

SURVEYING LAB FOR ARCHITECTURE AND PLANNING ENGINEERING

ENCE317

Group C

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|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Point | B.S | I.S | F.S | HI(m) | H(m) | Correction | H Corrected(m) | Remark |
| BM1 | 0.488 |   |   | 767.818 | 767.33 | -- | 767.192 |   |
| P1 |   | 0.558 |   |   | 767.26 | -0.138 | 767.122 |   |
| P2 |   | 1.424 |   |   | 766.394 | -0.138 | 766.256 |   |
| P3 | 0.229 |   | 2.318 | 765.729 | 765.5 | -0.138 | 765.362 | Turning Point |
| P4 |   | 1.049 |   |   | 764.68 | -0.276 | 764.404 |   |
| P5 | 1.825 |   | 2.018 | 765.536 | 763.711 | -0.276 | 763.435 | Turning Point |
| a |   | 1.991 |   |   | 763.545 | -0.414 | 763.131 |   |
| b |   | 2.144 |   |   | 763.392 | -0.414 | 762.978 |   |
| P6 |   | 2.923 |   |   | 762.613 | -0.414 | 762.199 |   |
| A | 2.55 |   | 0.112 | 767.974 | 765.424 | -0.414 | 765.01 | Turning Point |
| BM1 |   |   | 0.092 |   | 767.882 | -0.552 | 767.33 |   |
| Sum. | 5.092 | 10.089 | 4.54 |   | 8417.731 |   |   |   |

* **Data Arrangement**
* **Calculations**

 Checks

1. No. of setups= No. of T.P.+1

 4=3+1

1. No. of B.S = No. of F.S

 4=4

1. Sum. B.S – Sum. F.S = Elev. Of the last point - Elev. Of the first point

 5.092 - 4.54= 767.882 - 767.33

 0.552 = 0.552m

1. Sum. Elev. For all points – Elev. Of BM1 = [Sum. (HIi \*( #of IS+ #of FS))] – Sum. IS – Sum FS

 8417.731 - 767.33 =

Misclosure error = 0.552m

Tolerance error = K^1/2 \* C = 9.95mm

Misclosure error < Tolerance error (OK) Field work is accepted and adjusted.