

MCom (Valuation) Sem.-1 Examination
Elementary Surveying & Engineering Drawing

Time : 2-30 Hours]

February-2025

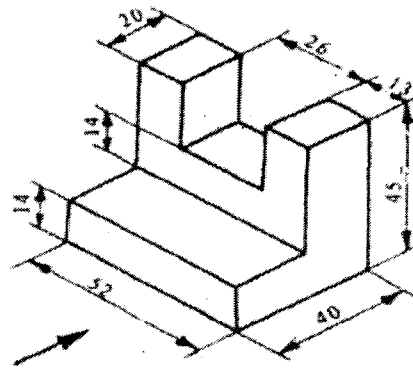
[Max. Marks : 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- | | | |
|-----|--|----|
| Q.1 | (A) What is the principle of surveying? Explain in detail. | 07 |
| | (B) Mention the importance and scope of engineering drawing. | 07 |
| | OR | |
| Q.1 | Write short notes on; 1) EMD and 2) Total station | 14 |
| Q.2 | (A) Give objective and use of levelling and write note on reciprocal levelling | 07 |
| | (B) Explain different types of lines and its applications. | 07 |
| | OR | |
| Q.2 | The following offsets were taken from a chain line to an irregular boundary line at interval of 6 m.
Offsets: 0, 3.5, 4.7, 6.8, 5.4, 3.3, 0
Compute the area between chain line using: (1) Mid ordinate rule
(2) Trapezoidal rule (3) Avg. ordinate rule (4) Simpson's rule | 14 |
| Q.3 | (A) Differentiate between Prismatic compass and Surveyor's compass. | 07 |
| | (B) What are the advantages and disadvantages of plane table survey? | 07 |
| | OR | |
| Q.3 | What is mean by contour? Write note on characteristics of contour. Also Explain 'contour interval' and horizontal equivalent'. | 14 |
| Q.4 | (A) Define the following term: Datum surface, Line of collimation, Reduced level and Benchmark. | 07 |
| | (B) Differentiate between plane surveying and geodetic surveying. | 07 |
| | OR | |
| Q.4 | Draw orthographic views (front, top and side views) for the given isometric views: (All dimensions are in mm) | 14 |

(P.T.O)



Q.5 (A) Attempt any three (out of five)

06

- (1) Define W.C.B & R.B.
- (2) Define the term Local attraction.
- (3) Define contour map.
- (4) What is meant by direct ranging?
- (5) What is meant by remote sensing?

(B) Choose the correct answer of the following MCQ:

08

- 1) Hydrographic surveys deal with the mapping of
 - (a) large water bodies
 - (b) canal system
 - (c) movement of clouds
- 2) For indirect ranging, number of ranging rods required, is
 - (a) 3
 - (b) 4
 - (c) 2
- 3) _____ must be done when the plane table is set up at more than one station.
 - (a) Tie the station
 - (b) Orientation
 - (c) Marking the north line
- 4) The degree of precision does not depend upon the type of instrument for levelling.
 - (a) True
 - (b) False
- 5) Contours can be found in a _____ map.
 - (a) Topographical
 - (b) Gradient
 - (c) Layout
- 6) A closed contour line with one or more higher ones inside to represent
 - (a) Pond
 - (b) Cliff
 - (c) Hill
- 7) By balancing back sight and fore sight, error due to curvature can be eliminated.
 - (a) True
 - (b) False
- 8) Which method is suitable for contouring on large for hilly area?
 - (a) Direct method
 - (b) Indirect method
 - (c) Cross method