## Surveyor - Semester 2 Module 1: Plane Table Surveying

Reviewed and updated on: 01st November 2019 Version 1.1

**1** : Which survey is checking of plot details and can be done easily on the spot itself?

A : Chain surveyB : Compass surveyC : Plane table surveyD : Dumpy level survey

**2** : Which type of survey cannot be done in dense wooded areas?

A : Chain surveyB : Compass surveyC : Plane table surveyD : Dumpy level survey

**3** : What is the another name of Bessel's method?

A: Graphical method
B: Mechanical method
C: Tracing paper method
D: Trial and error method

**4** : How many setting up of operation are there in plane table survey?

A : One operationB : Two operationC : Four operationD : Three operation

**5** : Which method is positions of the point are fixed on the sheet by the rays drawn from two instrument stations?

A : Radiation methodB : Resection methodC : Traversing methodD : Intersection method

**6** : What is the another name of mechanical method?

A: Bessel's method
B: Graphical method
C: Tracing paper method
D: Trial and error method

**7** : What is the another name of tracing paper method?

A : Bessel's method
B : Graphical method
C : Mechanical method
D : Trial and error method

**8** : How many methods are used to solve by three point problem?

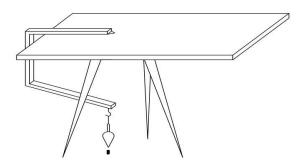
A : SixB : FiveC : FourD : Three

9 : What is the name of work done?



A : Centering the station
B : Levelling the plane table
C : Orienting the plane table
D : Orienting by back sighting

10 : What is the name of work done?



A : Orienting by sighting
 B : Centering the station
 C : Levelling the plane table
 D : Orienting the plane table

**11** : Which operation the table top is made truly horizontal?

A : Levelling the plane table
B : Centering the plane table
C : Orienting the plane table
D : Magnetic needle method

**12** : What is the technical term used in the working edge of alidade?

A : Ebony edge

#### Surveyor - Semester 2 Module 1: Plane Table Surveying

Reviewed and updated on: 01st November 2019 Version 1.1

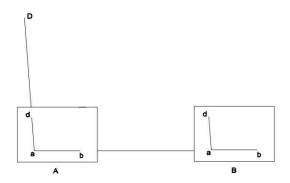
B : Ruling edgeC : Straight edgeD : Fiducial edge

**13** : Which accessory is used for centerings the table over the point or station occupied by the plane table?

A : Plumb bobB : Spirit levelC : Plumbing fork

**D**: Plumbing fork with bob

14 : What is the name of the work done?



A : Orienting the plane table
B : Orientation by fore sighting
C : Orientation by back sighting
D : Orienting by magnetic needle

15 : Which process is necessary if more than one instrument station is to be used?

A : Levelling the plane table
B : Orienting the plane table
C : Centering the plane table
D : Setting up the plane table

**16** : Which method is used for plotting inaccessible objects, broken boundaries, river etc.?

A : Radiation method
B : Resection method
C : Traversing method
D : Intersection method

**17** : Which method used in plane table survey is also similar to that of compass or theodolite?

A : RadiationB : ResectionC : TraversingD : Intersection

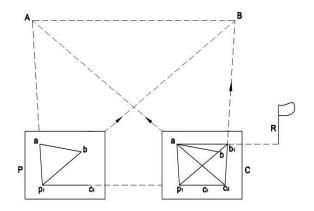
**18** : Which method is suitable for the survey of small areas in plane table?

A : RadiationB : ResectionC : TraversingD : Intersection

**19** : Which is the line joining two stations in plane table survey?

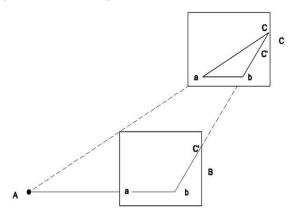
A : Base lineB : Offset lineC : Check lineD : Survey line

**20** : What is the name of the work done in plane table survey?



A : One point problem
B : Two point problem
C : Three point problem
D : Mechanical problem

**21** : What is the name of the method done by plane table survey?



A : Traverse method
 B : Radiation method
 C : Resection method
 D : Intersection method

## Surveyor - Semester 2 Module 1: Plane Table Surveying

Reviewed and updated on: 01st November 2019 Version 1.1

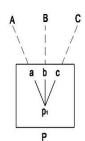
**22** : Which is the method used only for locating station points?

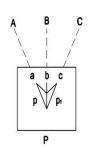
A : RadiationB : ResectionC : TraversingD : Intersection

23 : What is the back ray method in plane table survey?

A : Radiation methodB : Resection methodC : Traversing methodD : Intersection method

24 : What is the name of the work done in plane table survey?





A : One point problemB : Two point problemC : Three point problemD : Mechanical problem

**25** : What is the triangle formed by joining the three ground points in three point problem?

A : Great triangle
 B : Scalene triangle
 C : Equilateral triangle
 D : Isosceles triangle

**26** : Which circle is passing through the three ground points in three point problem?

A : CircleB : Great circleC : Eccentric circleD : Concentric circle

27 : Which is quick and accurate method in three point problem?

A: Bessel's method
B: Graphical method
C: Mechanical method
D: Trial and error method

28 : Which accessory is used to read the angles of both elevation and depression and can be read on the vertical circle?

A : Plain alidadeB : Trough compassC : Magnetic compassD : Telescopic alidade

29 : How the vanes are fixed in plain alidade?

A : BoltedB : HingedC : WeldedD : Screwed

**30** : Which accessory can be used if the elevations or depressions of the object are low?

A : AlidadeB : Plain alidadeC : Trough compassD : Telescopic alidade

**31** : Which accessory is required to take inclined sights?

A : AlidadeB : Plain alidadeC : Trough compassD : Telescopic alidade

**32** : Which is the axis of graduated scale mounted in a telescopic alidade?

A : Vertical axisB : Inclined axisC : Bevelled axisD : Horizontal axis

#### Surveyor – Semester 2 Module 2: Theodolite Survey

Reviewed and updated on: 01st November 2019 Version 1.1

**33** : How many levelling screws carry the upper plate of theodolite?

A : 2 screwsB : 3 screwsC : 4 screwsD : 6 screws

**34** : Which device helps in exactly centering the theodolite instruments over the station?

A : Levelling headB : Shifting headC : Lower plateD : Upper plate

**35** : What is the name of theodolite if its telescope can be revolved through 180° in a vertical plane about its horizontal axis?

