

SURVEYING

SL	Questions	Answer
1.	The line of intersection of a level surface with the ground surface is known as- (a) Contour interval (b) Contour (c) Contour line (d) (b) + (c) both. Explanation:	(d)
2.	If the height of a slanted object is 3 ft and the length of this object is 12 ft, then what is the slope correction of that slanted object? (a) 11.6 cm (c) 11.2 cm (b) 12.4 cm (d) 12.6 cm. Explanation:	(a)
3.	The true length and the error of a chain are 5 ft and -2 ft respectively. If the true length of a line creates a 230-degree angle through a circle of the same radius as the true length of the chain is, then, what is the measured length of that line? (a) 11.196 m (b) 10.146 m, (c) 11.146 m (d) 10.196 m. Explanation:	(d)
4.	The length of a tape is 10 ft and the slope of the ground is $\frac{3}{5}$ th of a circle. Then, which of the following values is correct for the hypotenusal allowance of the tape? (a) 5.82 m (c) 6.82 m (b) 7.82 m (d) 8.82 m. Explanation:	(c)
5.	The magnetic bearing of a line MN is 150 deg. 25 min. What will be the true bearing of that line, if the declination is 17 deg. 45 min? (a) 132 deg. 42 min. (b) 132 deg. 41 min. (c) 132 deg. 40 min. (d) 132 deg. 39 min. Explanation:	(c)
6.	The magnetic bearing of a line YZ is S 41 deg. 42 min. W. Find its true bearing, if the declination is 7 deg. 32 min. E from the following values. (a) 48 deg. 14 min. (c) 49 deg. 14 min. (b) 49 deg. 16 min. (d) 49 deg. 18 min. Explanation:	(c)
7.	On a Ship-map, a line was drawn to a magnetic bearing of 292 deg. 45 min., when the declination was 6 deg. 20 min. W. Which of the following values is correct for the present bearing of the line if the declination is 2 deg. 45 min. E? (a) 283 deg. 36 min. (b) 283 deg. 38 min., (c) 283 deg. 40 min. (d) 283 deg. 42 min. Explanation:	(c)
8.	What is the visible horizon distance from a tower 442 m high? (a) 80.040 km (c) 82.042 km (b) 81.041 km (d) 83.043 km. Explanation:	(b)

9.	A man on the deck of a ship observes an U.F.O., which is 179 metres above sea-level. If the man's eye-level is 110 metres above sea-level, what is the distance between him and the U.F.O.? (a) 92.002 km (b) 91.001 km (c) 93.003 km (d) 94.004 km Explanation:	(a)
10.	The following offsets were taken at 28 metres of intervals from a survey line to an irregular boundary line:- 2.20, 3.95, 4.92, 6.72, 7.93, 7.19, 10.91, 6.21, 5.83, 4.60 ft. Now, calculate the area enclosed between the survey line within the irregular boundary line, by the Trapezoidal Rule. (a) 148.23 sq. metres (c) 148.33 sq. metres, (b) 148.53 sq. metres (d) 148.43 sq. metres Explanation:	(d)
11.	Calculate the sectional area of an embankment 22 m wide, with a side slope of 7:5. The ground is levelled in a transverse direction to the centre line. The central height of the embankment is 5.3 m. (a) 1677.333 sq. ft (b) 1678.333 sq. ft, (c) 1679.333 sq. ft (d) 1680.333 sq. ft. Explanation:	(b)
12.	What is the exact equation of pull correction of a chain? (a) $C-p = (P_m - P_o) * (wL) / (A * E)$ (c) $C-p = (P_m - P_o) * (wL)^2 / (A * E)$ (b) $C-p = (P_m - P_o) * L / (A * E)$ (d) $C-p = (L * W^2) / (24 * n^2 * P_m^2)$ Explanation:	(b)
13.	What is the principle of Chain Surveying? (a) Ill-Conditioned Triangles (c) Well-Conditioned Triangles (b) Reconnaissance Survey (d) Triangulation Explanation:	(d)
14.	At first, which should be determined before the starting of any survey work? (a) Section of survey stations (c) Degree of accuracy (b) Field Book (d) Number of Offsets Explanation:	(c)
15.	When a line or plane passes through the geographical north pole, geographical south pole and any point on the surface of the earth, then what is it called? (a) True meridian (c) Magnetic meridian (b) Arbitrary meridian (d) Grid meridian Explanation:	(a)
16.	The magnetic bearing of a line measured clockwise from the north pole towards the line, is called- (a) Whole Circle Bearing (c) Quadrantal Bearing (b) Reduced Bearing (d) Fore Bearing Explanation:	(a)
17.	What is the horizontal angle between the magnetic meridian and the true meridian referred as? (a) Magnetic Bearing (c) Magnetic Meridian (b) Magnetic Declination (d) Magnetic Variation Explanation:	(b)

