



SD-6103

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

May / June - 2011

Surveying & Levelling

Time : 2 Hours]

[Total Marks : 50

Instructions :

(1)

नीचे दृष्टावेक निशानीवाणी विगतो उत्तरवडी पर अवश्य लपवी. 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)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="Surveying &amp; Levelling"/>	<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"/>	Section No. (1, 2,.....): <input type="text" value="Nil"/>
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 (a) Explain following terms : 4  
Plain surveying, FB, offset, Ranging.
- (b) Explain the process of ranging. 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 3rd and 5th reading. Use any method for calculation of RL Benchmark was taken on a 1<sup>st</sup> station having 50 m RL. 2.5, 2.15, 1.6, 0.45, 0.55, 0.8, 1.0.
- (b) Following readings are taken with a prismatic compass. Calculate internal angles. Fore bearing of line AB, BC, CD and DE are  $50^{\circ}15'$ ,  $100^{\circ}15'$ ,  $200^{\circ}0'$ ,  $281^{\circ}30'$  respectively.
- (c) Explain principles of surveying.

- 3 (a) Calculate area bounded between chain line and boundray using Simpson's rule. 4

Offset (m)	3	4	3	3	5
Chainedge(m)	5	10	25	30	35

- (b) Explain radiation and traverse methods of plane table surveying. 6
- 4 (a) Explain following terms : MSL, U fork. 5
- (b) Explain the process of levelling. 5
- 5 Write short notes on following : (any **three**) 12
- (1) Use of contour map
  - (2) Division of surveying
  - (3) Magnetic declination
  - (4) Methods of orientation in plane table surveying.