A: Transit theodolite

B : Non - transit theodoliteC : Horizontal axis theodoliteD : Vertical axis theodolite

**36** : What is the name of theodolite, if its telescope cannot be revolved through 180° in vertical plane about its horizontal axis?

A : Transit theodolite
 B : Non - transit theodolite
 C : Horizontal axis theodolite
 D : Vertical axis theodolite

**37** : How many level tubes are there in theodolite instruments?

A : OneB : TwoC : ThreeD : Four

**38** : What is the name of term that the fundamental axis going out of adjustment in theodolite?

A : Natural errorB : Personal errorC : Instrumental errorD : Temperature error

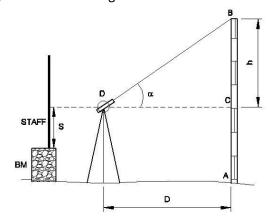
**39** : Which is natural error?

A : Wind effectB : Slip in screwsC : Inaccurate levellingD : Improper setting

40 : Which is personal error?A : Eccentricity of VernierB : Inaccurate sighting

C : TemperatureD : Atmospheric

**41** : What is the position of object in method of trigonometric levelling?

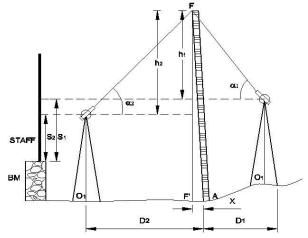


A : Base of the object accessible

B : Single plane methodC : Double plane method

**D** : Base of the object inaccessible

**42** : What is the position of object in trigonometric levelling?



A : Base of object inaccessible

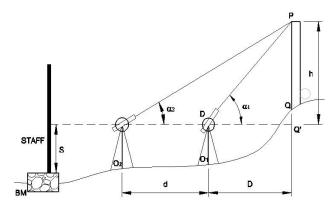
**B**: Base of the object accessible and inclined

C : Single plane methodD : Double plane method

**43** : What is the position of instrument in trigonometric levelling?

#### Surveyor – Semester 2 Module 2: Theodolite Survey

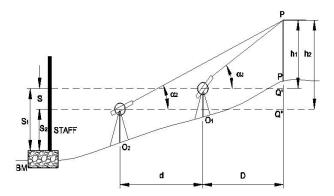
Reviewed and updated on: 01st November 2019 Version 1.1



A : Single plane methodB : Double plane method

C : Single plane, height of instrument are sameD : Single plane, height of instrument different level

**44** : What is the position of instrument in trigonometric levelling?



A : Single plane methodB : Double plane method

C : Single plane, height of instrument are same
 D : Single plane, height of instrument different level

**45** : Which surveying instrument is used to measure the angle?

A : TheodoliteB : ChainC : Plane tableD : Tape

**46** : What is the name of traversing instrument that the direction of lines are fixed by linear measurement only?

A : Chain traversingB : Compass traversingC : Plane table traversingD : Theodolite traversing

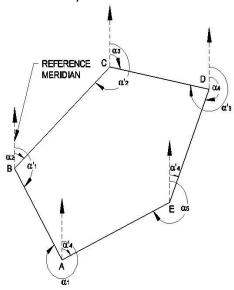
**47** : What instrument is used to measure deflection angle in traverse survey?

A : Chain surveyB : Compass surveyC : Plane table surveyD : Theodolite survey

**48** : Where the term bearing is commonly used in surveying?

A : Chain surveyB : Compass surveyC : Levelling surveyD : Theodolite survey

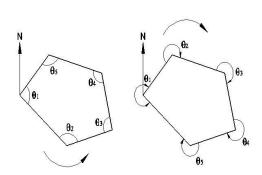
**49** : What is the name of the traversing method in theodolite survey?



A : Included angle methodB : Azimuth methodC : Deflection method

: Direct angle method

**50** : What is the name of the traversing method in theodolite survey?



A : Included angle method

B: Azimuth method

## Surveyor - Semester 2 Module 2: Theodolite Survey

Reviewed and updated on: 01st November 2019 Version 1.1

C : Deflection methodD : Direct angle method

**51** : What is the formula used to find the length of traverse line?

**A** : L2 + D2 **B** : L2 - D2  $\sqrt{L^2 + D^2}$ 

 $\mathbf{D}$ :  $\sqrt{L^2-D^2}$ 

**52** : What is the formula used to find reduced bearing of traverse line?

A : tan (D/L)
B : tan (DxL)
C : tan (D-L)

tan √D/L

**D** :

**53** : Find the error of angle if the sum of the observed interior angle of the traverse is  $\angle A+\angle B+\angle C+\angle D=110^{\circ}+63^{\circ}+130^{\circ}+53^{\circ}$ .

A : -1° B : +4° C : -4° D : +1°

54 : Find the back bearing AB if bearing of AB is

30°.

A : 180° B : 150° C : 210° D : 280°

**55** : What is used as vertical arm in index frame of theodolite instrument?

A: Index armB: Clipping armC: Lower armD: Upper arm

**56** : What is used as horizontal arm in Vernier frame of theodolite instrument?

A : Index armB : Clipping armC : Lower armD : Upper arm

**57**: What is the process of turning the telescope in vertical plane about its axis through 180°?

A : SwingB : CenteringC : TransitingD : Inverting

**58** : What is the term, if rotating telescope in horizontal plane, about its vertical axis in theodolite?

A : CenteringB : SwingC : TransitingD : Plunging

**59** : What is the term, while the vertical circle is on the right of the telescope and the target on the telescope is down in theodolite?

A : Telescope forwardB : Telescope backwardC : Telescope invertedD : Telescope normal

**60** : What is the term, while the vertical circle is on the left of the telescope and the target on telescope is up in theodolite?

A : Telescope forward
 B : Telescope backward
 C : Telescope inverted
 D : Telescope normal

**61** : What is the purpose of focussing is done in theodolite?

A : Eliminate parallax errorB : Eliminate instruments error

C : Minimize the errorD : Eliminate the error

**62** : What test is that the bubbles control to run while the vertical axis of the theodolite is truly vertical?

A : Cross hair ring testB : Plate level testC : Collimation test

**D**: Spire test

**63** : What test is that the vertical and horizontal cross hair lie in a plane perpendicular to the horizontal axis in theodolite?

