The work deals with the prediction of the concrete lab strength by the development of a model which is formed by considering the different parameters affecting the strength of concrete. The Fisher f-test shows that the values of compressive cube strength predicted by the new regression model are very close to those from the experiment strength values, with f-value of 3.44 at 95% confidence level. Hence this new model of regression is useful in the concrete mix design.

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MATHEMATICAL MODELING FOR PREDICTION OF STRENGTH OF REMIXED CONCRETE

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ABSTRACT:

This paper deals with the methodology, related to application of mathematical model for reuse of partially set old concrete by adding fresh concrete to form serviceable mix by considering their time lags and blend ratios. As Compared to the strength of the freshly prepared concretes the preset concrete obviously gives the reduction in strength. This reduction is further possible to be minimized to a certain extent on blending some quantity of a relatively fresh mix to the existing quantity of the preset mix.

In the statistical methods of concrete mix design in civil engineering the most frequently used models are Scheffe's and Osadebe's models, which are quite suitable for concrete mix optimization but are greatly limited as a predetermined number of experiments must be carried out in order to formulate them and they can only be applied for mix ratios that fall within the predetermined observation points. Ibearugbulem's regression model has been formulated as a new model to take care of these inherent problems in Scheffe's and Osadebe's. Some modifications were made to obtain the new model. This new model has been tested on concrete cubes for different mix ratios for 28 days compressive strengths. The Fisher f-test shows that the values of compressive cube strength predicted by the new regression model are very close to those from the experiment strength values, with f-value of 3.44 at 95% confidence level. Hence this new model of regression is useful in concrete mix design.

Keywords: Statistical technique Response function,Optimization, Ibearugbulem's, Scheffe's,Osadebe's model.

I.INTRODUCTION:

1.1 MODELLINGS

The regression model was used to make inferences about concrete mix through the use of experimental design in other words experimental design as a statistical technique was adopted and used in detail. (Simon et al. 1997)**.** The basic purpose of the experiment is to generate a model which is able by another statistical technique, regression analysis. This is to bring about process optimization(Ahmad & Alghamdi, 2014), for predicting concrete compressive strengths for different concrete mix proportions, adopted for a model possessing a fixed degree of accuracy.

1.2 Polynomial Response Function

Osadebe and Ibearugbulem (State, 2013) quoted that the response function F(B) is given as

$$F(B)= \quad \Sigma\ F^{m}(B_0) \quad \frac{(B_i - B_0)^m}{m!} \quad \text{-----(1)}$$

$0 \leq m \leq \infty$

Since $\Sigma F^{m}(B_0)$ is the derivative of the function $F(B_0)$ to m degree, equation (1) can be written as in equation (2)

$$F(B)= \quad \frac{\Sigma\, d^{m} F(B_0)}{dB_0^{m}} \quad \frac{(B_i - B_0)^m}{m!} \quad \text{-----(2)}$$

$0 \leq m \leq \infty$, $2 \leq m \leq \infty$ The number of terms in equation (2) is dependent on the degree of the polynomial, m and the number of independent variables, i. Consider m equal to 1,then equation (2) can be written as shown in equation (3)

$$F(B)= \quad \frac{\Sigma\, d^0 F(B_0^0)}{dB_0^0} \frac{(B_i-B_0)^0}{0!} + \Sigma \frac{dF(B_0^0)}{dB_0} \frac{(B_i-B_0)^0}{1!} \quad \text{-----(3)}$$

$0 \leq m \leq \infty$, $2 \leq m \leq \infty$, If m=2, then equation (3) can be written as shown in equation (4)

$$F(B)= \frac{\Sigma\, d^0F(B_0^0)}{dB_0^0} \frac{(B_i-B_0)^0}{0!} + \Sigma \frac{dF(B_0^0)}{dB_0} \frac{(B_i-B_0)^0}{1!} + \Sigma \frac{d^2F(B_0^0)}{dB_0^2} \frac{(B_i-B_0)^2}{2!} + \Sigma \frac{d^2F(B_0^0)}{dB_0^2} \frac{(B_i-B_0)(B_i-B_j)}{2!} \quad \text{---(4)}$$

It is assumed that the origin is B_o, which is equal to zero. Since the products and quotients of constants are themselves constants, this equation can be written as shown in equation (5)

$F(B)= \Sigma\, b_m.B_i^m$ ----------(5)

$0 \leq m \leq \infty$, $2 \leq m \leq \infty$

It can be seen from equation (5) that,

For m=0, $b_m = b$-------- (6)

For m=1, $b_m = b_1$------- (7)

For m=2, $b_m = b_{ii}$ (for B_i^2) -------- (8)

$b_m = b_{ij}$ (for B_iB_j) ------ (9)

For m=3, $b_m = b_{iii}$ (for B_i^3) ------- (10)

$b_m = b_{ijk}$ (for $B_iB_jB_k$) ---(11)

$b_m = b_{iij}$ (for $B_i^2B_j$) ------ (12)

$b_m = b_{ijj}$ (for$B_iB_j^2$) ------ (13)

$b_m = b_{iik}$(for $B_i^2 B_k$) ------ (14)

$b_m = b_{ikk}$(for $B_iB_k^2$) ------ (15)

$b_m = b_{jjk}$(for B_j^2)B_k) ------ (16)

$b_m = b_{jkk}$ (for $B_jB_k^2$) ------ (17)

Equation (5) can be written as shown in equation (18)

$F(B) = b_0 + \Sigma b_m.B_i^m$ ---------- (18)

$1 \leq m \leq \infty$, $2 \leq m \leq \infty$

For i=n, $1 \leq m \leq n$---------- (19)

The implication of equation (19) is that the maximum degree of polynomial that can be is used is equal to the number of independent variables, i.

1.3 Boundary Conditions

Both Scheffe and Osadebe and Ibearugbulem (S.O.OBAM, 2006) restricted the summation of the independent variables to unity. That is

$\Sigma B_i = 1$ ---------- (20)

Scheffe (1958) also restricted the value of each arbitrary independent variable to be between zero and one. That is

$0 \leq m \leq 1$---------- (21)

1.4 Ibearugbulem's Regression Model

Multiplying equation (20) by b_o gives equation (22)

$b_o = \Sigma b_o B_i$ ---------- (22)

Multiplying equation (20) by B_i and rearranging the terms gives equation (23)

$B_i^2 = B_i - B_1B_i - B_2B_i$----- $-B_iB_n$ ---------- (23)

Multiplying equation (20) by B_i^r

$B_i^{r+1} = B_i^r - B_1B_i^r - B_2B_i^r$----- $-B_i^rB_n$ -------- (24)

Taking the highest degree of the polynomial and substituting equation (22) and (24) into equation (18) and factorizing, making sure that every term has no independent variable of more than one degree will yield equation (25), which is the new Ibearugbulem's regression model.

$$F(B) = \Sigma x_i B_i + \Sigma x_{ij} B_i B_j + \Sigma x_{ijk} B_i B_j B_k + \text{---} + \Sigma x_{ijk\text{---}\infty} B_i B_j B_{k\text{---}\infty} \text{ --------- (25)}$$

$1 \leq i \leq \infty$, $1 \leq i \leq j \leq \infty$, $1 \leq i \leq j \leq k \leq \infty$------, $1 \leq i \leq j \leq k \leq$------$\infty$

The relationship of number of variables and its function is represented in table 6.55

Table 1: Relationship of Number of Variables and its function

No. of variables (i)	Function =F(B)	Equation
2	$x_1 B_1 + x_2 B_2 + x_{12} B_1 B_2$	(26)
4	$x_1 B_1 + x_2 B_2 + x_3 B_3 + x_4 B_4 + x_{12} B_1 B_2 + x_{13} B_1 B_3 + x_{14} B_1 B_4 + x_{23} B_2 B_3 + x_{24} B_2 B_4 + x_{34} B_3 B_4 + x_{123} B_1 B_2 B_3 + x_{124} B_1 B_2 B_4 + x_{134} B_1 B_3 B_4 + x_{234} B_2 B_3 B_4 + x_{1234} B_1 B_2 B_3 B_4$	(27)
6	$x_1 B_1 + x_2 B_2 + x_3 B_3 + x_4 B_4 + x_5 B_5 + x_6 B_6 + x_{12} B_1 B_2 + x_{13} B_1 B_3 + x_1 x_4 B_1 B_4 + x_{15} B_1 B_5 + x_{16} B_1 B_6 + x_{23} B_2 B_3 + x_{24} B_2 B_4 + x_{25} B_2 B_5 + x_{26} B_3 B_6 + x_{34} B_3 B_4 + x_{35} B_3 B_5 + x_{36} B_3 B_6 + x_{45} B_4 B_5 + x_{46} B_4 B_6$ $+x_{56} B_5 B_6 + x_{123} B_1 B_2 B_3 + x_{124} B_1 B_2 B_4 + x_{125} B_1 B_2 B_5 + x_{126} B_1 B_2 B_6 + x_{134} B_1 B_3 B_4 + x_{135} B_1 B_3 B_5 + x_{136} B_1 B_3 B_6 + x_{145} B_1 B_4 B_5 + x_{146} B_1 B_4 B_6 + x_{156} B_1 B_5 B_6 + x_{234} B_2 B_3 B_4 + x_{235} B_2 B_3 B_5 + x_{236} B_2 B_3 B_6 + x_{245} B_2 B_4 B_5$ $+x_{246} B_2 B_4 B_6 + x_{256} B_2 B_5 B_6 + x_{345} B_3 B_4 B_5 + x_{346} B_3 B_4 B_6 + x_{356} B_3 B_5 B_6 + x_{456} B_4 B_5 B_6 + x_{1234} B_1 B_2 B_3 B_4$ $+x_{1235} B_1 B_2 B_3 B_5 + x_{1236} B_1 B_2 B_3 B_6 + x_{1245} B_1 B_2 B_4 B_5 + x_{1246} B_1 B_2 B_4 B_6 + x_{1256} B_1 B_2 B_5 B_6 + x_{1345} B_1 B_3 B_4 B_5$ $+x_{1346} B_1 B_3 B_4 B_6 + x_{1356} B_1 B_3 B_5 B_6 + x_{1456} B_1 B_4 B_5 B_6 + x_{2345} B_2 B_3 B_4 B_5 + x_{2346} B_2 B_3 B_4 B_6 + x_{2356} B_2 B_3 B_5 B_6 + x_{2456} B_2 B_4 B_5 B_6 + x_{3456} B_3 B_4 B_5 B_6 + x_{12345} B_1 B_2 B_3 B_4 B_5 + x_{12346} B_1 B_2 B_3 B_4 B_6 + x_{12356} B_1 B_2 B_3 B_5 B_6$ $+x_{12456} B_1 B_2 B_4 B_5 B B_6 + x_{13456} B_1 B_3 B_4 B_5 B_6 + x_{23456} B_2 B_3 B_4 B_5 B_6 + x_{123456} B_1 B_2 B_3 B_4 B_5 B_6$	(28)

1.5 Model Equation

For concrete of six components, $1 \leq i \leq 6$, if the total quantity of concrete is designated s, then

$\sum s_i = S$

That is to say, $s_1 + s_2 + s_3 + s_4 + s_5 + s_6 = S$ ---------- (29)

If the total quantity of concrete required here is a unit quantity then it will be wise to divide equation (29) through by s. Hence,

$s_1/s + s_2/s + s_3/s + s_4/s + s_5/s + s_6/s = s/s$ ---------- (30)

So that $B_1 + B_2 + B_3 + B_4 + B_5 + B_6 = 1$ ---------- (31)

1.5.1 Pseudo and Actual Variables

The independent variables used in the regression function (equation (25) are pseudo variables. They are not the actual variables. However, a relationship exists between the pseudo variables, B_i and actual variables, s_i

$B_i = s_i / S$ ---------- (32)

$S = \sum s_i$ ---------- (33)

1.5.2 Coefficients of the Regression Function

$\Sigma R\ F(B) = \Sigma R\ \Sigma x_1\ B_1 + \Sigma R\ \Sigma xij B_1 B$

$1 \leq r \leq n$

$$\begin{vmatrix} \Sigma r\ B_1.\ F(B) \\ \Sigma r\ B_2.\ F(B) \\ \Sigma r\ B_3.\ F(B) \\ : \\ : \\ : \\ : \end{vmatrix} = \begin{vmatrix} \Sigma r\ \Sigma\ B_1.\ B_2 \\ \Sigma r\ \Sigma\ B_2.\ B_2 \\ \Sigma r\ \Sigma\ B_1.\ B_3 \\ - \\ - \\ - \\ - \end{vmatrix} \begin{vmatrix} \Sigma r\ \Sigma\ B_2.\ B_1 \\ \\ \Sigma r\ \Sigma\ B_2.\ B_2 \\ \Sigma r\ \Sigma\ B_2.\ B_3 \\ - \\ - \\ - \\ \Sigma r\ \Sigma\ B_2\ B_1\ B_2.\ B_3. \end{vmatrix} \begin{vmatrix} \Sigma r\ \Sigma\ B_3.B_1 \\ \Sigma r\ \Sigma\ B_3.B_2 \\ \Sigma r\ \Sigma\ B_3.B_3 \\ - \\ - \\ - \\ - \\ \Sigma r\ \Sigma\ B_3.\ B_1.\ B_2.B_3 \end{vmatrix} \begin{vmatrix} x_1 \\ x_2 \\ x_3 \\ - \\ - \\ - \\ - \\ X_{123} \end{vmatrix} \text{----------(34)}$$

----(13)

$\Sigma r\, B_1\, B_2.\, B_3\, F(B)$		$\Sigma r\, \Sigma\, B1\, .B1.\, B2.\, B3.$						

Solving the simultaneous equation of equation (3.35a) will give the values of the coefficients of regression function equation. Equation 13 can be written in a short form as [F(B)B] = [AA] [x]

[AA] is always a symmetric matrix

For a six components, AA is a 63 x 63 matrix as shown below in table 2 A,2,B, 2C, 2D, 2E, 2F, 2G, 2H, 2I, 2J, 2K, 2L, 2M and 2 N

1.6 Application of Ibearugbulem's model: Ibearugbulem's model tested on concrete for lab compressive strength. The concrete constituents are water, ordinary Portland cement that conforming to IS 456 (2007), river sand and coarse aggregates. Batching of the materials was done by mass. The first 12 trial mix ratios are the mixes for formulation of model while the remaining 9 are used as control mixes which are used to test the adequacy of the mode, which are tabulated in table 3 and 4 respectively.