18.	When a series of connected lines form a closed circuit in a field, what is it called? (a) Closed Traverse (c) Open Traverse (b) Chain Traverse (d) Compass Traverse Explanation:	(a)
19.	How many types of traversing methods are there in the field of Traverse Surveying? (a) 7 (b) 6 (c) 5 (d) 4 Explanation:	(d)
20.	When the Simpson's Rule for computing an area is applied, the boundary between the ordinates is considered to be- (a) An arc of a Circle (c) An arc of an Ellipse (b) An arc of a Parabola (d) A Straight Line Explanation:	(b)
21.	Trapezoidal Rule gives more precise measurements of the areas in field than the Simpson's Rule. Is it true? (a) Yes (c) No (b) Partially correct (d) Sometimes true Explanation:	(c)
22.	How many methods are there for Contouring? (a) 3 (b) 5 (c) 4 (d) 2 Explanation:	(d)
23.	The vertical distance between any two consecutive contours is referred to as- (a) Contour Line (c) Contour Interval (b) Horizontal Equivalent (d) Vertical Equivalent Explanation:	(c)
24.	Which of the following is the length of a Metric Chain? (a) 65.616 ft (b) 98.424 ft (c) 66 ft (d) Both (a) & (c) Explanation:	(d)
25.	The _____ distance of a point above or below the datum line is regarded as RL (reduced level). What will be the exact term for filling the blank? (a) Vertical (b) Oblique (c) Horizontal (d) Level. Explanation:	(a)
26.	The apparent movement of image relative to cross-hairs is called- (a) Parallax (b) Geoid (c) Bench Mark (d) Line of Collimation. Explanation:	(a)
27.	Mean Sea Level (MSL) is derived by averaging of- (a) Over 40 years (b) Over 30 years (c) Over 20 years (d) Over 10 years. Explanation:	(b)
28.	What is referred as the angle between the horizontal line and the tangent line? (a) Combined Correction (c) Dip of Horizon (b) Curvature of Horizon (d) Curvature Correction Explanation:	(c)
29.	What is the principle of chain surveying? (a) Parallelism (c) Segmentation (b) Trapezoidalism (d) Triangulation Explanation:	(d)

30.	Surveys which are carried out to depict mountains, rivers, water bodies, wooded areas and other cultural details, are known as- a) Chain surveys (c) Plane surveys b) Topographical surveys (d) Compass surveys Explanation:	(b)
31.	An ideal vertical curve to join two gradients- a) Parabolic (b) Circular (c) Hyperbolic (d) Elliptical Explanation:	(a)
32.	How many stations are there in chain survey? a) 2 (b) 3 (c) 4 (d) 5 Explanation:	(b)
33.	8. Number of links per meter length of a chain are- a) 2 (b) 4 (c) 5 (d) 8 Explanation:	(b)
34.	An ideal transition curve is- a) cubic parabola (b) cubic spiral (c) clothoid spiral (d) true spiral Explanation:	(c)
35.	To orient a plane table at a point with two inaccessible points, the method generally adopted, is- a) intersection (b) resection (c) two point problem (d) radiation Explanation:	(c)
36.	9. The method generally preferred to for contouring an undulating area, is- a) Chain surveying (c) Plane table surveying b) Tacheometrical surveying (d) Compass surveying Explanation:	(b)
37.	If a whole circle bearing of a line is 270° , its reduced bearing is – (a) $W 90^\circ$ (b) $E 90^\circ$ (c) $N 90^\circ$ (d) $S 90^\circ$ Explanation:	(a)
38.	The method of finding out the difference in elevation between two points for eliminating the effect of curvature and refraction, is- (a) reciprocal levelling (c) precise levelling (b) differential levelling (d) flying levelling Explanation:	(a)
39.	Total latitude of a point is positive if it lies_ (a) north of the reference parallel (c) south of the reference parallel (b) east of the reference parallel (d) west of the reference parallel Explanation:	(a)
40.	Whole circle bearing of AB is $216^\circ 30'$, What is the Quadrantal bearing- (a) $N 36^\circ 30' S$ (b) $S 37^\circ 40' W$ (c) $N 35^\circ 30' W$ (d) $S 36^\circ 30' W$ Explanation:	(d)