A : Cross hair ring testB : Plate level testC : Collimation testD : Spire test

## Surveyor – Semester 2 Module 2: Theodolite Survey

Reviewed and updated on: 01st November 2019 Version 1.1

**64** : What test is that the line of sight perpendicular to the horizontal axis in theodolite?

A : Cross hair ring testB : Plate level testC : Collimation testD : Spire test

**65** : What test is that the horizontal axis perpendicular to the vertical axis in the theodolite?

A : Cross hair ring testB : Plate level testC : Collimation testD : Spire test

**66** : What test is that telescope bubble central while the line of sight is horizontal in theodolite?

A : Bubble tube adjustment test

B : Collimation testC : Vertical arc testD : Plate level test

**67** : What test is that the vertical circle indicate zero while the line of sight is perpendicular to the vertical axis in theodolite?

A : Bubble tube adjustment test

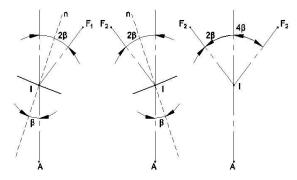
B : Collimation testC : Vertical arc testD : Plate level test

**68** : How the parallax error is eliminated in theodolite?

A : By refocusing lens in proper position

B : By turning the eye pieceC : Centering the instrumentsD : Setting up the instruments

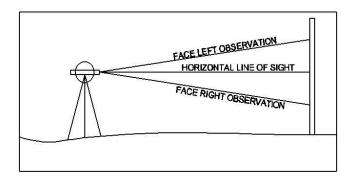
**69** : What is the name of test in theodolite instruments?



A : Bubble tube adjustment testB : Collimation in azimuth test

C : Vertical arc testD : Plate level test

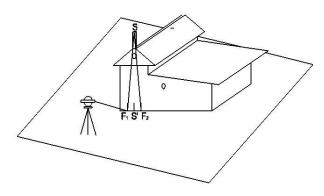
**70** : What is the name of test in theodolite instruments?



A : Collimation in azimuthB : Vertical circle index test

C : Plate level testD : Cross hair ring test

**71** : What is the name of test in theodolite instruments?



A : Collimation in azimuth
 B : Vertical circle index test
 C : Collimation in spire test
 D : Cross hair ring test

**72** : Which method is a single set of observations made for measuring a horizontal angle between any two point at a station?

A : Repetition methodB : Reiteration methodC : Ordinary methodD : Deflection method

**73** : Which method is the eccentricity of the spindle eliminated by reading both vernier in theodolite?

A : Reiteration methodB : Ordinary method

## Surveyor - Semester 2 Module 2: Theodolite Survey

Reviewed and updated on: 01st November 2019 Version 1.1

C : Direct angle methodD : Deflection method

**74** : Which method if the eccentricity of vernier is eliminated by reading both vernier in theodolite?

A : Ordinary method
B : Deflection method
C : Direct angle method
D : Repetition method

**75** : What method is used for imperfect graduations are minimized by reading on different parts of the graduated circle in theodolite?

A : Ordinary methodB : Deflection methodC : Direct angle methodD : Repetition method

**76** : Which method is possible to obtain valves lesser than least count of the theodolite instruments?

A : Ordinary methodB : Deflection methodC : Repetition methodD : Direct angle method

**77** : What type of method is the displacement of signal are not eliminated in horizontal measurement?

A : Ordinary methodB : Repetition methodC : Deflection methodD : Direct angle method

**78** : Which method is useful for measuring precisely a number of horizontal angle from a single station point in theodolite instrument?

A : Reiteration methodB : Ordinary methodC : Repetition methodD : Direct angle method

**79** : How to eliminate error while plate level axis not being perpendicular to vertical axis in theodolite?

A : By permanent adjustmentB : By temporary adjustment

C : By proper settingD : By accurate levelling

**80** : Which is instrumental error?

A : Eccentricity of vernier

B : Wind effectC : Refraction effectD : Slip in screws

**81** : What is the term, if the angle between the line of sight and a horizontal line at a station in theodolite survey?

A : Vertical angleB : Depression angleC : Deflection angleD : Direct angle

**82** : What is the term, if the angle is measured above the horizontal line in theodolite survey?

A : Angle of deflectionB : Angle of depressionC : Angle of elevationD : Horizontal angle

**83** : What is the term, if the angle is measured below the horizontal line in theodolite survey?

A : Angle of deflectionB : Angle of depressionC : Angle of elevationD : Horizontal angle

**84** : What type of instrument is used for measuring vertical angle?

A : Levelling instrumentsB : Electronic theodolite

C : Plane tableD : Chain survey

**85** : How many methods are there to measure horizontal angle in theodolite?

A : 2 methodsB : 3 methodsC : 4 methodsD : 5 methods

**86** : What is the term, if the angle between the preceding and succeeding line?

A : Depression angleB : Horizontal angleC : Deflection angleD : Vertical angle

**87** : Which angle is very useful in open traverse by theodolite such as alignment of highways, railways etc.?

A : Vertical angleB : Depression angle

## Surveyor - Semester 2 Module 2: Theodolite Survey

Reviewed and updated on: 01st November 2019 Version 1.1

C : Horizontal angleD : Deflection angle

88 : What is the variation of direct angle?

A : 0° to 180°B : 90° to 270°C : 180° to 360°D : 0° to 360°

89 : What is the variation of deflection angle?

A : 0° to 180°B : 90° to 270°C : 180° to 360°D : 0° to 360°

**90** : How many methods are there for prolonging a line by theodolite?

A: 2 methodsB: 3 methodsC: 4 methodsD: 5 methods

**91** : Which method, the error is not carried over to the other span in prolonging line by theodolite?

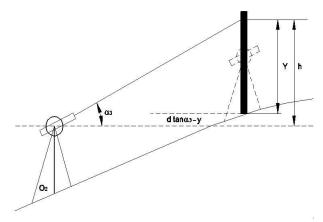
A : Methods IB : Methods IIC : Methods IIID : Methods IV

**92** : What type of works in trigonometric levelling is commonly used?

A: Topographical work

B : City surveyC : Field surveyD : Cadastral survey

**93** : What is the method of trigonometric levelling?



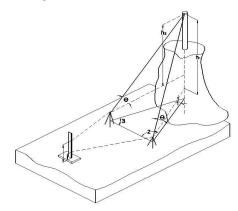
A : Single plane method

B : Double plane methodC : Single plane at same level

**D**: Single plane-height of instrument different

level

**94** : What is the method of the trigonometric levelling?



A : Single plane methodB : Double plane method

C : Single plane height of instrument are sameD : Single plane height of instruments different level

**95** : Which method is rarely used in theodolite traverse survey as it is prone to local attraction?

A : Fast needle method
B : Direct angle method
C : Loose needle method
D : Azimuth method

**96** : Which method is more accurate than loose needle method in theodolite traverse survey?

A : Loose needle method
 B : Included angle method
 C : Direct angle method
 D : Deflection angle method

**97** : Which method without transiting gives the best results even while the theodolite instrument is not in perfect adjustment by traverse survey?