Table 2 A: Elements of matrix [AA] for Observation Point 1-10 for first half

S.No.	Var.	1	2	3	4	5	6	7	8	9	10
1	b1	ΣΣb1b1	ΣΣb7	ΣΣb8	ΣΣb9	ΣΣb10	ΣΣb11	ΣΣb1b7	ΣΣb1b8	ΣΣb1b9	ΣΣb1b10
2	b2	ΣΣb7	ΣΣb2b2	ΣΣb12	ΣΣb13	ΣΣb14	ΣΣb15	ΣΣb2b7	ΣΣb2b8	ΣΣb2b9	ΣΣb2b10
3	b3	ΣΣb8	ΣΣb12	ΣΣb3b3	ΣΣb16	ΣΣb17	ΣΣb18	ΣΣb3b7	ΣΣb3b8	ΣΣb3b9	ΣΣb3b10
4	b4	ΣΣb9	ΣΣb13	ΣΣb16	ΣΣb4b4	ΣΣb19	ΣΣb20	ΣΣb4b7	ΣΣb4b8	ΣΣb4b9	ΣΣb4b10
5	b5	ΣΣb10	ΣΣb14	ΣΣb17	ΣΣb19	ΣΣb5b5	ΣΣb21	ΣΣb5b7	ΣΣb5b8	ΣΣb5b9	ΣΣb5b10
6	b6	ΣΣb11	ΣΣb15	ΣΣb18	ΣΣb20	ΣΣb21	ΣΣb6b6	ΣΣb6b7	ΣΣb6b8	ΣΣb6b9	ΣΣb6b10
7	b7	ΣΣb1b7	ΣΣb2b7	ΣΣb3b7	ΣΣb4b7	ΣΣb5b7	ΣΣb6b7	ΣΣb7b7	ΣΣb7b8	ΣΣb7b9	ΣΣb7b10
8	b8	ΣΣb1b8	ΣΣb2b8	ΣΣb3b8	ΣΣb4b8	ΣΣb5b8	ΣΣb6b8	ΣΣb7b8	ΣΣb8b8	ΣΣb8b9	ΣΣb8b10
9	b9	ΣΣb1b9	ΣΣb2b9	ΣΣb3b9	ΣΣb4b9	ΣΣb5b9	ΣΣb6b9	ΣΣb7b9	ΣΣb8b9	ΣΣb9b9	ΣΣb9b10
10	b10	ΣΣb1b10	ΣΣb2b10	ΣΣb3b10	ΣΣb4b10	ΣΣb5b10	ΣΣb6b10	ΣΣb7b10	ΣΣb8b10	ΣΣb9b10	ΣΣb10b10
11	b11	ΣΣb1b11	ΣΣb2b11	ΣΣb3b11	ΣΣb4b11	ΣΣb5b11	ΣΣb6b11	ΣΣb7b11	ΣΣb8b11	ΣΣb9b11	ΣΣb10b11
12	b12	ΣΣb1b12	ΣΣb2b12	ΣΣb3b12	ΣΣb4b12	ΣΣb5b12	ΣΣb6b12	ΣΣb7b12	ΣΣb8b12	ΣΣb9b12	ΣΣb10b12
13	b13	ΣΣb1b13	ΣΣb2b13	ΣΣb3b13	ΣΣb4b13	ΣΣb5b13	ΣΣb6b13	ΣΣb7b13	ΣΣb8b13	ΣΣb9b13	ΣΣb10b13
14	b14	ΣΣb1b14	ΣΣb2b14	ΣΣb3b14	ΣΣb4b14	ΣΣb5b14	ΣΣb6b14	ΣΣb7b14	ΣΣb8b14	ΣΣb9b14	ΣΣb10b14
15	b15	ΣΣb1b15	ΣΣb2b15	ΣΣb3b15	ΣΣb4b15	ΣΣb5b15	ΣΣb6b15	ΣΣb7b15	ΣΣb8b15	ΣΣb9b15	ΣΣb10b15
16	b16	ΣΣb1b16	ΣΣb2b16	ΣΣb3b16	ΣΣb4b16	ΣΣb5b16	ΣΣb6b16	ΣΣb7b16	ΣΣb8b16	ΣΣb9b16	ΣΣb10b16
17	b17	ΣΣb1b17	ΣΣb2b17	ΣΣb3b17	ΣΣb4b17	ΣΣb5b17	ΣΣb6b17	ΣΣb7b17	ΣΣb8b17	ΣΣb9b17	ΣΣb10b17
18	b18	ΣΣb1b18	ΣΣb2b18	ΣΣb3b18	ΣΣb4b18	ΣΣb5b18	ΣΣb6b18	ΣΣb7b18	ΣΣb8b18	ΣΣb9b18	ΣΣb10b18
19	b19	ΣΣb1b19	ΣΣb2b19	ΣΣb3b19	ΣΣb4b19	ΣΣb5b19	ΣΣb6b19	ΣΣb7b19	ΣΣb8b19	ΣΣb9b19	ΣΣb10b19
20	b20	ΣΣb1b20	ΣΣb2b20	ΣΣb3b20	ΣΣb4b20	ΣΣb5b20	ΣΣb6b20	ΣΣb7b20	ΣΣb8b20	ΣΣb9b20	ΣΣb10b20
21	b21	ΣΣb1b21	ΣΣb2b21	ΣΣb3b21	ΣΣb4b21	ΣΣb5b21	ΣΣb6b21	ΣΣb7b21	ΣΣb8b21	ΣΣb9b21	ΣΣb10b21
22	b3b7	ΣΣb7b8	ΣΣb7b12	bΣΣ3b3b7	ΣΣb7b16	ΣΣb7b17	ΣΣb18b7	ΣΣb3b7b7	ΣΣb3b7b8	ΣΣb3b7b9	ΣΣb3b7b10
23	b4b7	ΣΣb7b9	ΣΣb7b13	ΣΣb7b16	ΣΣb4b4b7	ΣΣb7b19	ΣΣb20b7	ΣΣb4b7b7	ΣΣb4b7b8	ΣΣb4b7b9	ΣΣb4b7b10
24	b5b7	ΣΣb7b10	ΣΣb7b14	ΣΣb7b17	ΣΣb7b19	ΣΣb5b5b7	ΣΣb21b7	ΣΣb5b7b7	ΣΣb5b7b8	ΣΣb5b7b9	ΣΣb5b7b10
25	b6b7	ΣΣb1b6b7	ΣΣb7b15	ΣΣb7b18	ΣΣb7b20	ΣΣb7b21	ΣΣb6b6b7	ΣΣb5b7b7	ΣΣb6b7b8	ΣΣb6b7b9	ΣΣb6b7b10
26	b4b8	ΣΣb1b4b8	ΣΣb8b13	ΣΣb8b16	ΣΣb4b4b8	ΣΣb8b19	ΣΣb8b20	ΣΣb4b7b7	ΣΣb4b8b8	ΣΣb4b8b9	ΣΣb4b8b10
27	b5b8	ΣΣb1b5b8	ΣΣb8b14	ΣΣb8b17	ΣΣb8b19	ΣΣb5b5b8	ΣΣb8b21	ΣΣb4b7b8	ΣΣb5b8b8	ΣΣb5b8b9	ΣΣb5b8b10
28	b6b8	ΣΣb1b6b8	ΣΣb8b15	ΣΣb8b18	ΣΣb8b20	ΣΣb8b21	ΣΣb6b6b8	ΣΣb5b7b8	ΣΣb6b8b8	ΣΣb6b8b9	ΣΣb6b8b10
29	b5b9	ΣΣb1b5b9	ΣΣb9b14	ΣΣb9b17	ΣΣb9b19	ΣΣb5b5b9	ΣΣb9b21b	ΣΣb6b7b8	ΣΣb5b8b9	ΣΣb5b9b9	ΣΣb5b9b10
30	b6b9	ΣΣb6b9	ΣΣb9b15	ΣΣb9b18	ΣΣb9b20	ΣΣb9b21	ΣΣb6b6b9	ΣΣb6b7b9	ΣΣb6b8b9	ΣΣb6b9b9	ΣΣb6b9b10

