

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

- Q.23** The following bearings were observed for a closed traverse. (CO2)

Line	Fore Bearing	Back Bearing
AB	44°30'	226°30'
BC	124°30'	303°15'
CD	181°00'	1°00'
DA	289°30'	108°45'

Which stations are affected by local attraction? Determine the corrected bearings. Find the true bearings of the line if the declination was 3°E.

- Q.24** The following staff readings were observed while levelling and the first reading was observed on a B.M. having Reduced Level 305.250 m. Find out the RLs of all the points by using Height of Instrument Method. Apply the usual checks also. (CO3)

Station	Back Sight	Intermediate Sight	Fore Sight
1	1.675		
2		1.410	
3		1.735	
4	0.975		1.330
5		1.550	
6		1.785	
7			1.275

- Q.25** Explain the procedure of Traversing Method of plane table surveying with the help of a diagram. (CO4)

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2nd Sem / Architectural Assistantship

Subject : Surveying

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1** Determining the relative positions of points on above or beneath the surface of the earth by means of direct or indirect measurements of distance and direction and elevation is called as _____ (CO1)

- a) Surveying
- b) Levelling
- c) Measuring
- d) Contouring

- Q.2** Representing large scale on the surface of the earth is _____ (CO1)

- a) Plan
- b) Map
- c) Scale
- d) Area

- Q.3** Horizontal angle with the true Meridian through one of the extremities of the line is called ? (CO2)

- a) True bearing
- b) Magnetic Bearing
- c) Arbitrary bearing
- d) Bearing

- Q.4** In case, to get a well-proportioned or well-shaped

triangle, no angle should be less than _____ (CO2)

- a) 15°
- b) 30°
- c) 45°
- d) 25°

Q.5 _____ is defined as a curved surface which at each point is perpendicular to the direction of gravity at the point. (CO3)

- a) Level surface
- b) Level line
- c) Horizontal plane
- d) Datum

Q.6 GPS can also be known as _____ (CO5)

- a) GOS
- b) Arc GIS
- c) GIS
- d) NavStar

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Define the term "Line of Collimation". (CO3)

Q.8 A fore sight is the first staff reading taken after the level is set up. (True/False) (CO3)

Q.9 The calculation work is much simplified if the earth is assumed to be spheroid instead of its actual _____ shape. (CO1)

Q.10 The least count of a prismatic compass is _____ (CO2)

Q.11 Microwave EDM instrument requires two instrument stations. (True/False) (CO5)

Q.12 The operation of forming or bringing the clear image of the object in the plane of cross hairs is known as _____ (CO5)

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Write a short note on use of EDM in surveying. (CO5)

Q.14 Write a short note on the use of transit theodolite in surveying. (CO5)

Q.15 Describe the various principles of surveying. (CO1)

Q.16 Write the points of difference between the Plane Surveying and Geodetic Surveying. (CO1)

Q.17 Convert the following Reduced Bearings (RB) into Whole Circle Bearing (WCB) (CO2)

- a) N $43^\circ 30' E$
- b) S $41^\circ 15' E$
- c) S $57^\circ 45' W$
- d) N $79^\circ 15' W$

Q.18 Write the name of the various instruments used for surveying and their corresponding surveying classifications. (CO1)

Q.19 Write the different objectives of GIS used in surveying. (CO5)

Q.20 Write down the procedure of permanent adjustment of a dumpy level. (CO3)

Q.21 Write down the advantages of plane table surveying. (CO4)

Q.22 How will you carry out the process of orientation of a plane table, to continue the surveying work for the next day. (CO4)