A : Loose needle methodB : Fast needle methodC : Direct method

**D**: Included angle method

**98** : Which method is suitable for closed traverse in theodolite survey?

A : Loose needle method
B : Fast needle method

#### Surveyor – Semester 2 Module 2: Theodolite Survey

Reviewed and updated on: 01st November 2019 Version 1.1

C: Direct method

D : Included angle method

**99** : What rule is applicable so that the total error in latitude and departure is distributed in proportion to the latitude and departure of the traverse line?

A : Graphical method

B: Axis method

C : Transit rule methodD : Compass rule method

**100** : Which method is most suitable for

traverse in compass survey?A : Transit rule methodB : Bowditch's rule method

C : Graphical method
D : Axis method

**101** : What is the reduced bearing, if the whole circle bearing of 270° 20′23″?

A : \$86°39'40"WB : \$86°39'40"EC : N 86°39'40"ED : N 86°39'40"W

**102** : What is the height, if the horizontal distance between two points is 19.950m and observed angle of elevation is 19°44′45″?

A : 6.160mB : 6.610mC : 7.160mD : 7.610m

**103** : What is the reduced level of A, if reduced level of bench mark = 100.000m

Reading of bench marks =0.745m, height of object (h) = 7.160m?

A : 107.805mB : 107.905mC : 106.805mD : 106.905m

**104** : What is the R.L of A (R.L of B.M = 100.000m

Reading of BM =0.945m height of object =5.260m)?

A : 106.205mB : 106.105mC : 107.205mD : 107.105m

**105** : What is the co-ordinate of a line AB. observed radially from station A, whose W.C.B is <45°00′00″?

A : -70.71m B : +70.71m C : -71.70m D : +71.70m

**106** : What is the error if sum of the observed included angles of the traverse

95°00′00″+75°00′00″+125°00′00″+70°00′00″

**A** : -05°00′00" **B** : +05°00′00" **C** : -05°05′00" **D** : +05°05′00"

**107** : What is the bearing of BC (Bearing of line AB =  $140^{\circ}00'00'' \angle B = 73^{\circ}45'00''$ )?

A : 33°45′00″ B : 33°00′00″ C : 32°45′00″ D : 32°00′00″

108 : What is RB, if the W.C.B is 135°00'00"?

A : N 45°00′00″EB : S 45°00′00″EC : S 45°00′00″WD : N 45°00′00″W

**109** : What is RB, if the W.C B is 225°00′00"?

A : N 45°00′00″EB : S 45°00′00″EC : S 45°00′00″WD : N 45°00′00″W

110 : What is RB, if the W.C.B is 315°00′00"?

A : N 45°00′00″E
 B : S 45°00′00″E
 C : S 45°00′00″W
 D : N 45°00′00″W

111 : What is the corrected included angle at A if observed included angle of A is 95°00′00″ the correction should be applied each angle is - 01°15′00″?

**A** : 94°45′00″ **B** : 93°45′00″ **C** : 95°15′00″ **D** : 96°45′00″

# **Surveyor – Semester 2 Module 2: Theodolite Survey**

Reviewed and updated on: 01st November 2019 Version 1.1

112 : What is the closing error(e) (Sum of the latitude (L)= -24.2495m Sum of the departure (D)=-29.7592m)?

A : 37.4168B : 38.4186C : 38.4168D : 39.4168

113 : What is the reduced bearing of closing error (Sum of the latitude (L)= -24.2495m

A : 50°49′30″B : 50°30′49″C : 49°49′30″D : 49°30′49″

114 : What is the whole circle bearing, if the reduced bearing of N 74°05′25″W?

A : 285°53′25″B : 285°54′35″C : 285°54′45″D : 285°53′35″

Reviewed and updated on: 01st November 2019 Version 1.1

**115** : Which column is used for first entry on the level book page?

A : Fore sightB : Back sight

C : Intermediate sightD : Height of instrument

116 : Which column is used for last entry on the level book page?

A : Fore sight B : Back sight

C : Intermediate sightD : Height of instrument

**117** : What is the another name of positive or plus sight in levelling survey?

A : Staff readingB : Back sight

C: Intermediate sight

**D**: Fore sight

**118** : Which levelling rod is used for precise work?

A : Invar staffB : Telescopic staffC : Folding staffD : Target staff

**119** : How to calculate the height of collimation?

A : R.L of Bench mark + Back sight reading

B: R.L of Bench mark – I.S readingC: R.L of Bench mark – F.S reading

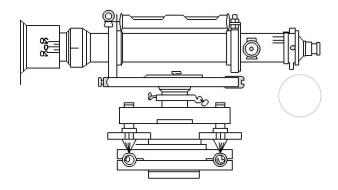
D: R.L of Bench mark – Back sight reading

**120** : What formula is used with arithmetical check in height of collimation method?

A :  $\Sigma B.S - \Sigma F.S = Last R.L - First R.L$ B :  $\Sigma B.S + \Sigma F.S = Last R.L - First R.L$ C : B.S - F.S = Last R.L - First R.L

**D** :  $\Sigma B.S + \Sigma F.S = Rise - Fall = Last R.L - First R.L$ 

**121** : What is the name of levelling instrument?



A : Dumpy levelB : Wye level

C : Cooke's reversible level

**D**: Tilting level

122 : Which is the fundamental line in levels?