Table 2 B: Elements of matrix [AA] for Observation Point 1-10 for second half

S.No.	Var.	1	2	3	4	5	6	7	8	9	10
31	b6b10	ΣΣb6b10	ΣΣb10b15	ΣΣb1018	ΣΣb10b20	ΣΣb10b21	ΣΣb6b6b10	ΣΣb6b7b10	ΣΣb6b8b10	ΣΣb6b9b10	ΣΣb6b10b10
32	b4b12	ΣΣb9b12	ΣΣb12b13	ΣΣb12b16	ΣΣb4b4b12	ΣΣb12b19	ΣΣb12b20	ΣΣb4b7b12	ΣΣb4b8b12	ΣΣb4b9b12	ΣΣb4b10b12
33	b5b12	ΣΣb10b12	ΣΣb12b14	ΣΣb12b17	ΣΣb12b19	ΣΣb5b5b12	ΣΣb12b21	ΣΣb5b7b12	ΣΣb5b8bb12	ΣΣb5b9b12	ΣΣb5b10b12
34	b6b12	ΣΣb11b12	ΣΣb12b15	ΣΣb12b18	ΣΣb12b20	ΣΣb12b21	ΣΣb6b6b12	ΣΣb6b7b12	ΣΣb6b8b12	ΣΣb6b9b12	ΣΣb6b10b12
35	b5b13	ΣΣb10b13	ΣΣb13b14	ΣΣb13b17	ΣΣb13b19	ΣΣb5b5b13	ΣΣb13b21	ΣΣb5b7b13	ΣΣb5b8b13	ΣΣb5b9b13	ΣΣb5b10b13
36	b6b13	ΣΣb1b22	ΣΣb2b22	ΣΣb3b22	ΣΣb4b22	ΣΣb5b22	ΣΣb6b22	ΣΣb7b22	ΣΣb8b22	ΣΣb9b22	ΣΣb10b22
37	b6b14	ΣΣb7b11	ΣΣb7b16	ΣΣb3b3b8	ΣΣb7b16	ΣΣb7b21	ΣΣb18b8	ΣΣb3b7b7	ΣΣb3b7b8	ΣΣb3b7b9	ΣΣb3b7b10
38	b5b16	ΣΣb7b12	ΣΣb7b17	ΣΣb7b19	ΣΣb4b4b8	ΣΣb7b23	ΣΣb20b8	ΣΣb4b7b7	ΣΣb4b7b8	ΣΣb4b7b9	ΣΣb4b7b10
39	b6b16	ΣΣb7b13	ΣΣb7b18	ΣΣb7b20	ΣΣb7b21	ΣΣb5b5b8	ΣΣb21b8	ΣΣb5b7b7	ΣΣb5b7b8	ΣΣb5b7b9	ΣΣb5b7b10
40	b6b17	ΣΣb1b6b8	ΣΣb7b19	ΣΣb7b21	ΣΣb7b22	ΣΣb7b21	ΣΣb6b6b8	ΣΣb5b7b7	ΣΣb6b7b8	ΣΣb6b7b9	ΣΣb6b7b10
41	b6b19	ΣΣb11b19	ΣΣb15b19	ΣΣb18b19	ΣΣb19b20	ΣΣb19b21	ΣΣb6b6b19	ΣΣb6b7b19	ΣΣb6b8b19	ΣΣb6b9b19	ΣΣb6b10b19
42	b7b16	ΣΣb1b7b16	ΣΣb2b7b16	ΣΣb3b7b16	ΣΣb4b716	ΣΣb5b7b16	ΣΣb6b7b16	ΣΣb7b7b16	ΣΣb7b8b19	ΣΣb7b9b16	ΣΣb7b10b16
43	b7b17	ΣΣb1b7b17	ΣΣb2b7b17	ΣΣb3b7b17	ΣΣb4b717	ΣΣb5b7b17	ΣΣb6b7b17	ΣΣb7b7b17	ΣΣb7b8b17	ΣΣb7b9b17	ΣΣ7b10b17
44	b7b18	ΣΣb1b7b18	ΣΣb2b7b18	ΣΣb3b7b18	ΣΣb4b718	ΣΣb5b7b18	ΣΣb6b7b18	ΣΣb7b7b18	ΣΣb7b8b18	ΣΣb7b9bb18	ΣΣb7b10b18
45	b7b19	ΣΣb1b7b19	ΣΣb2b7b19	ΣΣb3b7b19	ΣΣb4b719	ΣΣb5b7b19	ΣΣb6b7b19	ΣΣb7b7b19	ΣΣb7b8b19	ΣΣb7b9b19	ΣΣb7b10b19
46	b7b20	ΣΣb1b7b20	ΣΣb2b7b20	ΣΣb3b7b20	ΣΣb4b720	ΣΣb5b7b20	ΣΣb6b7b20	ΣΣb7b7b20	ΣΣb7b8b20	ΣΣb7b9b20	ΣΣb7b10b20
47	b7b21	ΣΣb1b7b21	ΣΣb2b7b21	ΣΣb3b7b21	ΣΣb4b721	ΣΣb5b7b21	ΣΣb6b7b21	ΣΣb7b7b21	ΣΣb7b8b21	ΣΣb7b9b21	ΣΣb7b10b21
48	b8b19	ΣΣb1b8b19	ΣΣb2b8b19	ΣΣb3b8b19	ΣΣb4b8b19	ΣΣb5b8b19	ΣΣb6b8b19	ΣΣb7b8b19	ΣΣb8b8b19	ΣΣb8b9b19	ΣΣb8b10b19
49	b8b20	ΣΣb1b8b20	ΣΣb2b8b20	ΣΣb3b8b20	ΣΣb4b8b20	ΣΣb5b8b20	ΣΣb6b8b20	ΣΣb7b8b20	ΣΣb8b8b20	ΣΣb8b9b20	ΣΣb8b10b20
50	b8b21	ΣΣb1b8b21	ΣΣb2b8b21	ΣΣb3b8b21	ΣΣb4b8b21	ΣΣb5b8b21	ΣΣb6b8b21	ΣΣb7b8b21	ΣΣb8b8b21	ΣΣb8b9b21	ΣΣb8b10b21
51	b9b21	ΣΣb1b9b21	ΣΣb2b9b21	ΣΣb3b8b22	ΣΣb4b9b21	ΣΣb5b9b21	ΣΣb6b9b21	ΣΣb7b9b21	ΣΣb8b9b21	ΣΣb9b9b21	ΣΣb9b10b21
52	b12b19	ΣΣb1b12b19	ΣΣb2b12b19	ΣΣb3b12b19	ΣΣb4b12b19	ΣΣb5b12b19	ΣΣb6b12b19	ΣΣb7b12b19	ΣΣb8b12b19	ΣΣb9b12b19	ΣΣb10b12b19
53	b12b20	ΣΣb1b12b20	ΣΣb2b12b20	ΣΣb3b12b20	ΣΣb4b12b20	ΣΣb5b12b20	ΣΣb6b12b20	ΣΣb7b12b20	ΣΣb8b12b20	ΣΣb9b12b20	ΣΣb10b12b20
54	b12b21	ΣΣb1b12b21	ΣΣb2b12b21	ΣΣb3b12b21	ΣΣb4b12b21	ΣΣb5b12b21	ΣΣb6b12b21	ΣΣb7b12b21	ΣΣb8b12b21	ΣΣb9b12b21	ΣΣb10b12b21
55	b13b21	ΣΣb1b13b21	ΣΣb2b13b21	ΣΣb3b13b21	ΣΣb4b13b21	ΣΣb5b13b21	ΣΣb6b13b21	ΣΣb7b13b21	ΣΣb8b13b21	ΣΣb9b13b21	ΣΣb10b13b21
56	b16b21	ΣΣb1b16b21	ΣΣb2b16b21	ΣΣb3b16b21	ΣΣb4b16b21	ΣΣb5b16b21	ΣΣb6b16b21	ΣΣb7b16b21	ΣΣb8b16b21	ΣΣb9b16b21	ΣΣb10b16b21
57	b5b7b16	ΣΣb7b10b16	ΣΣb7b14b16	ΣΣb7b16b17	ΣΣb7b16b19	ΣΣb5b5b7b16	ΣΣb7b16b21	ΣΣb5b7b7b16	ΣΣb5b7b8b16	ΣΣb5b7b9b16	ΣΣb5b7b10b16
58	b6b7b16	ΣΣb7b11b16	ΣΣb7b15b16	ΣΣb7b16b18	ΣΣb7b16b20	ΣΣb7b16b21	ΣΣb6b6b7b16	ΣΣb6b7b7b16	ΣΣb6b7b8b16	ΣΣb6b7b9b16	ΣΣb6b7b10b16
59	b6b7b17	ΣΣb7b11b17	ΣΣb7b15b17	ΣΣb7b17b18	ΣΣb7b17b20	ΣΣb7b17b21	ΣΣb6b6b7b17	ΣΣb6b7b7b17	ΣΣb6b7b8b17	ΣΣb6b7b9b17	ΣΣb6b7b10b17
60	b6b7b19	ΣΣb7b11b19	ΣΣb7b15b19	ΣΣb7b18b19	ΣΣb7b19b20	ΣΣb7b19b21	ΣΣb6b6b7b19	ΣΣb6b7b7b19	ΣΣb6b7b8b19	ΣΣb6b7b9b19	ΣΣb6b7b10b19
61	b6b8b19	ΣΣb8b11b19	ΣΣb8b15b19	ΣΣb8b18b19	ΣΣb8b19b20	ΣΣb8b19b21	ΣΣb6b6bb8b19	ΣΣb6b7b8b1b9	ΣΣb6b8b8b19	ΣΣb6b8b9b19	ΣΣb6b8b10b19
62	b6b12b19	ΣΣb11b12b19	ΣΣb12b15b19	ΣΣb12b18b19	ΣΣb12b19b20	ΣΣb12b19b21	ΣΣb6b6b12b19	ΣΣb6b7b12b19	ΣΣb6b8b12b19	ΣΣb6b9b12b19	ΣΣb6b10b12b19
63	b7b16b21	ΣΣb1b7b16b21	ΣΣb2b7b16b21	ΣΣb3b7b16b21	ΣΣb4b7b16b21	ΣΣb5b7b16b21	ΣΣb6b7b16b21	ΣΣb6b7b7b16b21	ΣΣb7b8b16b21	ΣΣb7b9b16b21	ΣΣb7b10b16b21

Table 2 C: Elements of matrix [AA] for Observation Point 11-20 for first half

S.No.	Var.	11	12	13	14	15	16	17	18	19	20
1	b1	ΣΣb1b11	ΣΣb1b12	ΣΣb1b13	ΣΣb1b14	ΣΣb1b15	ΣΣb1b16	ΣΣb1b17	ΣΣb1b18	ΣΣb1b19	ΣΣb1b20
2	b2	ΣΣb2b11	ΣΣb2b12	ΣΣb2b13	ΣΣb2b14	ΣΣb2b15	ΣΣb2b16	ΣΣb2b17	ΣΣb2b18	ΣΣb2b19	ΣΣb2b20
3	b3	ΣΣb3b11	ΣΣb3b12	ΣΣb3b13	ΣΣb3b14	ΣΣb3b15	ΣΣb3b16	ΣΣb3b17	ΣΣb3b18	ΣΣb3b19	ΣΣb3b20
4	b4	ΣΣb4b11	ΣΣb4b12	ΣΣb4b13	ΣΣb4b14	ΣΣb4b15	ΣΣb4b16	ΣΣb4b17	ΣΣb4b18	ΣΣb4b19	ΣΣb4b20
5	b5	ΣΣb5b11	ΣΣb5b12	ΣΣb5b13	ΣΣb5b14	ΣΣb5b15	ΣΣb5b16	ΣΣb5b17	ΣΣb5b18	ΣΣb5b19	ΣΣb5b20
6	b6	ΣΣb6b11	ΣΣb6b12	ΣΣb6b13	ΣΣb6b14	ΣΣb6b15	ΣΣb6b16	ΣΣb6b17	ΣΣb6b18	ΣΣb6b19	ΣΣb6b20
7	b7	ΣΣb7b11	ΣΣb7b12	ΣΣb7b13	ΣΣb7b14	ΣΣb7b15	ΣΣb7b16	ΣΣb7b17	ΣΣb7b18	ΣΣb7b19	ΣΣb7b20
8	b8	ΣΣb8b11	ΣΣb8b12	ΣΣb8b13	ΣΣb8b14	ΣΣb8b15	ΣΣb8b16	ΣΣb8b17	ΣΣb8b18	ΣΣb8b19	ΣΣb8b20
9	b9	ΣΣb9b11	ΣΣb9b12	ΣΣb9b13	ΣΣb9b14	ΣΣb9b15	ΣΣb9b16	ΣΣb9b17	ΣΣb9b18	ΣΣb9b19	ΣΣb9b20
10	b10	ΣΣb10b11	ΣΣb10b12	ΣΣb10b13	ΣΣb10b14	ΣΣb10b15	ΣΣb10b16	ΣΣb10b17	ΣΣb10b18	ΣΣb10b19	ΣΣb10b20
11	b11	ΣΣb11b11	ΣΣb11b12	ΣΣb11b13	ΣΣb11b14	ΣΣb11b15	ΣΣb11b16	ΣΣb11b17	ΣΣb11b18	ΣΣb11b19	ΣΣb11b20
12	b12	ΣΣb11b12	ΣΣb12b12	ΣΣb12b13	ΣΣb12b14	ΣΣb12b15	ΣΣb12b16	ΣΣb12b17	ΣΣb12b18	ΣΣb12b19	ΣΣb12b20
13	b13	ΣΣb11b13	ΣΣb12b13	ΣΣb13b13	ΣΣb13b14	ΣΣb13b15	ΣΣb13b16	ΣΣb13b17	ΣΣb13b18	ΣΣb13b19	ΣΣb13b20
14	b14	ΣΣb11b14	ΣΣb12b14	ΣΣb13b14	ΣΣb14b14	ΣΣb14b15	ΣΣb14b16	ΣΣb14b17	ΣΣb14b18	ΣΣb14b19	ΣΣb14b20
15	b15	ΣΣb11b15	ΣΣb12b15	ΣΣb13b15	ΣΣb14b15	ΣΣb15b15	ΣΣb15b16	ΣΣb15b17	ΣΣb15b18	ΣΣb15b19	ΣΣb15b20
16	b16	ΣΣb11b16	ΣΣb12b16	ΣΣb13b16	ΣΣb14b16	ΣΣb15b16	ΣΣb16b16	ΣΣb16b17	ΣΣb16b18	ΣΣb16b19	ΣΣb16b20
17	b17	ΣΣb11b17	ΣΣΣΣb12b17	ΣΣb13b17	ΣΣb14b17	ΣΣb15b17	ΣΣb16b17	ΣΣb17b17	ΣΣb17b18	ΣΣb17b19	ΣΣb17b20
18	b18	ΣΣb11b18	ΣΣb12b18	ΣΣb13b18	ΣΣb14b18	ΣΣb15b18	ΣΣb16b18	ΣΣb17b18	ΣΣb18b18	ΣΣb18b19	ΣΣb18b20
19	b19	ΣΣb11b19	ΣΣb12b19	ΣΣb13b19	ΣΣb14b19	ΣΣb15b19	ΣΣb16b19	ΣΣb17b19	ΣΣb18b19	ΣΣb19b19	ΣΣb19b20
20	b20	ΣΣb11b20	ΣΣb12b20	ΣΣb13b20	ΣΣb14b20	ΣΣb15b20	ΣΣb16b20	ΣΣb17b20	ΣΣb18b20	ΣΣb19b20	ΣΣb20b20
21	b21	ΣΣb11b21	ΣΣb12b21	ΣΣb1b22	ΣΣb2b22	ΣΣb3b22	ΣΣb6b22	ΣΣb5b22	ΣΣb6b22	ΣΣb7b22	ΣΣb1b22
22	b3b7	ΣΣb3b7b11	ΣΣb3b7b12	ΣΣb7b16	ΣΣb7b20	ΣΣb3b3b8	ΣΣb7b18	ΣΣb7b19	ΣΣb18b8	ΣΣb3b7b13	ΣΣb7b16
23	b4b7	ΣΣb4b7b11	ΣΣb4b7b12	ΣΣb7b9	ΣΣb7b13	ΣΣb7b16	ΣΣb4b4b8	ΣΣb7b19	ΣΣb20b8	ΣΣb4b7b13	ΣΣb7b9
24	b5b7	ΣΣb5b7b11	ΣΣb5b7b12	ΣΣb7b10	ΣΣb7b14	ΣΣb7b17	ΣΣb7b19	ΣΣb5b5b8	ΣΣb21b8	ΣΣb5b7b13	ΣΣb7b10
25	b6b7	ΣΣb6b7bb11	ΣΣb6b7b12	ΣΣb1b6b8	ΣΣb7b15	ΣΣb7b18	ΣΣb7b20	ΣΣb7b21	ΣΣb6b6b8	ΣΣb5b7b7	ΣΣb1b6b8
26	b4b8	ΣΣb4b8b11	ΣΣb4b8b12	ΣΣb1b4b9	ΣΣb8b19	ΣΣb8b22	ΣΣb4b4b9	ΣΣb8b21	ΣΣb8b22	ΣΣb4b7b7	ΣΣb1b4b9
27	b5b8	ΣΣb5b8b11	ΣΣb5b8b12	ΣΣb1b5b9	ΣΣb8b14	ΣΣb8b17	ΣΣb8b19	ΣΣb5b5b9	ΣΣb8b21	ΣΣb4b7b8	ΣΣb1b5b9
28	b6b8	ΣΣb6b8b11	ΣΣb6b8b12	ΣΣb1b6b9	ΣΣb8b15	ΣΣb8b18	ΣΣb8b20	ΣΣb8b21	ΣΣb6b6b9	ΣΣb5b7b9	ΣΣb1b6b9
29	b5b9	ΣΣb5b9b11	ΣΣb5b9b12	ΣΣb1b5b10	ΣΣb9b14	ΣΣb9b17	ΣΣb9b19	ΣΣb5b5b10	ΣΣb9b21b	ΣΣb6b7b8	ΣΣb1b5b10
30	b6b9	ΣΣb6b9b11	ΣΣb6b9b12	ΣΣb6b9	ΣΣb9b15	ΣΣb9b18	ΣΣb9b20	ΣΣb9b21	ΣΣb6b6b9	ΣΣb6b7b9	ΣΣb6b9

