



KERALA AGRICULTURAL UNIVERSITY
B. Tech. (Agrl. Engg.) 2022 & Previous Admissions
II Semester Final Examination – September 2023

Lwre.1203

Surveying and Levelling (1+2)

Marks: 50
Time: 2 hours

- I State True or False (10x1=10)**
1. An increase in temperature causes a tape to increase in length and the measured distance is too large.
 2. A 100 m tape of cross section 10 mm × 0.25 mm stretches about 10 mm under 5 kg pull
 3. The straight distance between end points of a suspended tape is reduced by an amount called the sag correction.
- Fill in the blanks**
4. The line of collimation method of reduction of levels, does not provide a check on -----
 5. -----methods of contouring is most suitable for a hilly terrain.
 6. The size of a plane table is-----
 7. Detailed plotting is generally done by ----- method of plane table surveying.
 8. The line normal to the plumb line is known as-----
 9. The back staff reading on a B.M. of R.L. 500.000 m is 2.685 m. If foresight reading on a point is 1.345 m, the reduced level of the point, is-----
 10. If 'L' is in kilometers, the curvature correction is-----
- II Write short notes on ANY FIVE of the following (5x2=10)**
1. Orientation of a plane table is done by which method? Explain.
 2. What do you mean by quadrantal system of bearing?
 3. What is the principle of surveying?
 4. What is the base line in chain survey?
 5. What is back sight and foresight in levelling?
 6. What is a contour interval?
 7. What is the trapezoidal formula for surveying?
- III Answer ANY FIVE of the following (5x4=20)**
1. What is a Planimeter? What are its various parts?
 2. What are the uses of contour maps?
 3. Define Offset and its various types in chain surveying. Draw neat sketches also.
 4. What is the difference between direct and indirect ranging?
 5. What are two uses of total station?
 6. What are factors affecting the selection of survey station?
 7. What are steps involved in chain survey?
- IV Write an essay on ANY ONE of the following (1x10=10)**
1. Define and solve Two point problem of plane table surveying
 2. How do you measure the horizontal angle by theodolite?
