Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.ARCH. - SEMESTER–III EXAMINATION – WINTER 2015

Subject Code: 1035006 Date:10/12/2015

Subject Name: Surveying & Leveling

Time: 10:30am to 12:30pm Total Marks:50

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1 **(a)** Define Surveying. Explain its importance for Architects. **03**

(b) Explain difference between Plans and Maps **02**

(c) Fill in the Blanks **05**

i. 1 meter = _____ feet
ii. 1 feet = _____ inches
iii. 1 chain = _____ links
iv. 1 sq. yard = _____ sq. feet
v. 1 sq. km. = _____ hectares

Q.2 **(a)** Draw the neat sketch of the instruments necessary for 'Chain & Tape survey'. Explain their uses. **10**

OR

(a) What are different kinds of Ranging? Explain Indirect Ranging. **10**

Q.3 **(a)** Explain with sketches, the various instruments used in plane table surveying. **10**

OR

Q.3 **(a)** Explain the importance of setting out works. **04**

(b) Discuss the method of achieving horizontal and vertical control in setting out works. **06**

Q.4 **(a)** Convert following WCB to RB **10**

i. 20˚30'
ii. 90˚00'
iii. 179˚12'
iv. 208˚42'
v. 327˚03'

OR

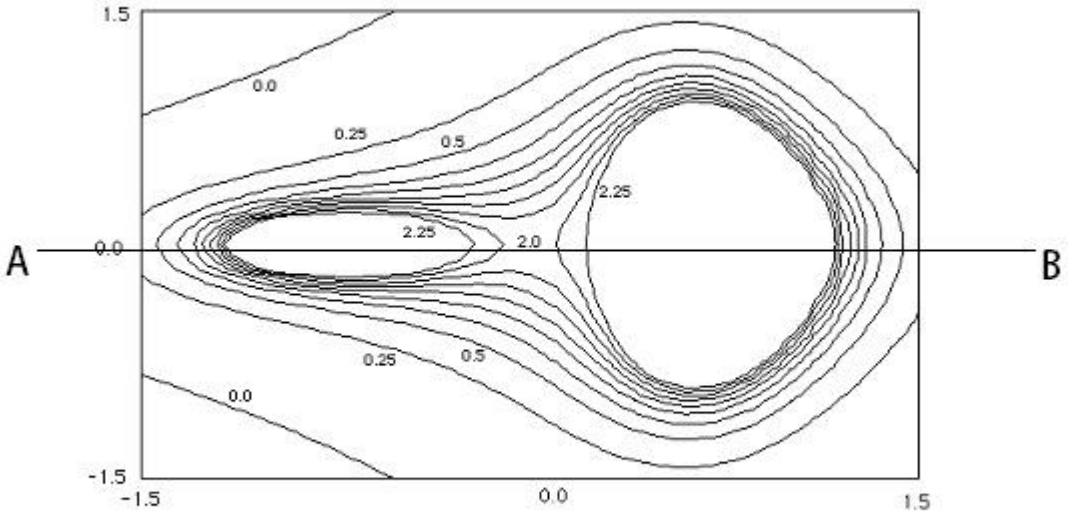
Q.4 **(a)** Recall contour and mention three uses of contour plan with suitable example. **10**

Q.5 **(a)** Following bearings were observed with a compass. Calculate the interior angles. **10**

Line	Fore Bearing
AB	60˚30'
BC	132˚30'
CD	35˚30'
DE	207˚30'
EA	303˚30'

OR

Q.5 (a) Draw a contour profile along line AB as shown in figure. Contour Interval 0.25 km **10**



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