Table 2 D: Elements of matrix [AA] for Observation Point 11-20 for second half

S.N	Var.	11	12	13	14	15	16	17	18	19	20
31	b6b10	ΣΣb6b10b11	ΣΣb6b10b12	ΣΣb6b10	ΣΣb10b16	ΣΣb10l9	ΣΣb10b22	ΣΣb10b23	ΣΣb6b6b10	ΣΣb6b7b10	ΣΣb6b10
32	b4b12	ΣΣb4b11b12	ΣΣb4b12b12	ΣΣb9b13	ΣΣb12b19	ΣΣb12b22	ΣΣb4b4b13	ΣΣb12b21	ΣΣb12b22	ΣΣb4b7b13	ΣΣb9b13
33	b5b12	ΣΣb5b11b12	ΣΣb5b12b12	ΣΣb10b13	ΣΣb12b14	ΣΣb12b17	ΣΣb12b19	ΣΣb5b5b13	ΣΣb12b21	ΣΣb5b7b13	ΣΣb10b13
34	b6b12	ΣΣb6b11b12	ΣΣb6b12b12	ΣΣb11b13	ΣΣb12b15	ΣΣb12b18	ΣΣb12b20	ΣΣb12b21	ΣΣb6b6b13	ΣΣb6b7b13	ΣΣb11b13
35	b5b13	ΣΣb5b11b13	ΣΣb5b12b13	ΣΣb10b14	ΣΣb13b14	ΣΣb13b17	ΣΣb13b19	ΣΣb5b5b14	ΣΣb13b22	ΣΣb5b7b14	ΣΣb10b14
36	b6b13	ΣΣb11b22	ΣΣb12b22	ΣΣb1b23	ΣΣb2b23	ΣΣb3b23	ΣΣb4b23	ΣΣb5b23	ΣΣb6b23	ΣΣb7b23	ΣΣb1b23
37	b6b14	ΣΣb3b7b11	ΣΣb3b7b12	ΣΣb7b16	ΣΣb7b20	ΣΣb3b3b9	ΣΣb7b18	ΣΣb7b19	ΣΣb18b9	ΣΣb3b7b14	ΣΣb7b21
38	b5b16	ΣΣb4b7b11	ΣΣb4b7b12	ΣΣb7b9	ΣΣb7b13	ΣΣb7b19	ΣΣb4b4b9	ΣΣb7b19	ΣΣb20b9	ΣΣb4b7b14	ΣΣb7b12
39	b6b16	ΣΣb5b7b11	ΣΣb5b7b12	ΣΣb7b10	ΣΣb7b14	ΣΣb7b20	ΣΣb7b21	ΣΣb5b5b9	ΣΣb21b9	ΣΣb5b7b1	ΣΣb7b13
40	b6b17	ΣΣb6b7bb12	ΣΣb6b7b13	ΣΣb1b6b9	ΣΣb7b15	ΣΣb7b21	ΣΣb7b22	ΣΣb7b21	ΣΣb6b6b9	ΣΣb5b7b5	ΣΣb1b6b9
41	b6b19	ΣΣb6b11b19	ΣΣb6b12b19	ΣΣb6b13b19	ΣΣb6b14b19	ΣΣb6b15b19	ΣΣb6b16b19	ΣΣb6b17b19	ΣΣb6b19b18	ΣΣb6b19b19	ΣΣb6b19b20
42	b7b16	ΣΣb7b11b16	ΣΣb7b12b16	ΣΣb7b13b16	ΣΣb7b14b16	ΣΣb7b15b16	ΣΣb7bb1616	ΣΣb7b16b17	ΣΣb7b16b18	ΣΣb7b16b19	ΣΣb7b16b20
43	b7b17	ΣΣb7b11b17	ΣΣb7b12b17	ΣΣb7b13b17	ΣΣb7b14b17	ΣΣb7b15b17	ΣΣb7b16b17	ΣΣb7b17b17	ΣΣb7b17b18	ΣΣb7b17b19	ΣΣb7b17b20
44	b7b18	ΣΣb7b11b18	ΣΣb7b12b17	ΣΣb7b13b18	ΣΣb7b14b18	ΣΣb7b15b18	ΣΣb7b16b18	ΣΣb7b17b18	ΣΣb7b18b18	ΣΣb7b18b19	ΣΣb7b18b20
45	b7b19	ΣΣb7b11b19	ΣΣb7b12b19	ΣΣb713b19	ΣΣb7b14b19	ΣΣb7b15b19	ΣΣb7b16b19	ΣΣb7b17b19	ΣΣb7b18b19	ΣΣb7b19b19	ΣΣb7b19b20
46	b7b20	ΣΣb7b11b20	ΣΣb7b12b20	ΣΣb7b13b20	ΣΣb7b14b20	ΣΣb7b15b20	ΣΣb7b16b20	ΣΣb7b17b20	ΣΣb7b18b20	ΣΣb7b19b20	ΣΣb7b20b20
47	b7b21	ΣΣb7b11b21	ΣΣb7b1b2b21	ΣΣb7b13b21	ΣΣb7b14b21	ΣΣb7b15b15b21	ΣΣb7b16b21	ΣΣb7b17b21	ΣΣb7b18b21	ΣΣb7b19b21	ΣΣb7b21b20
48	b8b19	ΣΣb8b11b19	ΣΣb8b12b19	ΣΣb8b13b19	ΣΣb8b14b19	ΣΣb8b15b19	ΣΣb8bb1619	ΣΣb8b17b19	ΣΣb8b18b19	ΣΣb8b19b19	ΣΣb8b19b20
49	b8b20	ΣΣb8b11b120	ΣΣb8b12b20	ΣΣb8b13b20	ΣΣb8b14b20	ΣΣb8b15b20	ΣΣb8b16b20	ΣΣb8b17b20	ΣΣb8b18b20	ΣΣb8b19b20	ΣΣb8b20b20
50	b8b21	ΣΣb8b11b21	ΣΣb8b12b21	ΣΣb8b13b21	ΣΣb8b14b21	ΣΣb8b15b21	ΣΣb8b16b21	ΣΣb8b17b21	ΣΣb8b18b21	ΣΣb8b19b21	ΣΣb8b20b21
51	b9b21	ΣΣb9b11b21	ΣΣb9b12b21	ΣΣb9b13b21	ΣΣb9b14b21	ΣΣb9b15b21	ΣΣb9b16b21	ΣΣb9b17b21	ΣΣb9b18b21	ΣΣb9b19b21	ΣΣb9b20b21
52	b12b19	ΣΣb11b12b19	ΣΣb12b12b19	ΣΣb12b13b19	ΣΣb12b14b19	ΣΣb12b15b19	ΣΣb12b16b19	ΣΣb12b17b19	ΣΣb12b18b19	ΣΣb12b19b19	ΣΣb12b19b20
53	b12b20	ΣΣb11b12b20	ΣΣb12b12b20	ΣΣb12b13b20	ΣΣb12b14b20	ΣΣb12b15b20	ΣΣb12b16b20	ΣΣb12b17b20	ΣΣb12b18b20	ΣΣb12b19b20	ΣΣb12b20b20
54	b12b21	ΣΣb11b12b21	ΣΣb12b12b21	ΣΣb12b13b21	ΣΣb12b14b21	ΣΣb12b15b21	ΣΣb12b16b21	ΣΣb12b17b21	ΣΣb12b18b21	ΣΣb12b19b21	ΣΣb12b20b21
55	b13b21	ΣΣb11b13b21	ΣΣb12b13b21	ΣΣb13b13b21	ΣΣb13b14b21	ΣΣb13b15b21	ΣΣb13b16b21	ΣΣb13b17b21	ΣΣb13b18b21	ΣΣb13b19b21	ΣΣb13b20b21
56	b16b21	ΣΣb11b16b21	ΣΣb12b16b21	ΣΣb13b16b21	ΣΣb16b14b21	ΣΣb16b15b21	ΣΣb16ΣΣb16b21	ΣΣb16b17b21	ΣΣb16b18b21	ΣΣb16b19b21	ΣΣb16b20b21
57	b5b7b16	ΣΣb5b7b11b16	ΣΣb5b7b12b16	ΣΣb5b7b13b16	ΣΣb5b7b14b16	ΣΣb5b7b15b16	ΣΣb5b7b16b16	ΣΣb5b7b16b17	ΣΣb5b7b16b18	ΣΣb5b7b16b19	ΣΣb5b7b16b20
58	b6b7b16	ΣΣb6b7b11b16	b6b7b12b16	ΣΣb6b7b13b16	ΣΣb6b7b14b16	ΣΣb6b7b15b16	ΣΣb6b7b16b16	ΣΣb6b7b16b17	ΣΣb6b7b16b18	ΣΣb6b7b16b19	ΣΣb6b7b16b20
59	b6b7b17	ΣΣb6b7b11b17	ΣΣb6b7b12b17	ΣΣb6b7b13b17	ΣΣb6b7b14b17	ΣΣb6b7b15b17	ΣΣb6b7b16b17	ΣΣb6b7b17b17	ΣΣb6b7b17b18	ΣΣb6b7b17b19	ΣΣb6b7b17b20
60	b6b7b19	ΣΣb6b7b11b19	ΣΣb6b7b12b19	ΣΣb6b7b13b19	ΣΣb6b7b14b19	ΣΣb6b7b15b19	ΣΣb6b7b16b19	ΣΣb6b7b17b19	ΣΣb6b7b18b19	ΣΣb6b7b19b19	ΣΣb6b7b19b20
61	b6b8b19	ΣΣb6b8b11b19	b6b8b12b19	ΣΣb6b8b13b19	ΣΣb6b8b14b19	ΣΣb6b8b15b19	ΣΣb6b8b16b19	ΣΣb6b8b17b19	ΣΣb6b8b18b19	ΣΣb6b8b19b19	ΣΣb6b8b19b20
62	b6b12b19	ΣΣb6b11b12b19	ΣΣb6b12b12b19	ΣΣb6b12b13b19	ΣΣb6b12b14b19	ΣΣb6b12b15b19	ΣΣb6b12b16b19	ΣΣb6b12b17b19	ΣΣb6b12b18b19	ΣΣb6b12b19	ΣΣb6b12b19b20
63	b7b16b21	ΣΣb7b11b16b21	ΣΣb7b12b16b21	ΣΣb7b13b16b21	ΣΣb7b14b16b21	ΣΣb7b15b16b21	ΣΣb7b16b16b21	ΣΣb7b16b17b21	ΣΣb7b16bb1821	ΣΣb7b16b19b21	ΣΣb7b16b20b21

