATR Target Range may be

.A) 800 m)

.B) 1000 m)

.C) 1200 m)

D) None of Above)

Total station parameter for calculation in _____Direction

A) E)

B) N)

C) Z)

D) All of Above)

? What is the following value of Prism Constant in total Station

A) 0 To 50 mm)

B) 0 To 50 cm)

C) 0.5 To 0.80 mm)

D) 0.50 To 0.80 cm)

_____ In total station, data is stored in

A) External hardware)

B) Data card)

C) Pen drive)

D) Microprocessor)

?When total station is sighted to the target, which of the operation acts first

A) Rotation of optical axis)

B) Rotation of vertical axis)

C) Rotation of horizontal axis)

D) Rotation of line of collimation)

?Which of the following indicates the correct set of the combination of total station

A) Theodolite, compass, microprocessor)

B) Theodolite, EDM, microprocessor)

C) Electronic theodolite, EDM, microprocessor)

D) EDM, GPS, microprocessor)

?Which among the following doesn't indicate the basic calculation of the total station

A) Horizontal distance)

B) Slope distance)

C) Vertical distance)

D) Co-ordinate calculations)

? How many accuracy of measurement for angles in total station for electronic theodolite

A) 2 to 6 second)

B) 2 to 6 minuet)

C) 2 to 6 degree)

D) None of the above)

? How many range of measurement for EDM in total station

A) 2800 to 4200 m)

B) 2.8 to 4.2 km)

C) Both A and B)

D) None of the above)

? Which of the following is data recorder maximum capacity in total station for memory unit

A) 500 to 1000 points)

B) 1000 to 2000 points)

C) 2000 to 4000 points)

D) None of the above)

?Which type of prism use in ATR when the prism always pointed to the instrument

A) 0°)

B) 90°)

C) 180°)

D) 360°)

? How many counts are scale factors in total station

A) 0)

B) 1)

C) 2)

D) 3)

? Which of following is/are type of EDM instrument

A) Microwave)

B) Visible light)

C) Infrared)

D) All of above)

.was the first microwave based EDM developed in the world _____

A) Tellurometer)

B) Total station)

C) Distomats)

D) None of above)

REMOTE SENSING, GPS, GIS

Which of the following doesn't indicate a stage in remote sensing?
a) Reflectance of energy
b) Transmission of energy
c) Energy source
d) Absorption of energy

Which of the following indicates the functioning of a sensor? .3
a) Transmits energy
b) Absorbs wave length
c) Sensitive to wave length
d) Reflects energy

Which type of remote sensing uses its own source of electromagnetic energy?
a) Passive
b) Active
c) Satellite
d) Orbital

Signal can be generated by _____
a) Interaction of EM waves with surface
b) Interaction of EM waves with energy source

c) Interaction of EM waves with atmosphere
d) Interaction of EM waves with sensor

Which among the following is having more wavelengths?
a) X-rays
b) Cosmic waves
c) Radio waves
d) Gamma rays

Gamma rays are having a wavelength of _____
a) Zero
b) Greater than 0.03nm
c) Less than 0.03nm
d) Equal to 0.03nm

Which of the following is used for shaping the velocity of the satellite orbit?
a) User segment
b) Control segment
c) Ground segment
d) Space segmen

Ground antennas can be communicated using _____
a) N-band
b) K-band
c) S-band
d) M-band

Satellite generates which type of signals?
a) Visible rays
b) X-rays
c) Cosmic waves
d) Radio waves

Which among the following is used to locate an object?
a) GPS
b) GIS
c) RS
d) IRS

What will be the length of the base line in case of short baseline method of GPS surveying?
a) Less than 50km
b) Greater than 50km
c) Less than 2km
d) Greater than 100km