A : The line of collimation

B : Horizontal lineC : Vertical lineD : Slant line

**123** : How many permanent adjustment are required in dumpy level?

A : OneB : TwoC : ThreeD : Four

**124** : Which surface is normal to the direction of gravity at all points?

A : Horizontal surfaceB : Vertical surfaceC : Level surfaceD : Curved surface

**125** : Which line is normal to plumb line at all points?

A : Curved lineB : Horizontal lineC : Vertical lineD : Level line

126 : What is the full form of GTS?
A : Great triangulation survey
B : Global trigonometrical survey
C : Great trigonometrical survey

**D**: Great traverse survey

Reviewed and updated on: 01st November 2019 Version 1.1

**127** : Which place the mean sea level is fixed in India?

A : Chennai B : Kolkata

: Bombay

C

D: Visakhapatnam

**128** : What is the distance of interval all over country with respect to the mean sea level of Mumbai as datum?

A : 50 KmB : 75 KmC : 100 KmD : 150 Km

**129** : What is the another name of assumed bench mark?

A: GTS bench mark

B : Permanent bench markC : Arbitrary bench markD : Temporary bench mark

**130** : Which bench mark is established for short duration such as at the end of a day's work?

A : Arbitrary bench markB : Temporary bench markC : Permanent bench mark

**D**: GTS bench mark

**131** : What is the smallest graduated division in levelling staff?

**A** : 0.5m **B** : 0.05m **C** : 0.005m **D** : 0.0005m

**132** : What type of staff is used, if the sight are long?

A : Solid staffB : Folding staffC : Telescopic staff

D: Target staff

133 : Which levelling staff consists of three

pieces?

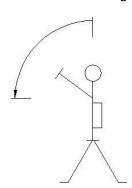
A : Solid staffB : Folding staffC : Telescopic staffD : Invar staff

134 : How the staff should be read?

A : Downwards

B : UpwardsC : Left sideD : Right side

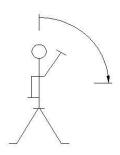
135 : What does the hand signal represents?



A : Move to my leftB : Move to my rightC : Establish the position

**D**: Return to me

136 : What does the hand signal represents?



A : Move to my leftB : Move to my right

C : Move top of staff to my leftD : Move top of staff to my right

137 : What does the hand signal represent?



A : Move to my leftB : Move to my right

C : Move top of staff to my leftD : Move top of staff to my right

Reviewed and updated on: 01st November 2019 Version 1.1

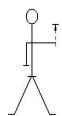
138 : What does the hand signal represent?



A : Move to my leftB : Move to my right

C : Move top of staff to my leftD : Move top of staff to my right

139 : What does the hand signal represent?



A : Raise height of peg or staffB : Lower height of peg or staff

**C**: Establish the position

**D**: Return to me

**140** : What is the folded length of staff, while folding staff is not in use?

A : 2mB : 2.5mC : 3mD : 3.5m

**141** : Which levelling is the relative height of point is found out by some direct observation?

A : Indirect levellingB : Direct levellingC : Simple levellingD : Different levelling

**142** : Which levelling is adopted while the points are a great distance apart?

A : Profile levellingB : Reciprocal levellingC : Differential levellingD : Longitudinal levelling

**143** : Which levelling is adopted if the obstacles between the points?

A : Differential levelling
 B : Reciprocal levelling
 C : Longitudinal levelling
 D : Profile levelling

**144** : What is the another name of differential levelling?

A : Simple levelling
 B : Profile levelling
 C : Continuous levelling
 D : Longitudinal levelling

**145** : What is the levelling used while it is not possible to set up the level midway between two points as across river or lake?

A : Simple levelling
 B : Profile levelling
 C : Reciprocal levelling
 D : Differential levelling

**146** : Which instrument is mainly designed for precise levelling work?

A : Dumpy levelB : Wye levelC : Cushing levelD : Tilting level

**147** : What type of level does not require any protection from the sun?

A : Modern tilting level
B : Automatic level
C : Cushing's level
D : Dumpy level

**148** : What is the process of levelling while the difference of level between two points is determined by setting the levelling instrument midway the point?

A : Simple levelling
 B : Differential levelling
 C : Reciprocal levelling
 D : Profile levelling

**149** : What is the term of sight, if the last sight taken on a levelling staff held over a point of unknown elevation before shifting the instruments?

A : Back sightB : Fore sight

C : Intermediate sightD : Positive sight

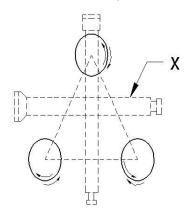
Reviewed and updated on: 01<sup>st</sup> November 2019 Version 1.1

**150** : What is the term of sight, if the sight taken between the back sight and fore sight on a levelling staff held over a point of unknown elevations?

A : Back sightB : Fore sight

C : Intermediate sightD : Positive sight

151 : What is the name of part marked as 'X'?



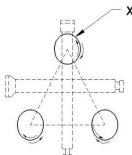
A : First position of telescope
 B : Second position of telescope
 C : Third position of telescope
 D : Fourth position of telescope

**152** : What is the level that combine good features both the dumpy level and 'y' level?

A : Cushing levelB : Modern tilting levelC : Cooke's reversible level

**D**: Automatic level

**153** : What is the name of part marked as 'X'?



A : First foot screwB : Second foot screwC : Third foot screwD : Fourth foot screw

154 : What is the fundamental line in levels?

A : Slant lineB : Vertical line

C: Horizontal line

**D**: The axis of the telescope

**155** : Which levelling instrument is required in second adjustment to make the line of collimation parallel to the axis of the bubble tube?

A : Auto levelB : Target levelC : Dumpy levelD : Tilting level

**156** : Which level instrument requires a signal permanent adjustment?

A : Tilting levelB : Dumpy levelC : Auto levelD : Target level

**157** : What is the position of line of collimation, if observed staff reading is more than the required true staff reading?

A : Inclined downwardsB : Inclined upwardsC : Horizontal

**D** : Parallel

**158** : What is the position of line of collimation While the observed reading is the less than the required true reading?

A : Inclined downwardsB : Inclined upwardsC : Horizontal

**D** : Parallel

**159** : What is the diameter of earth?

A : 12842km B : 12742km C : 12724km D : 12785km

**160** : What is the curvature of earth correction?

A : 0.1785D2B : 0.0857D2C : 0.0785D2D : 0.0787D2

**161** : Which level is that the line of sight remains horizontal once the operator has roughly levelled the instruments?

A : Dumpy levelB : Modern level

Reviewed and updated on: 01st November 2019 Version 1.1

C : Wye levelD : Auto level

**162** : How many level screws are used to level the instruments?

A : Two level screwsB : Three level screwsC : Four level screwsD : Six level screws

**163** : How to eliminate parallel between the staff and reticle in auto level?

A : Turn the focusing knob
B : Adjust the levelling screw
C : Adjusting screw cover
D : Setting of the tripod

**164** : What is the gap of stems of 'E' or 3 between them of earth?

A: 3mm highB: 5mm highC: 10mm highD: 15mm high

**165** : What is the level that is widely used in construction work but not for more precise control work?

A : Laser levelB : Dumpy levelC : Wye levelD : Tilting level

**166** : What is the instrument that one person can perform the levelling independently?

A : Laser levelB : Dumpy levelC : Wye levelD : Tilting level

**167** : Which instrument may compute and apply refraction and curvature corrections?

A : Dumpy levelB : Modern levelC : Auto / digital level

**D**: Wye level

**168** : Which type of levelling is done in order to connect a bench mark to the starting point of the alignment of any project in survey?