Table 2 E: Elements of matrix [AA] for Observation Point 21-30 for first half

S.No.	Var.	21	22	23	24	25	26	27	28	29	30
1	b1	ΣΣb1b21	ΣΣb7b8	ΣΣb7b9	ΣΣb7b10	ΣΣb1b6b7	ΣΣb1b4b8	ΣΣb1b5b8	ΣΣb1b6b8	ΣΣb1b5b9	ΣΣb6b9
2	b2	ΣΣb2b21	ΣΣb7b12	ΣΣb7b13	ΣΣb7b14	ΣΣb7b15	ΣΣb8b13	ΣΣb8b14	ΣΣb8b15	ΣΣb9b14	ΣΣb9b15
3	b3	ΣΣb3b21	ΣΣb3b3b7	ΣΣb7b16	ΣΣb7b17	ΣΣb7b18	ΣΣb8b16	ΣΣb8b17	ΣΣb8b18	ΣΣb9b17	ΣΣb9b18
4	b4	ΣΣb4b21	ΣΣb7b16	ΣΣb4b4b7	ΣΣb7b19	ΣΣb7b20	ΣΣb4b4b8	ΣΣb8b19	ΣΣb8b20	ΣΣb9b19	ΣΣb9b20
5	b5	ΣΣb5b21	ΣΣb7b17	ΣΣb7b19	ΣΣb5b5b7	ΣΣb7b21	ΣΣb8b19	ΣΣb5b5b8	ΣΣb8b21	ΣΣb5b5b9	ΣΣb9b21
6	b6	ΣΣb6b21	ΣΣb18b7	ΣΣb20b7	ΣΣb21b7	ΣΣb6b6b7	ΣΣb8b20	ΣΣb8b21	ΣΣb6b6b8	ΣΣb9b21b	ΣΣb6b6b9
7	b7	ΣΣb7b21	ΣΣb3b7b7	ΣΣb4b7b7	ΣΣb5b7b7	ΣΣΣb5b7b7	ΣΣb4b7b7	ΣΣb4b7b8	ΣΣb5b7b8	ΣΣb6b7b8	ΣΣb6b7b9
8	b8	ΣΣb8b21	ΣΣb3b7b8	ΣΣb4b7b8	ΣΣb5b7b8	ΣΣb6b7b8	ΣΣb4b8b8	ΣΣb5b8b8	ΣΣb6b8b8	ΣΣb5b8b9	ΣΣb6b8b9
9	b9	ΣΣb9b21	ΣΣb3b7b9	ΣΣb4b7b9	ΣΣb5b7b9	ΣΣb6b7b9	ΣΣb4b8b9	ΣΣb5b8b9	ΣΣb6b8b9	ΣΣb5b9b9	ΣΣb6b9b9
10	b10	ΣΣb10b21	ΣΣb3b7b10	ΣΣb4b7b10	ΣΣb5b7b10	ΣΣb6b7b10	ΣΣb4b8b10	ΣΣb5b8b10	ΣΣb6b8b10	ΣΣb5b9b10	ΣΣb6b9b10
11	b11	ΣΣb11b21	ΣΣb3b7b11	ΣΣb4b7b11	ΣΣb5b7b11	ΣΣb6b7bb11	ΣΣb4b8b11	ΣΣb5b8b11	ΣΣb6b8b11	ΣΣb5b9b11	ΣΣb6b9b11
12	b12	ΣΣb12b21	ΣΣb3b7b12	ΣΣb4b7b12	ΣΣb5b7b12	ΣΣb6b7b12	ΣΣb4b8b12	ΣΣb5b8b12	ΣΣb6b8b12	ΣΣb5b9b12	ΣΣb6b9b12
13	b13	ΣΣb13b21	ΣΣb3b7b13	ΣΣb4b7b13	ΣΣb5b7b13	ΣΣb6b7b13	ΣΣb4b8b13	ΣΣb5b8b13	ΣΣb6b8b13	ΣΣb5b9b13	ΣΣb6b9b13
14	b14	ΣΣb14b21	ΣΣb3b7b14	ΣΣb4b7b14	ΣΣb5b7b14	ΣΣb6b7b14	ΣΣb4b8b14	ΣΣb5b8b14	ΣΣb6b8b14	ΣΣb5b9b14	ΣΣb6b9b14
15	b15	ΣΣb15b21	ΣΣb3b7b15	ΣΣb4b7b15	ΣΣb5b7b15	ΣΣb6b7b15	ΣΣb4b8b15	ΣΣb5b8b15	ΣΣb6b8b15	ΣΣb5b9b15	ΣΣb6b9b15
16	b16	ΣΣb16b21	ΣΣb3b7b16	ΣΣb4b7b16	ΣΣb5b7b16	ΣΣb6b7b16	ΣΣb4b8b16	ΣΣb5b8b16	ΣΣb6b8b16	ΣΣb5b9b16	ΣΣb6b9b16
17	b17	ΣΣb17b21	ΣΣb3b7b17	ΣΣb4b7b17	ΣΣb5b7b17	ΣΣb6b7b17	ΣΣb4b8b17	ΣΣb5b8b17	ΣΣb6b8b17	ΣΣb5b9b17	ΣΣb6b9b17
18	b18	ΣΣb18b21	ΣΣb3b7b18	ΣΣb4b7b18	ΣΣb5b7b18	ΣΣb6b7b18	ΣΣb4b8b18	ΣΣb5b8b18	ΣΣb6b8b18	ΣΣb5b9b18	ΣΣb6b9b18
19	b19	ΣΣb19b21	ΣΣb3b7b19	ΣΣb4b7b19	ΣΣb5b7b19	ΣΣb6b7b19	ΣΣb4b8b19	ΣΣb5b8b19	ΣΣb6b8b19	ΣΣb5b9b19	ΣΣb6b9b19
20	b20	ΣΣb20b21	ΣΣb3b7b20	ΣΣb4b7b20	ΣΣb5b7b20	ΣΣb6b7b20	ΣΣb4b8b20	ΣΣb5b8b20	ΣΣb6b8b20	ΣΣb5b9b20	ΣΣb6ΣΣb6b9
21	b21	ΣΣb21b21	ΣΣb3b7b21	ΣΣb4b7b21	ΣΣb5b7b21	ΣΣb6b7b21	ΣΣb4b8b21	ΣΣb5b8b21	ΣΣb6b8b21	ΣΣb5b9b21	ΣΣb6b7b9
22	b3b7	ΣΣb3b7b21	ΣΣb3b3b7b7	ΣΣb7b7b16	ΣΣb7b7b17	ΣΣb7b7b18	ΣΣb7b8b16	ΣΣb7b8b17	ΣΣb7b8b18	ΣΣb5b8b9	ΣΣb7b9b18
23	b4b7	ΣΣb4b7b21	ΣΣb7b7b16	ΣΣb4b4b7b7	ΣΣb7b7b19	ΣΣb7b7b20	ΣΣb4b7b4b8	ΣΣb7b8b19	ΣΣb7b8b20	ΣΣb5b9b9	ΣΣb7b9b20
24	b5b7	ΣΣb5b7b21	ΣΣb7b7b17	ΣΣb7b7b19	ΣΣb5b5b7b7	ΣΣb7b7b21	ΣΣb7b8b19	ΣΣb5b5b7b8	ΣΣb7b8b21	ΣΣb5b9b10	ΣΣb7b9b21
25	b6b7	ΣΣb6b7b21	ΣΣb7b7b18	ΣΣb7b7b20	ΣΣb7b7b21	ΣΣb6b6b7b7	ΣΣb7b8b20	ΣΣb7b8b21	ΣΣb6b6b7b8	ΣΣb7b9b21	ΣΣb6b7b6b9
26	b4b8	ΣΣb4b8b21	ΣΣb7b8b16	ΣΣb4b7b4b8	ΣΣb7b8b19	ΣΣb7b8b20	ΣΣb4b4b8b8	ΣΣb8b8b19	ΣΣb8b8b20	ΣΣb8b9b19	ΣΣb8b9b20
27	b5b8	ΣΣb5b8b21	ΣΣb7b8b17	ΣΣb7b8b19	ΣΣb5b5b7b8	ΣΣb7b8b21	ΣΣb8b8b19	ΣΣb5b5b8b8	ΣΣb8b8b21	ΣΣb5ΣΣb5b8b9	ΣΣb8b9b21
28	b6b8	ΣΣb6b8b21	ΣΣb7b8b18	ΣΣb7b8b20	ΣΣb7b8b21	ΣΣb6b6b7b8	ΣΣb8b8b20	ΣΣb8b8b21	ΣΣb6b6b8b8	ΣΣb8b9b21	ΣΣb6b6b8b9
29	b5b9	ΣΣb5b9b21	ΣΣb7b9b17	ΣΣb7b9b19	ΣΣb5b5b7b9	ΣΣb7b9b21	ΣΣb8b9b19	ΣΣb5b5b8b9	ΣΣb8b9b21	ΣΣb5b5b9b9	ΣΣb9b9b21
30	b6b9	ΣΣb6b9b21	ΣΣb7b9b18	ΣΣb7b9b20	ΣΣb7b9b21	ΣΣb6b7b6b9	ΣΣb8b9b20	ΣΣb8b9b21	ΣΣb6b6b8b9	ΣΣb9b9b21	ΣΣb6b6b9b9

