

**B. SC. GEOGRAPHY 1<sup>st</sup> YEAR 2<sup>nd</sup> SEMESTER EXAMINATION 2023**

**Subject: Surveying and Mapping**

**Paper: SC/GEOG/UG/CORE/PR/04**

**Time: 2 hours**

**Full Marks: 20**

1. a) Make a Dumpy Level survey along the given line  $AB$  of 10 m length. Prepare a field workbook and determine the  $RL$  of points marked at 2 m interval. Bench mark at point  $A$  is 10.500 m. Draw a longitudinal profile of the given line. The instrument is to be shifted after the third point. 8
- b) Calculate the gradient from the first point to last point of line  $AB$ . 2

**OR**

- c) Measure the height of the given building using the Transit Theodolite through the base inaccessible method considering same vertical plane. 10
2. Prepare an average slope map (Wentworth's Method) of the assigned grid framework of 10 cm  $\times$  10 cm from the given topographical map and interpret it. 6