**Mid Term Examination** (Summer *Semester 2020*)

**Subject:** Engineering Survey **Duration: 4 hrs**

I**nstructor**: Engr. Hamza **Total Marks:**30

**Note:** Attempt all questions. Manage your time properly.

(10)

**Q No 1)** A Line was measured by steel tape which was 30m long at 18 degree centigrade and found to be 450m. The temperature during the measurement was 33 degree. Find the true length of line if the coefficient of expansion of tape is 0.0000035.

Q No 2) While chaining across a pond two points A and B were taken on opposite side of the pond. A line CB 275 m long was laid on left of AB and an other line BD was laid down on the right of line AB is 310 m, such that points C,A and D becomes inline with each other. CA and AD were then measured and found to be 156 m and 174 m respectively.Find the length AB

Q No 3) **Convert the following W.C.B to Quadrantal Bearing**. **(a)** 68o 32’ **(b)** 132o12’ (c) 258 o12’ d) 334 o12’

(10 Marks)