Table 2 F: Elements of matrix [AA] for Observation Point 21-30 for second half

Sr.N	Var.	21	22	23	24	25	27	27	28	29	30
31	b6b10	ΣΣb6b10b21	ΣΣb7b10b18	ΣΣb7b10b20	ΣΣb7b10b21	ΣΣb6b7b6b10	ΣΣb8b10b20	ΣΣb8b10b21	ΣΣb6b6b8b10	ΣΣb9b10b21	ΣΣb6b6b9b10
32	b4b12	ΣΣb4b12b21	ΣΣb7b12b16	ΣΣb4b7b4b12	ΣΣb7b12b19	ΣΣb7b12b20	ΣΣb4b4b8b12	ΣΣb8b19b19	ΣΣb8b12b20	ΣΣb9b12b19	ΣΣb9b12b20
33	b5b12	ΣΣb5b12b21	ΣΣb7b12b17	ΣΣb7b12b19	ΣΣb5b5b7b12	ΣΣb7b12b21	ΣΣb8b12b19	ΣΣb8b19b19	ΣΣb8b12b20	ΣΣb9b12b19	ΣΣb9b12b20
34	b6b12	ΣΣb6b12b21	ΣΣb7b12b18	ΣΣb7b12b20	ΣΣb7b12b21	ΣΣb6b6b7b12	ΣΣb8b12b20	ΣΣb8b12b21	ΣΣb6b6b8b12	ΣΣb9b12b21	ΣΣb6b6b9b12
35	b5b13	ΣΣb5b13b21	ΣΣb7b13b17	ΣΣb7b13b19	ΣΣb5b5b7b13	ΣΣb7b13b21	ΣΣb8b13b19	ΣΣb5b5b8b13	ΣΣb8b13b21	ΣΣb5b5b9b13	ΣΣb9b13b21
36	b6b13	ΣΣb6b13b21	ΣΣb7b13b18	ΣΣb7b13b20	ΣΣb7b13b21	ΣΣb6b6b7b13	ΣΣb8b13b20	ΣΣb8b12b21	ΣΣb6b6b8b12	ΣΣb9b12b21	ΣΣb6b6b9b12
37	b6b14	ΣΣb6b14b21	ΣΣb7b14b18	ΣΣb7b14b20	ΣΣb7b14b21	ΣΣb6b6b7b14	ΣΣb8b14b20	ΣΣb5b5b8b13	ΣΣb8b13b21	ΣΣb5b5b9b13	ΣΣb9b13b21
38	b5b16	ΣΣb5b16b21	ΣΣb7b16b17	ΣΣb7b16b19	ΣΣb5b5b7b16	ΣΣb7b16b21	ΣΣb8b16b19	ΣΣb8b13b21	ΣΣb6b6b8b13	ΣΣb9b13b21	ΣΣb6b6b9b13
39	b6b16	ΣΣb6b16b21	ΣΣb7b16b18	ΣΣb7b16b20	ΣΣb7b16b21	ΣΣb6b6b7b16	ΣΣb8b16b20	ΣΣb8b14b21	ΣΣb6b6b8b14	ΣΣb9b14b21	ΣΣb6b6b9b14
40	b6b17	ΣΣb6b17b21	ΣΣb7b17b18	ΣΣb7b17b20	ΣΣb7b17b21	ΣΣb6b6b7b17	ΣΣb8b17b20	ΣΣb5b5b8b16	ΣΣb8b16b21	ΣΣb5b5b9b16	ΣΣb9b16b21
41	b6b19	ΣΣb6b19b21	ΣΣb7b18b19	ΣΣb7b19b20	ΣΣb7b19b21	ΣΣb6b6b7b19	ΣΣb8b19b20	ΣΣb8b16b21	ΣΣb6b6b8b16	ΣΣb9b16b21	ΣΣb6b6b9b16
42	b7b16	ΣΣb7b16b21	ΣΣb3b7b7b16	ΣΣb4b7b7b16	ΣΣb5b7b7b16	ΣΣb6b7b7b16	ΣΣb4b7b8b16	ΣΣb8b17b21	ΣΣb6b6b8b17	ΣΣb9b17b21	ΣΣb6b6b9b17
43	b7b17	ΣΣb7b17b21	ΣΣb3b7b7b17	ΣΣb4b7b7b17	ΣΣb5b7b7b17	ΣΣb6b7b7b17	ΣΣb4b7b8b17	ΣΣb8b19b21	ΣΣb6b6b8b19	ΣΣb9b19b21	ΣΣb6b6b9b19
44	b7b18	ΣΣb7b18b21	ΣΣb3b7b7b18	ΣΣb4b7b7b18	ΣΣb5b7b7b18	ΣΣb6b7b7b18	ΣΣb4b7b8b18	ΣΣb5b7b8b16	ΣΣb6b7b8b16	ΣΣb5b7b9b16	ΣΣb6b7b9b16
45	b7b19	ΣΣb7b19b21	ΣΣb3b7b7b19	ΣΣb4b7b7b19	ΣΣb5b7b7b19	ΣΣb6b7b7b19	ΣΣb4b7b8b19	ΣΣb5b7b8b17	ΣΣb6b7b8b17	ΣΣb5b7b9b17	ΣΣb6b7b9b17
46	b7b20	ΣΣb7b20b21	ΣΣb3b7b7b20	ΣΣb4b7b7b20	ΣΣb5b7b7b20	ΣΣb6b7b7b20	ΣΣb4b7b8b20	ΣΣb5b7b8b18	ΣΣb6b7b8b18	ΣΣb5b7b9b18	ΣΣb6b7b9b18
47	b7b21	ΣΣb7b21b21	ΣΣb3b7b7b21	ΣΣb4b7b7b21	ΣΣb5b7b7b21	ΣΣb6b7b7b21	ΣΣb4b7b8b21	ΣΣb5b7b8b19	ΣΣb6b7b8b19	ΣΣb5b7b9b19	ΣΣb6b7b9b19
48	b8b19	ΣΣb8b19b21	ΣΣb3b7b8b19	ΣΣb4b7b8b19	ΣΣb5b7b8b19	ΣΣb6b7b8b19	ΣΣb4b8b8b19	ΣΣb5b7b8b20	ΣΣb6b7b8b20	ΣΣb5b7b9b20	ΣΣb6b7b9b20
49	b8b20	ΣΣb8b20b21	ΣΣb3b7b8b20	ΣΣb4b7b8b20	ΣΣb5b7b8b20	ΣΣb6b7b8b20	ΣΣb4b8b8b20	ΣΣb5b8b8b20	ΣΣb6b8b8b20	ΣΣb5b8b9b20	ΣΣb6b8b9b20
50	b8b21	ΣΣb8b21b21	ΣΣb3b7b8b21	ΣΣb4b7b8b21	ΣΣb5b7b8b21	ΣΣb6b7b8b21	ΣΣb4b8b8b21	ΣΣb5b8b8b21	ΣΣb6b8b8b21	ΣΣb5b8b9b21	ΣΣb6b8b9b21
51	b9b21	ΣΣb9b21b21	ΣΣb3b7b9b21	ΣΣb4b7b9b21	ΣΣb5b7b9b21	ΣΣb6b7b9b21	ΣΣb4b8b9b21	ΣΣb5b8b9b21	ΣΣb6b8b9b21	ΣΣb5b9b9b21	ΣΣb6b9b9b21
52	b12b19	ΣΣb12b19b21	ΣΣb3b7b12b19	ΣΣb4b7b12b19	ΣΣb5b7b12b19	ΣΣb6b7b12b19	ΣΣb4b8b12b19	ΣΣb5b8b12b19	ΣΣb6b8b12b19	ΣΣb5b9b12b19	ΣΣb6b9b12b19
53	b12b20	ΣΣb12b20b21	ΣΣb3b7b12b20	ΣΣb4b7b12b20	ΣΣb5b7b12b20	ΣΣb6b7b12b20	ΣΣb4b8b12b20	ΣΣb5b8b12b20	ΣΣb6b8b12b20	ΣΣb5b9b12b20	ΣΣb6b9b12b20
54	b12b21	ΣΣb12b21b21	ΣΣb3b7b12b21	ΣΣb4b7b12b21	ΣΣb5b7b12b21	ΣΣb6b7b12b21	ΣΣb4b8b12b21	ΣΣb5b8b12b21	ΣΣb6b8b12b21	ΣΣb5b9b12b21	ΣΣb6b9b12b21
55	b13b21	ΣΣb13b21b21	ΣΣb3b7b13b21	ΣΣb4b7b13b21	ΣΣb5b7b13b21	ΣΣb6b7b13b21	ΣΣb4b8b13b21	ΣΣb5b8b13b21	ΣΣb6b8b13b21	ΣΣb5b9b13b21	ΣΣb6b9b13b21
56	b16b21	ΣΣb16b21b21	ΣΣb3b7b16b21	ΣΣb4b7b16b21	ΣΣb5b7b16b21	ΣΣb6b7b16b21	ΣΣb4b8b16b21	ΣΣb5b8b16b21	ΣΣb6b8b16b21	ΣΣb5b9b16b21	ΣΣb6b9b16b21
57	b5b7b16	ΣΣb5b7b16b21	ΣΣb7b7b16b17	ΣΣb4b7b5b7b16	ΣΣb5b7ΣΣb5b7b16	b7b7b16b21	ΣΣb7b8b16b19	ΣΣb5b5b7b8b16	ΣΣb7b8b16b21	ΣΣb5b5b7b9b16	ΣΣb21b7b9b16
58	b6b7b16	ΣΣb6b7b16b21	ΣΣb3b7b6b7b16	ΣΣb4b7b6b7b16	ΣΣb7b7b16b21	ΣΣb6ΣΣb6b7b7b16	ΣΣb7b8b16b20	ΣΣb7b8b16b21	ΣΣb6b6b7b8b16	ΣΣb7b9b16b21	ΣΣb6b6b7b9b16
59	b6b7b17	ΣΣb6b7b17b21	ΣΣb7b7b17b18	ΣΣb4b7b6b7b17	ΣΣb7b7b17b21	ΣΣb6ΣΣb6b7b7b17	ΣΣb7b8b17b20	ΣΣb7b8b17b21	ΣΣb6b6b7b8b17	ΣΣb7b9b17b21	ΣΣb6b6b7b9b17
60	b6b7b19	ΣΣb6b7b19b21	ΣΣb7b7b18b19	ΣΣb4b7b6b7b19	ΣΣb7b7b19b21	ΣΣb6ΣΣb6b7b7b19	ΣΣb7b8b19b20	ΣΣb7b8b19b21	ΣΣb6b6b7b8b19	ΣΣb7b9b19b21	ΣΣb6b6b7b9b19
61	b5b7b16	ΣΣb5b7b16b21	ΣΣb7b7b16b17	ΣΣb4b7b5b7b16	ΣΣb5b7ΣΣb5b7b16	b7b7b16b21	ΣΣb7b8b16b19	ΣΣb5b5b7b8b16	ΣΣb7b8b16b21	ΣΣb5b5b7b9b16	ΣΣb21b7b9b16
62	b6b7b16	ΣΣb6b7b16b21	ΣΣb3b7b6b7b16	ΣΣb4b7b6b7b16	ΣΣb7b7b16b21	ΣΣb6ΣΣb6b7b7b16	ΣΣb7b8b16b20	ΣΣb7b8b16b21	ΣΣb6b6b7b8b16	ΣΣb7b9b16b21	ΣΣb6b6b7b9b16
63	b6b7b17	ΣΣb6b7b17b21	ΣΣb7b7b17b18	ΣΣb4b7b6b7b17	ΣΣb7b7b17b21	ΣΣb6ΣΣb6b7b7b17	ΣΣb7b8b17b20	ΣΣb7b8b17b21	ΣΣb6b6b7b8b17	ΣΣb7b9b17b21	ΣΣb6b6b7b9b17

Table 2 G: Elements of matrix [AA] for Observation Point 31-40 for first half

S.No.	Var.	31	32	33	34	35	36	37	38	39	40
1	b1	ΣΣb6b10	ΣΣb9b12	ΣΣb10b12	ΣΣb11b12	ΣΣb10b13	ΣΣb11b13	ΣΣb11b14	ΣΣb10b16	ΣΣb11b16	ΣΣb11b17
2	b2	ΣΣb10b15	ΣΣb12b13	ΣΣb12b14	ΣΣb12b15	ΣΣb13b14	ΣΣb13b15	ΣΣb14b15	ΣΣb14b16	ΣΣb15b16	ΣΣb15b17
3	b3	ΣΣb1018	ΣΣb12b16	ΣΣb12b17	ΣΣb12b18	ΣΣb13b17	ΣΣb13b18	ΣΣb14b18	ΣΣb16b17	ΣΣb16b18	ΣΣb17b18
4	b4	ΣΣb10b20	ΣΣb4b4b12	ΣΣb12b19	ΣΣb12b20	ΣΣb13b19	ΣΣb13b20	ΣΣb14b20	ΣΣb19b16	ΣΣb16b20	ΣΣb17b20
5	b5	ΣΣb10b21	ΣΣb12b19	ΣΣb5b5b12	ΣΣb12b21	ΣΣb5b5b13	ΣΣb13b21	ΣΣb14b20	ΣΣb5b5b16	ΣΣb16b21	ΣΣb17b21
6	b6	ΣΣb6b6b10	ΣΣb12b20	ΣΣb12b21	ΣΣb6b6b12	ΣΣb13b21	ΣΣb6b6b13	ΣΣb6b614	ΣΣb16b21	ΣΣb6b6b16	ΣΣb6b6b17
7	b7	ΣΣb6b7b10	ΣΣb4b7b12	ΣΣb5b7b12	ΣΣb6b7b12	ΣΣb5b7b13	ΣΣb6b7b13	ΣΣb6b7b14	ΣΣb5b7b16	ΣΣb6b7b16	ΣΣb6b7b17
8	b8	ΣΣb6b8b10	ΣΣb4b8b12	ΣΣb5b8bb12	ΣΣb6b8b12	ΣΣb5b8b13	ΣΣb6b8b13	ΣΣb6b8b14	ΣΣb5b8b16	ΣΣb6b8b16	ΣΣb6b8b17
9	b9	ΣΣb6b9b10	ΣΣb4b9b12	ΣΣb5b9b12	ΣΣb6b9b12	ΣΣb5b9b13	ΣΣb6b9b13	ΣΣb6b9b14	ΣΣb5b9b16	ΣΣb6b9b16	ΣΣb6b9b17
10	b10	ΣΣb6b10b10	ΣΣb4b10b12	ΣΣb5b10b12	ΣΣb6b10b12	ΣΣb5b10b13	ΣΣb6b10b13	ΣΣb6b10b14	ΣΣb5b10b16	ΣΣb6b10b16	ΣΣb6b10b17
11	b11	ΣΣb6b10b11	ΣΣb4b11b12	ΣΣb5b11b12	ΣΣb6b11b12	ΣΣb5b11b13	ΣΣb6b11b13	ΣΣb6b11b14	ΣΣb5b11b16	ΣΣb6b11b16	ΣΣb6b11b17
12	b12	ΣΣb6b10b12	ΣΣb4b12b12	ΣΣb5b12b12	ΣΣb6b12b12	ΣΣb5b12b13	ΣΣb6b12b13	ΣΣb6b12b14	ΣΣb5bb12b16	ΣΣb6b12b16	ΣΣb6b12b17
13	b13	ΣΣb6b10b13	ΣΣb4b12b13	ΣΣb5b12b13	ΣΣb6b12b13	ΣΣb5b13b13	ΣΣb6b13b13	ΣΣb6b13b14	5b13b16	ΣΣb6b13b16	ΣΣb6b13b17
14	b14	ΣΣb6b10b14	ΣΣb4b12b14	ΣΣb5b12b14	ΣΣb6b12b14	ΣΣb5b13b14	ΣΣb6b13b14	ΣΣb6b14b14	ΣΣb5b16b14	ΣΣb6b16b14	ΣΣb6b17b14
15	b15	ΣΣb6b10b15	ΣΣb4b12b15	ΣΣb5b12b15	ΣΣb6b12b15	ΣΣb5b13b15	ΣΣb6b13b15	ΣΣb6b14b15	ΣΣb5b15b16	ΣΣb6b15b16	ΣΣb6b15b17
16	b16	ΣΣb6b10b16	ΣΣb4b12b16	ΣΣb5b12b16	ΣΣb6b12b16	ΣΣb5b13b16	ΣΣb6b13b16	ΣΣb6b14b16	ΣΣb5b16b16	ΣΣb6b16b16	ΣΣb6b16b17
17	b17	ΣΣb6b10b17	ΣΣb4b12b17	ΣΣb5b12b17	ΣΣb6b12b17	ΣΣb5b13b17	ΣΣb6b13b17	ΣΣb6b14b17	ΣΣb5b16b17	ΣΣb6b16b17	ΣΣb6b17b17
18	b18	ΣΣb6b10b18	ΣΣb4b12b18	ΣΣb5b12b18	ΣΣb6b12b18	ΣΣb5b13b18	ΣΣb6b13b18	ΣΣb6b14b18	ΣΣb5b16b18	ΣΣb6b16b18	ΣΣb6b17b18
19	b19	ΣΣb6b10b19	ΣΣb4b12b19	ΣΣb5b12b19	ΣΣb6b12b19	ΣΣb5b13b19	ΣΣb6b13b19	ΣΣb6b14b19	ΣΣb5b16b19	ΣΣb6b16b19	ΣΣb6b17b19
20	b20	ΣΣb6ΣΣb6b10	ΣΣb4b12b20	ΣΣb5b12b20	ΣΣb6b12b20	ΣΣb5b13b20	ΣΣb6b13b20	ΣΣb6b14b20	ΣΣb5b16b20	ΣΣb6b16b20	ΣΣb6b17b20
21	b21	ΣΣb6b7b10	ΣΣb4b12b21	ΣΣb5b12b21	ΣΣb6b12b21	ΣΣb5b13b21	ΣΣb6b13b21	ΣΣb6b14b21	ΣΣb5b16b21	ΣΣb6b16b21	ΣΣb6b17b21
22	b3b7	ΣΣb7b10b18	ΣΣb7b12b16	ΣΣb7b12b17	ΣΣb7b12b18	ΣΣb7b13b17	ΣΣb7b13b18	ΣΣb7b14b18	ΣΣb7b16b17	ΣΣb7b16b18	ΣΣb7b17b18
23	b4b7	ΣΣb7b10b20	ΣΣb4b7ΣΣb4b12	ΣΣb7b12b19	ΣΣb7b12b20	ΣΣb7b13b19	ΣΣb7b13b20	ΣΣb7b14b20	ΣΣb7b16b19	ΣΣb7b16b20	ΣΣb7b17b20
24	b5b7	ΣΣb7b10b21	ΣΣb7b12b19	ΣΣb5b5b7b12	ΣΣb7b12b21	ΣΣb5b5b7b13	ΣΣb7b13b21	ΣΣb7b14b21	ΣΣb5b5b7b16	ΣΣb7b16b21	ΣΣb7b17b21
25	b6b7	ΣΣb6b7b6b10	ΣΣb7b12b20	ΣΣb7b12b21	ΣΣb6b6b7b12	ΣΣb7b13b21	ΣΣb6b6b7b13	ΣΣb6b6b7b14	ΣΣb7b16b21	ΣΣb6b6b7b16	ΣΣb6b6b7b17
26	b4b8	ΣΣb8b10b20	ΣΣb4b4b8b12	ΣΣb8b12b19	ΣΣb8b12b20	ΣΣb8b13b19	ΣΣb8b13b20	ΣΣb8b14b20	ΣΣb8b16b19	ΣΣb8b16b20	ΣΣb8b17b20
27	b5b8	ΣΣb8b10b21	ΣΣb8b19b19	ΣΣb5ΣΣb5b8b12	ΣΣb8b12b21	ΣΣb5ΣΣb5b8b13	ΣΣb8b13b21	ΣΣb8b14b21	ΣΣbb5b8b16	ΣΣb8b16b21	ΣΣb8b17b21

