JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
WAKNAGHAT
TEST-1 EXAMINATION- Feb 2020
B Tech IVSemester (Civil Engineering)

Course Code: 10 B11CE412
Course Name: Surveying
Course credit: 4

Max. Marks: 15
Max. Time: 1 hrs

Note: All questions are compulsory. Assume suitable data if required.

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Q1. (a) Explain the fundamental principles of surveying. [1]
(b) Differentiate between plane surveying and geodetic surveying with their salient features. [1]
(c) Differentiate between Quadrantal bearing system and whole circle bearing system. [1]
(d) Define hypotenusal allowance. [1]

Q2. How will you perform a chaining operation if a large river interrupts the chaining operation? [2]

Q3. Explain different characteristics of contour lines with neat sketch. [3]

Q4. The following are the fore bearing and back bearing of a compass Traverse. Calculate the interior angles of the traverse. [4]

Line	FB	BB
AB	305° 0′	125°
BC	75° 30′	255° 30′
CD	115° 30′	295° 30′
DE	165° 30′	345° 30′
EA	225° 0′	45°0′

Q5. A distance of 2000 m was measured by a 30 m chain. ; After on, it was detected that chain was 0.1 m too long. Another 500 m (total 2500 m) was measured and it was detected that the chain was 0.15 m too long. If the length of the chain in the initial stage was correct, determine the exact length that was measured. [2]