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**RN-6103**

**B. Arch. - II (Sem. III) (ATKT) Examination**

**May / June - 2010**

**Surveying & Levelling  
(Old Course)**

Time : 2 Hours]

[Total Marks : 50

**Instructions :**

(1)

नीचे दृष्टावेक निशानीवाणी विगतो उत्तरवडी पर अवश्य बपवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="B. Arch. - 2 (Sem. 3) (ATKT)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="Surveying &amp; Levelling (Old Course)"/>	<input type="text"/>
Subject Code No. : <input type="text" value="6"/> <input type="text" value="1"/> <input type="text" value="0"/> <input type="text" value="3"/>	<input type="text" value="Student's Signature"/>
Section No. (1, 2,...): <input type="text" value="Nil"/>	

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

- 1 (a) Explain following terms : 4  
base line, FB, offset, Traverse
- (b) Classify surveying. 4
- 2 Attempt any two : 10
  - (a) Tabulate and calculate RL of all the stations if following readings are taken with a 3 m levelling staff. Instrument is shifted after 3<sup>rd</sup> and 6<sup>th</sup> reading. Use any method for calculation of RL. Benchmark was taken on a 1<sup>st</sup> station having 100 m RL.  
0.5, 1.2, 2.5, 3, 1, 0.36, 0.4, 0.5, 0.8
  - (b) The bearings of lines AB, BC and CD are 50°, 100°, and 200° respectively. Compute the internal angles between the lines.
  - (c) Explain type of meridians and Magnetic declination.

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**1**

**[Contd...**

- 3 (a) Calculate area bounded between chain line and boundary using Simpson's Rule : 4

Offset (m)	2	2	4	6	3
Chainedge (m)	5	10	15	20	25

- (b) Explain instruments used in Plane table surveying, its use. 6
- 4 (a) Explain following terms : FS, True Meridian. 5
- (b) Explain types of levelling staff. 5
- 5 Write short notes on following : (any **three**) 12
- (i) Characteristics and use of Contour map
  - (ii) Profile levelling
  - (iii) Instruments used in chain surveying
  - (iv) Chaining.