28	b6b8	ΣΣb6b6b8b10	ΣΣb8b12b20	ΣΣb8b12b21	ΣΣb6b6b8b12	ΣΣb8b13b21	ΣΣb6b6b8b13	ΣΣb6b6b8b14		ΣΣb8b16b21	ΣΣb6b6b8b16	ΣΣb6b6b8b17
29	b5b9	ΣΣb9b10b21	ΣΣb9b12b19	ΣΣb5b5b9b12	ΣΣb9b12b21	ΣΣb5b5b9b13	ΣΣb9b13b21	ΣΣb9b14b21	ΣΣb5b5b9b16	ΣΣb9b16b21	ΣΣb9b17b21	
30	b6b9	ΣΣb6b6b9b10	ΣΣb9b12b20	ΣΣb9b12b21	ΣΣb6b6b9b12	ΣΣb9b13b21	ΣΣb6b6b9b13	ΣΣb6b6b9b14		ΣΣb9b16b21	ΣΣb6b6b9b16	ΣΣb11b17

Table 2 H: Elements of matrix [AA] for Observation Point 31-40 for second half

		31	32	33	34	35	36	37	38	39	40
31	b6b10	ΣΣb6b6b10b10	ΣΣb10b12b20	ΣΣb10b12b21	ΣΣb6b6b10b12	ΣΣb10b13b21	b6b6b10b13	ΣΣb6b6b10b14	ΣΣb10b16b21	ΣΣb6b6b10b16	ΣΣb15b17
32	b4b12	ΣΣb8b19b19	ΣΣb8b12b20	ΣΣb9b12b19	ΣΣb9b12b20	ΣΣb10b12b20	ΣΣb4b4b12b12	ΣΣb12b12b19	ΣΣb12b12b20	ΣΣb12b13b19	ΣΣb17b18
33	b5b12	ΣΣb10b12b20	ΣΣb4b4b12b12	ΣΣb12b12b19	ΣΣb12b12b20	ΣΣb12b13b19	ΣΣb12b13b20	ΣΣb12b14b20	ΣΣb12b16b19	ΣΣb12b16b20	ΣΣb12b17b21
34	b6b12	ΣΣb6b6b10b12	ΣΣb12b12b19	ΣΣb5b5b12b12	ΣΣb12b12b21	ΣΣb5b5b12b13	ΣΣb12b13b21	ΣΣb12b14b21	ΣΣb5b5b12b16	ΣΣb12b16b21	ΣΣb6b6b12b17
35	b5b13	ΣΣb5b5b8b13	ΣΣb8b13b21	ΣΣb5b5b9b13	ΣΣb9b13b21	ΣΣb6b6b10b13	ΣΣb12b13b19	ΣΣb5b5b12b13	ΣΣb12b13b21	ΣΣb5b5b13b13	ΣΣb13b17b21
36	b6b13	ΣΣb10b13b21	ΣΣb12b12b20	ΣΣb12b12b21	ΣΣb6b6b12b12	ΣΣb12b13b21	ΣΣb6b6b12b13	ΣΣb6b6b12b14	ΣΣb12b16b21	ΣΣb6b6b12b16	ΣΣb6b6b13b17
37	b6b14	ΣΣb6b6b10b13	ΣΣb12b13b19	ΣΣb5b5b12b13	ΣΣb12b13b21	ΣΣb5b5b13b13	ΣΣb13b13b21	ΣΣb13b14b21	ΣΣb5b5b13b16	ΣΣb13b16b21	ΣΣb6b6b14b17
38	b5b16	ΣΣb6b6b10b14	ΣΣb12b13b20	ΣΣb12b13b21	ΣΣb6b6b12b13	ΣΣb13b13b21	ΣΣb6b6b13b13	ΣΣb6b6b13b14	ΣΣb13b16b21	ΣΣb6b6b13b16	ΣΣb16b17b21
39	b6b16	ΣΣb10b16b21	ΣΣb12b14b20	ΣΣb12b14b21	ΣΣb6b6b12b14	ΣΣb13b14b21	ΣΣb6b6b13b14	ΣΣb6b6b1b4b14	b14b16b21	ΣΣb6b6b14b16	ΣΣb6b6b16b17
40	b6b17	ΣΣb6b6b10b16	ΣΣb12b16b19	ΣΣb5b5b12b16	ΣΣb12b16b21	ΣΣb5b5b13b16	ΣΣb13b16b21	ΣΣb14b16b21	ΣΣb5b5b16b16	ΣΣb16b16b21	ΣΣb6b6b17b17
41	b6b19	ΣΣb6b6b10b17	ΣΣb12b16b20	ΣΣb12b16b21	ΣΣb6b6b12b16	ΣΣb13b16b21	ΣΣb6b6b13b16	ΣΣb6b6b14b16	ΣΣb16b16b21	ΣΣb6b6b16b16	ΣΣb6ΣΣb6b17b19
42	b7b16	ΣΣb6b6b10b19	ΣΣb12b17b20	ΣΣb12b17b21	ΣΣb6b6b12b17	ΣΣb13b17b21	ΣΣb6b6b13b17	ΣΣb6b6b14b17	ΣΣb16b17b21	ΣΣb6b6b16b17	ΣΣb6b7b16b17
43	b7b17	ΣΣb6b7b10b16	ΣΣb1b19b20	ΣΣb12b19b21	ΣΣb6b6b12b19	ΣΣb13b19b21	ΣΣb6b6b13b19	ΣΣb6b6b14b19	ΣΣb16b19b21	ΣΣb6b6b16b19	ΣΣb6b7b17b17
44	b7b18	ΣΣb6b7b10b17	ΣΣb4b7b12b16	ΣΣb5b7b12b16	ΣΣb6b7b12b16	ΣΣb5b7b13b16	ΣΣb6b7b13b16	ΣΣb6b7b14b16	ΣΣb5b7b16b16	ΣΣb6b7b16b16	ΣΣb6b7b17b18
45	b7b19	ΣΣb6b7b10b18	ΣΣb4b7b12b17	ΣΣb5b7b12b17	ΣΣb6b7b12b17	ΣΣb5b7b13b17	ΣΣb6b7b13b17	ΣΣb6b7b14b17	ΣΣb5b7b16b17	ΣΣb6b7b16b17	ΣΣb6b7b17b19
46	b7b20	ΣΣb6b7b10b19	ΣΣb4b7b12b18	ΣΣb5b7b12b18	ΣΣb6b7b12b18	ΣΣb5b7b13b18	ΣΣb6b7b13b18	ΣΣb6b7b14b18	ΣΣb5b7b16b18	ΣΣb6b7b16b18	ΣΣb6b7b17b20
47	b7b21	ΣΣb6b7b10b20	ΣΣb4b7b12b19	ΣΣb5b7b12b19	ΣΣb6b7b12b19	ΣΣb5b7b13b19	ΣΣb6b7b13b19	ΣΣb6b7b14b19	ΣΣb5b7b16b19	ΣΣb6b7b16b19	ΣΣb6b7b16b21
48	b8b19	ΣΣb6b7b10b21	ΣΣb4b7b12b20	ΣΣb5b7b12b20	ΣΣb6b7b12b20	ΣΣb5b7b13b20	ΣΣb6b7b13b20	ΣΣb6b7b14b20	ΣΣb5b7b16b20	ΣΣb6b7b16b20	ΣΣb6b8b17b19
49	b8b20	ΣΣb6b8b10b19	ΣΣb4b7b12b21	ΣΣb5b7b12b21	ΣΣb6b7b12b21	ΣΣb5b7b13b21	ΣΣb6b7b13b21	ΣΣb6b7b14b21	ΣΣb5b7b16b21	ΣΣb6b7b16b21	ΣΣb6b8b17b20
50	b8b21	ΣΣb6b8b10b20	ΣΣb4b8b12b19	ΣΣb5b8b12b19	ΣΣb6b8b12b19	ΣΣb5b8b13b19	ΣΣb6b8b13b19	ΣΣb6b8b14b19	ΣΣb5b8b16b19	ΣΣb6b8b16b19	ΣΣb6b8b17b21
51	b9b21	ΣΣb6b8b10b21	ΣΣb4b8b12b20	ΣΣb5b8b12b20	ΣΣb6b8b12b20	ΣΣb5b8b13b20	ΣΣb6b8b13b20	ΣΣb6b8b14b20	ΣΣb5b8b16b20	ΣΣb6b8b16b20	ΣΣb6b9b17b21
52	b12b19	ΣΣb6b9b10b21	ΣΣb4b8b12b21	ΣΣb5b8b12b21	ΣΣb6b8b12b21	ΣΣb5b8b13b21	ΣΣb6b8b13b21	ΣΣb6b8b14b21	ΣΣb5b8b16b21	ΣΣb6b8b16b21	ΣΣb6b12b17b19
53	b12b20	ΣΣb6b10b12b19	ΣΣb4b9b12b21	ΣΣb5b8b12b22	ΣΣb6b9b12b21	ΣΣb5b9b13b21	ΣΣb6b9b13b21	ΣΣb6b9b14b21	ΣΣb5b9b16b21	ΣΣb6b9b16b21	ΣΣb6b12b17b20
54	b12b21	ΣΣb6b10b12b20	ΣΣb4b12b12b19	ΣΣb5b12b12b19	ΣΣb6b12b12b19	ΣΣb5b12b13b19	ΣΣb6b12b13b19	ΣΣb6b12b14b19	ΣΣb5b12b16b19	ΣΣb6b12b16b19	ΣΣb6b12b17b21
55	b13b21	ΣΣb6b10b12b21	ΣΣb4b12b12b20	ΣΣb5b12b12b20	ΣΣb6b12b12b20	ΣΣb5b12b13b20	ΣΣb6b12b13b20	ΣΣb6b12b14b20	ΣΣb5b12b16b20	ΣΣb6b12b16b20	ΣΣb6b13b17b21
56	b16b21	ΣΣb6b10b13b21	ΣΣb4b12b12b21	ΣΣb5b12b12b21	ΣΣb6b12b12b21	ΣΣb5b12b13b21	ΣΣb6b12b13b21	ΣΣb6b12b14b21	ΣΣb5b12b16b21	ΣΣb6b12b16b21	ΣΣb6b16b17b21
57	b5b7b16	b5b7b16	ΣΣb6b10b16b21	ΣΣb4b12b13b21	ΣΣb5b12b13b21	ΣΣb6b12b13b21	ΣΣb5b13b13b21	ΣΣb6b13b13b21	ΣΣb6b13b14b21	ΣΣb5b13b16b21	ΣΣb6b13b16b21
58	b6b7b16	b6b7b16	ΣΣb7b10b16b21	ΣΣb4b12b16b21	ΣΣb5b12b16b21	ΣΣb6b12b16b21	ΣΣb5b13b16b21	ΣΣb6b13b16b21	ΣΣb6b14b16b21	ΣΣb5b16b16b21	ΣΣb6b16b16b21
59	b6b7b17	b6b7b17	ΣΣb6b6b7b10b16	ΣΣb7b12b16b19	ΣΣb5b5b7b12b16	ΣΣb7b12b16b21	ΣΣb5b5b7b13b16	ΣΣb7b13b16b21	ΣΣb7b14b16b21	ΣΣb5b5b7b16b16	ΣΣb7b16b16b21
60	b6b7b19	b6b7b19	ΣΣb6b6b7b10b17	ΣΣb7b12b16b20	ΣΣb7b12b16b21	ΣΣb6b6b7b12b16	ΣΣb7b13b16b21	ΣΣb6b6b7b13b16	ΣΣb6b6b7b14b16	ΣΣb7b16b16b21	ΣΣb6b6b7b16b16
61	b5b7b16	ΣΣb6b6b7b10b19	ΣΣb7b12b17b20	ΣΣb7b12b17b21	ΣΣb6b6b7b12b17	ΣΣb7b13b17b21	ΣΣb6b6b7b13b17	ΣΣb6b6b7b14b17	ΣΣb7b16b17b21	ΣΣb6ΣΣb6b7b16b17	ΣΣb6b6b8b17b19
62	b6b7b16	ΣΣb6b6b8b10b19	ΣΣb7b12b19b20	ΣΣb7b12b19b21	ΣΣb6b6b7b12b19	ΣΣb7b13b19b21	ΣΣb6b6b7b13b19	ΣΣb6b6b7b14b19	ΣΣb7b16b19b21	ΣΣb6ΣΣb6b7b16b19	ΣΣb6b6b12b17b19
63	b6b7b17	ΣΣb6b6b10b12b19	ΣΣb8b12b19b20	ΣΣb21b8b12b19	ΣΣb6b6b8b12b19	ΣΣb8b13b19b21	ΣΣb6b6b8b13b19	ΣΣb6b6b8b14b19	ΣΣb8b16b19b21	ΣΣb6b6b8b16b19	ΣΣb6b7b16b17b21

