

2024
SRMUJ
1st Semester Examination
M.Sc.
Geography
GEO-196
Map Projection and Surveying

Full Marks: 40

Time: 4 Hours

The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.

1. Answer all the following questions:

10×3

A. Draw neat graticules of Mercator's Projection for an area extending from 60° S to 60° N and 90°W to 90°E at an interval of 10° with a given scale 1:160,000,000. Write the limitation of Zenithal Orthomorphic Projection (Equatorial case). **(8+2)**

B. Prepare a flow chart about methodology of UTM projection. Write the advantage and disadvantage of Total Station survey. **(5+5)**

C. Prepare a suitable field book for Closed Travers Survey on the given plot ABCD by Prismatic Compass. Compute the Angles and checking the error with Bowditch method. Draw the corrected Travers. **(4+3+3)**

OR

D. Prepare a field book for Determination of Reduced level along the line PQ with 10m interval by the help of Dumpy Level. Compute the reduced level with collimation method (BM-77m). Draw the Surface Profile on the reduced level. **(4+4+2)**

OR

E. Prepare a field book for the determination of height on the selected object by the Theodolite. Compute the angles and find out the height of the object by the proper method. Find out the Horizontal Distance in between station and object with the help of graphical method.

2. Practical Note.

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3. Viva-voce.

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