A : Direct levellingB : Indirect levelling

C : Check levellingD : Fly levelling

**169** : Which levelling is done to connect the B.M to any intermediate point of the alignment for checking the accuracy of the work?

A : Fly levellingB : Check levellingC : Direct levellingD : Indirect levelling

**170** : Which levelling is only the back sight and fore sight readings are taken at every set up of the level and no distance are measured along the direction of levelling?

A : Direct levellingB : Indirect levellingC : Fly levellingD : Check levelling

**171** : What is the name of level, if the fly levelling done at the end of day's work to connect the finishing point with the starting point on that particular day?

A : Fly levellingB : Check levellingC : Direct levellingD : Indirect levelling

**172** : Which method gives approximate result and so it is adopted in the reconnaissance or in the preliminary survey?

A : Barometric levellingB : Hypsometry levellingC : Trigonometrical levelling

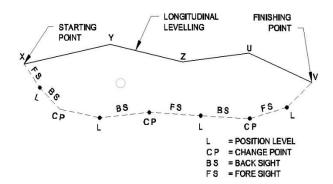
**D**: Check levelling

**173** : What is the name of the levelling while the relative elevations of different points are obtained by measuring the vertical angles and horizontal distance?

A : Fly levelling
B : Check levelling
C : Barometric levelling
D : Trigonometric levelling

Reviewed and updated on: 01st November 2019 Version 1.1

#### 174 : What is the name of levelling?



A : Fly levellingB : Check levellingC : Direct levellingD : Indirect levelling

**175** : What level is required for permanent adjustment if the bubble axis made parallel to collimation axis of the telescope?

A : Auto levelB : Tilting levelC : Dumpy levelD : Target level

**176** : What is the difference of level if dumpy level is at mid point C

Staff reading on A = 1.580m Staff reading on B = 1.220m?

A : 2.700mB : 1.360mC : 0.360mD : 0.630m

177 : What is the height of collimation if reduced level of point A= 100.000m. Back sight at point A = 2.750m?

A : 12.750mB : 98.250mC : 102.750mD : 101.750m

178 : What is R.L of point, if the height of collimation level 103.450m and inter sight reading on point 1=2.680m?

A : 106.130mB : 105.130mC : 100.077mD : 100.77m

179 : What is rise or fall, if back sight reading taken on B.M is 2.045m and inter sight on point =2.68m?

A : -0.735 fall
 B : -0.635 fall
 C : +0.735 Rise
 D : +0.635 Rise

**180** : What is rise or fall if inter sight on point 4 is 2.975m and fore sight on point 5 is =2.860m?

A : +0.115 Rise B : +0.835 Rise C : -0.835 fall D : -0.115 fall

**181** : What is reduced level, if height of line of collimation is 98.717m and inter sight is 1.238m?

A : 96.389mB : 97.389mC : 97.479mD : 97.379m

**182** : What is the difference in level if back sight reading 1.430m and inter sight reading 2.015m?

A : +0.585(Rise)
B : -0.585(Fall)
C : +0.558(Rise)
D : -0.558(Fall)

183 : What is the height of Tee beam above the floor level if height of collimation of level on the floor 102.385m, inverted staff reading of the bottom of Tee beam -3.890m and R.L of floor level 100.595m?

A : 5.860mB : 5.680mC : 5.780mD : 5.870m

**184** : What is the difference in level if back sight of reading 3.370m inter sight of reading 2.975m?

A : +0.395 (Rise)
 B : -0.395 (fall)
 C : +0.295 (Rise)
 D : -0.295 (fall)

**185** : What is the correction for curvature for a distance of 10km (Correction of curvature =0.0785D2)?

**A** : 0.0785m **B** : 0.7850m

Reviewed and updated on: 01st November 2019 Version 1.1

**C**: 7.8500m **D**: 7.8700m

**186** : What is the correction for curvature for a distance of 800m (Correction of curvature=0.0785D2)?

A : 0.5024mB : 0.05024mC : 1.5024mD : 1.05024m

**187** : What is the correction for refraction for a distance of 5km (Correction of refraction =0.0112D2)

A : 1.28mB : 0.28mC : 0.028mD : 0.0028m

**188** : What is the correction for refraction for a distance of 800meters (Correction for refraction =0.0112D2)

A : 0.07168mB : 0.007168mC : 0.05024mD : 0.005024m

**189** : What is the combined correction for curvature and refraction for a distance of 5km (Combined correction for refraction and curvature is 0.0673D2)?

A : 1.6825mB : 0.6825mC : 0.06825mD : 0.006825m

**190** : What is the combined correction for curvature and refraction for a distance of 700m (Combined correction for refraction and curvature is 0.073D2)?

A : 0.3297mB : 0.03297mC : 0.003297mD : 0.0003297m

## Surveyor – Semester 2 Module 4: Tacheometry Survey

Reviewed and updated on: 01st November 2019 Version 1.1

**191** : What is the multiplying constant in tachometric?

A : (f/i)
B : (f+d)
C : (f+i)
D : (f/d)

192 : What is the additive constant in

tacheometry?

A : (f/i)

B : (f+d)

C : (f+i)

D : (f/d)

**193** : How many stadia hairs are provided in the diaphragm of the tacheometer?

A : Two stadia hairsB : Three stadia hairsC : Four stadia hairsD : Five stadia hairs

**194** : Which instrument is used in optical distance measurement method?

A : TacheometryB : Dumpy levelC : Wye levelD : Modern level

**195** : What is the least count of stadia rod?

A : 0.1mB : 0.01mC : 0.001mD : 0.0001m

**196** : What is the length of stadia rod?

A : 1mB : 2mC : 3mD : 4m

197 : What is the basis for tacheometer survey?

