

University of Mumbai

Examination 2020

Program: Civil Engineering

Curriculum Scheme: Rev2016

Examination: Second Year Semester III

Course Code: CE-C302 and Course Name: Surveying-1

Time: 1 hour

Max. Marks: 50

For the students:- All the Questions are compulsory and carry equal marks .

Q1.	The difference between observed value of an quantity and its most probable value is known as _____.
Option A:	True error
Option B:	Residual error
Option C:	Systematic error
Option D:	Gross error
Q2.	Surveyor's chain of 66ft has _____ links.
Option A:	150
Option B:	100
Option C:	75
Option D:	200
Q3.	The R.L. of the point 'A' which is on the floor is 100m and back sight reading on 'A' is 2.455m. If the foresight reading on the point 'B' which on the ceiling is 2.745 m, the R.L of point 'B' will be
Option A:	94.80 m
Option B:	99.71 m
Option C:	100.29 m
Option D:	105.20 m
Q4.	The principal of plane tabling is _____.
Option A:	Similarity
Option B:	Parallelism
Option C:	Trigonometry
Option D:	Contouring
Q5.	_____ must be done when the plane table is set up at more than one station.
Option A:	Marking the north line
Option B:	Permanent Adjustment
Option C:	Orientation
Option D:	Ranging
Q6.	Which of the following is not method of calculating the boundary area?
Option A:	Simpson's rule
Option B:	Transit rule
Option C:	Mid ordinate rule
Option D:	Average ordinate rule

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Q7.	The value of additive constant (C) is considered in calculation when anchor point of planimeter is _____.
Option A:	Inside the figure
Option B:	Outside the figure
Option C:	On the boundary
Option D:	Not specified
Q8.	The following offsets were taken at 15 m intervals from a survey line to an irregular boundary line 3.50, 4.30, 6.75, 5.25, 7.50, 8.80, 7.90, 6.40, 4.40, 3.25 m. Calculate the area enclosed between the survey line, the irregular boundary line, and the offsets, by Simpson's rule.
Option A:	915 sq meter
Option B:	750 sq meter
Option C:	813 sq meter
Option D:	890 sq meter
Q9.	Bowditch rule to calculate correction in latitude
Option A:	"Length of that Side" / "Perimeter of Traverse " x Total Error in latitude
Option B:	"Length of that Side" / "Perimeter of Traverse " x Total Error in departure
Option C:	"Length of that Side" x "Perimeter of Traverse " / Total Error in latitude
Option D:	"Length of that Side" / "Perimeter of Traverse " + Total Error in latitude
Q10.	Least count of vernier transit theodolite is _____.
Option A:	15"
Option B:	20'
Option C:	20"
Option D:	1"
Q11.	The process of turning the telescope about its vertical axis in horizontal plane through 360 degree is known as _____.
Option A:	Transiting
Option B:	Swinging
Option C:	Plunging
Option D:	Reversing
Q12.	If the departure of a line is negative then, line is declined towards
Option A:	Northwards
Option B:	Southwards
Option C:	Eastwards
Option D:	Westwards
Q13.	If for a closed traverse the algebraic sum of latitude is -1.2 and for departure it is +3.28 then closing error of this traverse lies in _____.
Option A:	First Quadrant
Option B:	Second Quadrant
Option C:	Third Quadrant
Option D:	Fourth Quadrant

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Q14.	In theodolite, the upper triangular plate carrying three foot screws at its ends is known as _____.
Option A:	Trivet
Option B:	Tribatch
Option C:	Levelling head
Option D:	Tripod
Q15.	What is latitude of a line AB aligned to north direction having length of 123 m?
Option A:	123m
Option B:	12.3m
Option C:	1.23m
Option D:	-1.23m
Q16.	_____ is an indirect method of levelling.
Option A:	Fly levelling
Option B:	Trigonometric levelling
Option C:	Differential levelling
Option D:	Auto levelling
Q17.	In case of trigonometric levelling, the correction for refraction is always _____.
Option A:	Subtractive
Option B:	Additive
Option C:	Negative
Option D:	Multiplying
Q18.	Which of the following is not type of EDM instrument?
Option A:	Microwave
Option B:	Visible light
Option C:	Ultrasonic wave
Option D:	Infrared
Q19.	Ranging is an operation of
Option A:	Reconnaissance
Option B:	Judging the distance
Option C:	Determination of slope
Option D:	Establishing intermediate points between terminals
Q20.	If the intercept on a vertical staff is observed as 0.75 m from a tachometer, the horizontal distance between tachometer and staff.
Option A:	7.5m
Option B:	25m
Option C:	75m
Option D:	50m
Q21.	If the reduced bearing of a line AB is N60W and length is 100m, then the latitude and departure respectively of the line AB will be

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Option A:	+50 m, +86.6 m
Option B:	+86.6m , -50 m
Option C:	+50 m, -86.6 m
Option D:	+70.7 m, -50 m
Q22.	The smaller horizontal angle between the true meridian and a survey line is known _____
Option A:	Declination
Option B:	Bearing
Option C:	Azimuth
Option D:	Dip
Q23.	The difference of levels between two stations A and B is to be determined. For best results, the instrument station should be
Option A:	Equidistant from A and b
Option B:	Closer to higher station
Option C:	Closer to lower station
Option D:	As far as possible from the line AB
Q24.	If the focal length of the object glass is 25 cm and the distance from object glass to the trunnion axis is 15 cm, the additive constant
Option A:	0.1
Option B:	0.4
Option C:	0.6
Option D:	1.33
Q25.	If the whole circle bearing of a line is 270 degree, its reduced bearing is
Option A:	N 90 W
Option B:	S 90 W
Option C:	W 90
Option D:	90 W