



AE-6013

B. Arch. - I (Sem. II) Examination

May / June - 2015

Surveying & Levelling

("D" Syllabus)

(New Syllabus, New Scheme)

Time : 2 Hours]

[Total Marks : 30

Instructions :

(1)

नीचे दर्शायेव निशानीवाणी विगतो उत्तरवडी पर अवश्य कपनी.
Fillup strictly the details of signs on your answer book.

Name of the Examination :
B. ARCH.-1 (SEM. 2)

Name of the Subject :
Surveying & Levelling (D Syllabus) (New Syllabus, New Scheme)

Subject Code No. : **6 0 1 3** Section No. (1, 2,.....): **Nil**

Seat No. :

Student's Signature

- (2) Assume Suitable data and specifically mention them.
(3) Figures to the right indicate full marks.
(4) Use of Nonprogrammable scientific calculator is permitted

1 Explain following terms : 08
Traverse, chain triangulation, HI, QB, offset, chain edge, station, MSL.

2 Attempt any two : 10

- (a) Tabulate and calculate RL of all the stations if following readings are taken with a 3 m leveling staff. Instrument is shifted after 3rd and 7th reading. Benchmark was taken on a 1st station having 100 m RL.
1.15, 0.525, 1.5, 1.212, 2.45 0.565, 1.55, 2.1, 2.35, 3.00
- (b) Following readings are taken with a prismatic compass for an open traverse. Check if there is any local attraction and correct the bearing :

Line	FB	BB
AB	70° 30'	250° 15'
BC	135° 15'	310° 15'
CD	190° 30'	10° 00'
DE	270° 45'	91° 30'
EF	342° 00'	162° 00'

- (c) Calculate area bounded between Chain line and Boundary using Simpson's method :

<i>Offset(m)</i>	3	4	7	10	8	15	10	4
<i>Chain edge (m)</i>	5	10	15	20	25	30	35	40

3 Write short notes on following : (any **three**) **12**

- (1) Instruments and its use in chain survey.
 - (2) Methods of orientation in plane table surveying.
 - (3) Types of bearings and meridians.
 - (4) Profile levelling.
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