A : Property of right angle
 B : Property of scalene triangle
 C : Property of isosceles triangle
 D : Property of equilateral triangle

**198** : What is the multiplying constant, if adopting anallatic lens in the telescope of a tachometer?

**A** : 10 **B** : 20

**C** : 50 **D** : 100

**199** : What is the additive constant, if adopting on anallatic lens in the telescope of a tacheometer?

A : Zero
B : One
C : Two
D : Three

**200** : Which is used for measuring the stadia intercept 'i' from the diaphragm?

A : Vernier calliperB : Vernier micrometerC : Bevel protectorD : Dial test indicator

**201** : Which is used to measure the distance 'd' between the optical centre and the vertical axis of the instrument?

A : Bevel protractor
 B : Vernier caliper
 C : Vernier micrometer
 D : Dial test indicator

**202** : Where the tacheometer is usually adopted for surveying?

A : Hilly places

B : Direct chaining placesC : Direct levelling places

**D**: Plain surfaces

**203** : What is the tacheometric equation for distance while the line of sight is horizontal and staff is held vertically?

**A** :

$$D = \left(\frac{f}{i}\right) + (f + d)$$

**B** :

$$D = \left(\frac{f}{i}\right)S + (f+d)$$

**C** :

$$D = \left(\frac{f}{i}\right) + S(f + d)$$

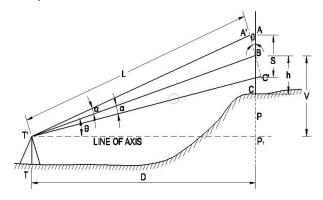
**D** :

$$D = \left(\frac{f}{i}\right)S + (f \times d)$$

#### Surveyor – Semester 2 Module 4: Tacheometry Survey

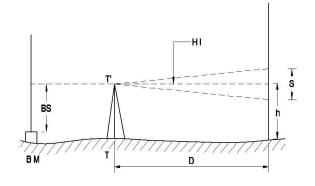
Reviewed and updated on: 01st November 2019 Version 1.1

**204** : What is the method of tacheometry survey?



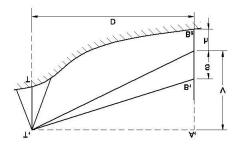
A : Fixed hair method - case I
 B : Fixed hair method - case II
 C : Tangential method - case I
 D : Tangential method - case II

**205** : What is the method of tacheometry survey?



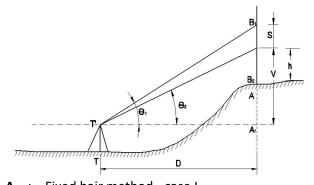
A : Fixed hair method - case I
 B : Fixed hair method - case II
 C : Tangential method - case I
 D : Tangential method - case II

**206** : What is the method of tacheometry survey?



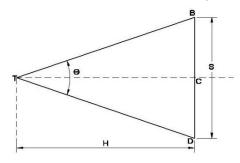
A : Fixed hair method - case I
 B : Fixed hair method - case II
 C : Tangential method - case I
 D : Tangential method - case II

**207** : What is the method of tacheometry survey?



A : Fixed hair method - case I
 B : Fixed hair method - case II
 C : Tangential method - case I
 D : Tangential method - case II

208 : What is the method tacheometry survey?

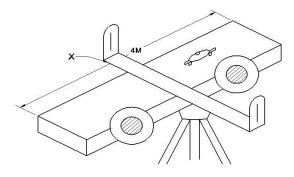


**A** : Measurement of horizontal distance by substance bar

**B** : Measurement of vertical distance by substance bar

C : Tangential methodD : Fixed hair method

**209** : What is the name of part of the substance bar marked as 'X'?



A : Spirit levelB : AlidadeC : TargetD : Telescope

# Surveyor - Semester 2 Module 4: Tacheometry Survey

Reviewed and updated on: 01st November 2019 Version 1.1

210 : What is the distance of station from the instruments if on fixed hair method the line of sight is horizontal with multiplying and additive constant is 100 and 0.5 respectively S =1.500?

A : 1.50mB : 15.50mC : 150.50mD : 150.00m

211 : What is the horizontal distance if in fixed hair method the line of sight inclined and with multiplying and additive constants of the instruments are 99.5 and 1.5 respectively S=1.670,  $\theta$ =10 $^{\circ}$ ?

A : 16.263mB : 162.63mC : 126.63mD : 120.63m

#### Surveyor – Semester 2 Module 5: Computer Aided Drawing

Reviewed and updated on: 01st November 2019 Version 1.1

212 : Which command is used to draw rectangle?

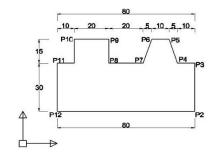
A : RECTANGLE/ REC

: PLINE : REVCLOUD : SPLINE

213 : What is the system that specify a point by entering its x and y valves in the format x, y?

A : Absolute co-ordinate system : Rectangular co-ordinate system : Relative polar co-ordinate system : Relative co-ordinate method

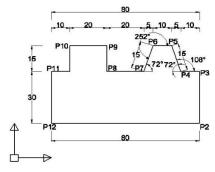
214 : What is the co-ordinate method?



: Absolute co-ordinate method : Relative co-ordinate method : Polar co-ordinate method

: Rectangular co-ordinate method

215 : What is the co-ordinate method?



: Absolute co-ordinate method : Relative co-ordinate method C : Polar co-ordinate method

: Rectangular co-ordinate method

216 : What is the command to the first icon in the draw panel?

: Arc : Line : Circle : Segment

: Which will activate the line command? 217

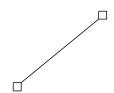
A : Click on command window

**B** : Clicking with centre of mouse on line icon **C**: Clicking once with left - mouse - button on

line icon

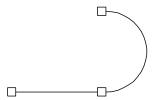
**D** : Clicking once with right - mouse - button on line icon

218 : What is the icon indicate in Auto CAD?



A: Line command Polyline command : Circle command : Arc command

219 : What is the icon indicate in Auto CAD?



A: Line command B: Polyline command : Circle command : Arc command

220 : What is the icon indicate in Auto CAD?

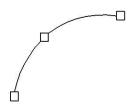


: Line command Polyline command C: Circle command D: Arc command

# Surveyor - Semester 2 Module 5: Computer Aided Drawing

Reviewed and updated on: 01st November 2019 Version 1.1

221 : What is the for icon command?



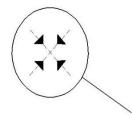
A : Line commandB : Polyline commandC : Circle commandD : Arc command

222 : What is the icon of zoom?



A : ScaleB : CentreC : InD : Out

223 : What is the icon of zoom?



A : ScaleB : CentreC : InD : Out

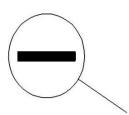
224 : What is the icon of zoom?



A : ScaleB : Centre

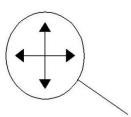
C: In D: Out

225 : What is the icon of zoom?



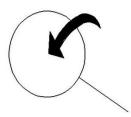
A : ScaleB : CentreC : InD : Out

226 : What is the icon of zoom?



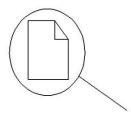
A : OutB : AllC : ExtentsD : Previous

227 : What is the icon of zoom?



A : OutB : AllC : ExtentsD : Previous

228 : What is the icon of zoom?



# Surveyor - Semester 2 Module 5: Computer Aided Drawing

Reviewed and updated on: 01st November 2019 Version 1.1

A : OutB : AllC : ExtentsD : Previous

**229** : Which icon will zoom to fit the complete drawing on the screen?









A : AB : BC : CD : D

**230** : Which icon zoom to show the complete electronic page you set up if zooms out to the electronic sheet limits?









A : AB : BC : CD : D

**231** : Which icon just click on it zoom out from the drawing?









A : AB : BC : CD : D

**232** : Which icon display the last view created by zoom, pan or view command?









A : AB : BC : CD : D

**233** : Which icon click on it zoom in on the drawing?







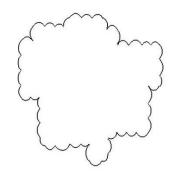


A : AB : BC : CD : D

#### Surveyor – Semester 2 Module 5: Computer Aided Drawing

Reviewed and updated on: 01st November 2019 Version 1.1

234 : What is the command?



A : RECTANGLE/ REC

B : PLINEC : REVCLOUDD : SPLINE

235 : What is the command?



A : RECTANGLE/ REC

B : PLINEC : REVCLOUDD : SPLINE

236 : What command used to draw polylines?

A : RECTANGLE/ REC

B : PLINEC : REVCLOUDD : SPLINE

237 : Which command is used to display a point

on a screen?

A: PDMODE

B: PLINE

C: SPLINE

D: REVCLOUD

238 : Which command represents dimension –

linear?

A : DIM LIN/DLIB : DIM ALI/DALC : DAR DIM/ARCD : DIM RA/DRA

239 : Which command refers dimension-

radius?

A : DIM LIN/DLIB : DIM ALI/DAL

C : DAR DIM/ARCD : DIM RA/DRA

**240** : Which command is used to measure inclined dimension between two points?

A : DIM ALI/DALB : DIM ARC/DARC : DIM RA/DRAD : DIM JO/DJO

**241** : Which command is used to measure the radius of an arc or circle?

A : DIM ALI/DALB : DIM ARC/DARC : DIM RA/DRAD : DIM JO/DJO

**242** : Which command is used to measure the diameter of a circle?

A : DIM JO/DJOB : DIM DIA/DDIC : DIM ANG/DAND : DIM CON/DCO

**243** : Which command is used to measure the angle between the two non-parallel straight line?

A : DIM JO/DJO
B : DIM DIA /DDI
C : DIM ANG/DAN
D : DIM CON /DCO

244 : Which command is used to continuous dimensioning after the first dimension has been extended?

A : DIM JO/DJOB : DIM DIA /DDIC : DIM ANG/DAND : DIM CON/DCO

#### **ANSWERS:**

1:C; 2:C; 3:A; 4:D; 5:D; 6:C; 7:C; 8:D; 9:B; 10:B; 11:A; 12:D; 13:D; 14:C; 15:B; 16:D; 17:C; 18:A; 19:A; 20:B; 21:C; 22:B; 23:B; 24:C; 25:A; 26:B; 27:D; 28:D; 29:B; 30:B; 31:D; 32:D; 33:B; 34:B; 35:A; 36:B; 37:B; 38:C; 39:A; 40:B; 41:A; 42:B; 43:C; 44:D; 45:A; 46:A; 47:D; 48:B; 49:B; 50:A; 51:C; 52:A; 53:B; 54:C; 55:B; 56:A; 57:C; 58:B; 59:C; 60:D; 61:A; 62:B; 63:A; 64:C; 65:D; 66:A; 67:C; 68:A; 69:B; 70:B; 71:C; 72:C; 73:B; 74:A; 75:D; 76:C; 77:B; 78:A; 79:A; 80:A; 81:A; 82:C; 83:B;

#### Surveyor – Semester 2 Module 5: Computer Aided Drawing

Reviewed and updated on: 01st November 2019 Version 1.1

```
84:B; 85:B; 86:C; 87:D; 88:D; 89:A; 90:B; 91:B; 92:A;
93:A; 94:B; 95:C; 96:A; 97:C; 98:D; 99:C; 100:B;
101:A; 102:C; 103:B; 104:A; 105:B; 106:B; 107:A;
108:B; 109:C; 110:B; 111:B; 112:C; 113:A; 114:B;
115:B; 116:A; 117:B; 118:A; 119:A; 120:A; 121:A;
122:A; 123:B; 124:C; 125:D; 126:C; 127:C; 128:C;
129:C; 130:B; 131:C; 132:D; 133:C; 134:B; 135:A;
136:B; 137:C; 138:D; 139:A; 140:A; 141:B; 142:C;
143:A; 144:C; 145:C; 146:D; 147:B; 148:A; 149:B;
150:C; 151:A; 152:C; 153:C; 154:D; 155:C; 156:A;
157:B; 158:A; 159:B; 160:C; 161:D; 162:B; 163:A;
164:C; 165:A; 166:A; 167:C; 168:D; 169:A; 170:C;
171:B; 172:A; 173:D; 174:B; 175:B; 176:C; 177:C;
178:D; 179:B; 180:A; 181:C; 182:B; 183:B; 184:A;
185:C; 186:B; 187:B; 188:B; 189:A; 190:B; 191:A;
192:B; 193:A; 194:A; 195:C; 196:D; 197:C; 198:D;
199:A; 200:A; 201:B; 202:A; 203:B; 204:B; 205:A;
206:D; 207:C; 208:A; 209:B; 210:C; 211:B; 212:A;
213:A; 214:B; 215:C; 216:B; 217:C; 218:A; 219:B;
220:C; 221:D; 222:A; 223:B; 224:C; 225:D; 226:C;
227:D; 228:B; 229:C; 230:B; 231:A; 232:D; 233:D;
234:C; 235:D; 236:B; 237:A; 238:A; 239:D; 240:A;
241:C; 242:B; 243:C; 244:D;
```