Table 2I: Elements of matrix [AA] for Observation Point 41-48 for first half

S.No.	Var.	41	42	43	44	45	46	47	48
1	b1	ΣΣb11b19	ΣΣb1b7b16	ΣΣb1b7b17	ΣΣb1b7b18	ΣΣb1b7b19	ΣΣb1b7b20	ΣΣb1b7b21	ΣΣb1b8b19
2	b2	ΣΣb15b19	ΣΣb2b7b16	ΣΣb2b7b17	ΣΣb2b7b18	ΣΣb2b7b19	ΣΣb2b7b20	ΣΣb2b7b21	ΣΣb2b8b19
3	b3	ΣΣb18b19	ΣΣb3b7b16	ΣΣb3b7b17	ΣΣb3b7b18	ΣΣb3b7b19	ΣΣb3b7b20	ΣΣb3b7b21	ΣΣb3b8b19
4	b4	ΣΣb19b20	ΣΣb4b716	ΣΣb4b717	ΣΣb4b718	ΣΣb4b719	ΣΣb4b720	ΣΣb4b721	ΣΣb4b8b19
5	b5	ΣΣb19b21	ΣΣb5b7b16	ΣΣb5b7b17	ΣΣb5b7b18	ΣΣb5b7b19	ΣΣb5b7b20	ΣΣb5b7b21	ΣΣb5b8b19
6	b6	ΣΣb6b6b19	ΣΣb6b7b16	ΣΣb6b7b17	ΣΣb6b7b18	ΣΣb6b7b19	ΣΣb6b7b20	ΣΣb6b7b21	ΣΣb6b8b19
7	b7	ΣΣb6b7b19	ΣΣb7b7b16	ΣΣb7b7b17	ΣΣb7b7b18	ΣΣb7b7b19	ΣΣb7b7b20	ΣΣb7b7b21	ΣΣb7b8b19
8	b8	ΣΣb6b8b19	ΣΣb7b8b19	ΣΣb7b8b17	ΣΣb7b8b18	ΣΣb7b8b19	ΣΣb7b8b20	ΣΣb7b8b21	ΣΣb8b8b19
9	b9	ΣΣb6b9b19	ΣΣb7b9b16	ΣΣb7b9b17	ΣΣb7b9bb18	ΣΣb7b9b19	ΣΣb7b9b20	ΣΣb7b9b21	ΣΣb8b9b19
10	b10	ΣΣb6b10b19	ΣΣb7b10b16	ΣΣ7b10b17	ΣΣb7b10b18	ΣΣb7b10b19	ΣΣb7b10b20	ΣΣb7b10b21	ΣΣb8b10b19
11	b11	ΣΣb6b11b19	ΣΣb7b11b16	ΣΣb7b11b17	ΣΣb7b11b18	ΣΣb7b11b19	ΣΣb7b11b20	ΣΣb7b11b21	ΣΣb8b11b19
12	b12	ΣΣb6b12b19	ΣΣb7b12b16	ΣΣb7b12b17	ΣΣb7b12b17	ΣΣb7b12b19	ΣΣb7b12b20	ΣΣb7b1b2b21	ΣΣb8b12b19
13	b13	ΣΣb6b13b19	ΣΣb7b13b16	ΣΣb7b13b17	ΣΣb7b13b18	ΣΣb713b19	ΣΣb7b13b20	ΣΣb7b13b21	ΣΣb8b13b19
14	b14	ΣΣb6b14b19	ΣΣb7b14b16	ΣΣb7b14b17	ΣΣb7b14b18	ΣΣb7b14b19	ΣΣb7b14b20	ΣΣb7b14b21	ΣΣb8b14b19
15	b15	ΣΣb6b15b19	ΣΣb7b15b16	ΣΣb7b15b17	ΣΣb7b15b18	ΣΣb7b15b19	ΣΣb7b15b20	ΣΣb7b15b15b21	ΣΣb8b15b19
16	b16	ΣΣb6b16b19	ΣΣb7bb1616	ΣΣb7b16b17	ΣΣb7b16b18	ΣΣb7b16b19	ΣΣb7b16b20	ΣΣb7b16b21	ΣΣb8bb1619
17	b17	ΣΣb6b17b19	ΣΣb7b16b17	ΣΣb7b17b17	ΣΣb7b17b18	ΣΣb7b17b19	ΣΣb7b17b20	ΣΣb7b17b21	ΣΣb8b17b19
18	b18	ΣΣb6b19b18	ΣΣb7b16b18	ΣΣb7b17b18	ΣΣb7b18b18	ΣΣb7b18b19	ΣΣb7b18b20	ΣΣb7b18b21	ΣΣb8b18b19
19	b19	ΣΣb6b19b19	ΣΣb7b16b19	ΣΣb7b17b19	ΣΣb7b18b19	ΣΣb7b19b19	ΣΣb7b19b20	ΣΣb7b19b21	ΣΣb8b19b19
20	b20	ΣΣb6b19b20	ΣΣb7b16b20	ΣΣb7b17b20	ΣΣb7b18b20	ΣΣb7b19b20	ΣΣb7b20b20	ΣΣb7b21b20	ΣΣb8b19b20
21	b21	ΣΣb6b19b21	ΣΣb7b16b21	ΣΣb7b17b21	ΣΣb7b18b21	ΣΣb7b19b21	ΣΣb7b20b21	ΣΣb7b21b21	ΣΣb8b19b21
22	b3b7	ΣΣb7b18b19	ΣΣb3b7b7b16	ΣΣb3b7b7b17	ΣΣb3b7b7b18	ΣΣb3b7b7b19	ΣΣb3b7b7b20	ΣΣb3b7b7b21	ΣΣb3b7b8b19
23	b4b7	ΣΣb7b19b20	ΣΣb4b7b7b16	ΣΣb4b7b7b17	ΣΣb4b7ΣΣb7b18	ΣΣb4b7b7bI9	ΣΣb4b7b7b20	ΣΣb4b7b7b21	ΣΣb4b7b8b19
24	b5b7	ΣΣb7b19b21	ΣΣb5b7b7b16	ΣΣb5b7b7b17	ΣΣb5b7b7b18	ΣΣb5b7b7b19	ΣΣb5b7b7b20	ΣΣb5b7b7b21	ΣΣb5b7b8b19
25	b6b7	b6b7	ΣΣb6b6b7b19	ΣΣb6b7b7b16	ΣΣb6b7b7b17	ΣΣb6b7b7b18	ΣΣb6b7b7b19	ΣΣb6b7b7b20	ΣΣb6b7b7b21
26	b4b8	b4b8	ΣΣb8b19b20	ΣΣb4b7b8b16	ΣΣb4b7b8b17	ΣΣb4b7b8b18	ΣΣb4b7b8b19	ΣΣb4b7b8b20	ΣΣb4b7b8b21
27	b5b8	b5b8	ΣΣb8b19b21	ΣΣb5b7b8b16	ΣΣb5b7b8b17	ΣΣb5b7b8b18	ΣΣb5b7b8b19	ΣΣb5b7b8b20	ΣΣb5b7b8b21
28	b6b8	b6b8	ΣΣb6b6b8b19	ΣΣb6b7b8b16	ΣΣb6b7b8b17	ΣΣb6b7b8b18	ΣΣb6b7b8b19	ΣΣb6b7b8b20	ΣΣb6b7b8b21
29	b5b9	b5b9	ΣΣb9b19b21	ΣΣb5b7b9b16	ΣΣb5b7b9b17	ΣΣb5b7b9b18	ΣΣb5b7b9b19	ΣΣb5b7b9b20	ΣΣb5b7b9b21
30	b6b9	b6b9	ΣΣb11b19	ΣΣb1b7b16	ΣΣb1b7b17	ΣΣb1b7b18	ΣΣb1b7b19	ΣΣb1b7b20	ΣΣb1b7b21

Table 2 J: Elements of matrix [AA] for Observation Point 31-40 for second half

S.No.	Var.	41	42	43	44	45	46	47	48
31	b6b10	ΣΣb15b19	ΣΣb2b7b16	ΣΣb2b7b17	ΣΣb2b7b18	ΣΣb2b7b19	ΣΣb2b7b20	ΣΣb2b7b21	ΣΣb2b8b19
32	b4b12	ΣΣb18b20	ΣΣb3b7b16	ΣΣb3b7b17	ΣΣb3b7b18	ΣΣb3b7b19	ΣΣb3b7b20	ΣΣb3b7b21	ΣΣb3b8b19
33	b5b12	ΣΣb12b19b21	ΣΣb5b7b12b16	ΣΣb5b7b12b17	ΣΣb5b7b12b18	ΣΣb5b7b12b19	ΣΣb5b7b12b20	ΣΣb5b7b12b21	ΣΣb5b8b12b19
34	b6b12	ΣΣb6b6b12b19	ΣΣb6b7b12b16	ΣΣb6b7b12b17	ΣΣb6b7b12b18	ΣΣb6b7b12b19	ΣΣb6b7b12b20	ΣΣb6b7b12b21	ΣΣb6b8b12b19
35	b5b13	ΣΣb13b19b21	ΣΣb5b7b13b16	ΣΣb5b7b13b17	ΣΣb5b7b13b18	ΣΣb5b7b13b19	ΣΣb5b7b13b20	ΣΣb5b7b13b21	ΣΣb5b8b13b19
36	b6b13	ΣΣb6b6b13b19	ΣΣb6b7b13b16	ΣΣb6b7b13b17	ΣΣb6b7b13b18	ΣΣb6b7b13b19	ΣΣb6b7b13b20	ΣΣb6b7b13b21	ΣΣb6b8b13b19
37	b6b14	ΣΣb6b6b14b19	ΣΣb6b7b14b16	ΣΣb6b7b14b17	ΣΣb6b7b14b18	ΣΣb6b7b14b19	ΣΣb6b7b14b20	ΣΣb6b7b14b21	ΣΣb6b8b14b19
38	b5b16	ΣΣb16b19b21	ΣΣb5b7b16b16	ΣΣb5b7b16b17	ΣΣb5b7b16b18	ΣΣb5b7b16b19	ΣΣb5b7b16b20	ΣΣb5b7b16b21	ΣΣb5b8b16b19
39	b6b16	ΣΣb6b6b16b19	ΣΣb6b7b16b16	ΣΣb6b7b16b17	ΣΣb6b7b16b18	ΣΣb6b7b16b19	ΣΣb6b7b16b20	ΣΣb6b7b16b21	ΣΣb6b8b16b19
40	b6b17	ΣΣb6b6b17b19	ΣΣb6b7b16b17	ΣΣb6b7b17b17	ΣΣb6b7b17b18	ΣΣb6b7b17b19	ΣΣb6b7b17b20	ΣΣb6b7b16b21	ΣΣb6b8b17b19
41	b6b19	ΣΣb6b6b19b19	ΣΣb6b7b16b19	ΣΣb6b7b17b19	ΣΣb6b7b19b18	ΣΣb6b7b19b19	ΣΣb6b7b19b20	ΣΣb6b7b16b21	ΣΣb6b8b19b19
42	b7b16	ΣΣb6b7b16b19	ΣΣb7b7b16b16	ΣΣb7b7b16b17	ΣΣb7b7b16b18	ΣΣb7b7b16b19	ΣΣb7b7b16b20	ΣΣb7b7b16b21	ΣΣb7b8b16b19
43	b7b17	ΣΣb6b7b17b19	ΣΣb7b7b16b17	ΣΣb7b7b17b17	ΣΣb7b7b17b18	ΣΣb7b7b17b19	ΣΣb7b7b17b20	ΣΣb7b7b17b21	ΣΣb7b8b17b19
44	b7b18	ΣΣb6b7b19b18	ΣΣb7b7b16b18	ΣΣb7b7b17b18	ΣΣb7b7b18b18	ΣΣb7b7b18b19	ΣΣb7b7b18b20	ΣΣb7b7b18b21	ΣΣb7b8b18b19
45	b7b19	ΣΣb6b7b19b19	ΣΣb7b7b16b19	ΣΣb7b7b17b19	ΣΣb7b7b18b19	ΣΣb7b7b19b19	ΣΣb7b7b19b20	ΣΣb7b7b19b21	ΣΣb7b8b19b19
46	b7b20	ΣΣb6b7b19b20	ΣΣb7b7b16b20	ΣΣb7b7b17b20	ΣΣb7b7b18b20	ΣΣb7b7b19b20	ΣΣb7b7b20b20	ΣΣb7b7b20b21	ΣΣb7b8b19b20
47	b7b21	ΣΣb6b7b16b21	ΣΣb7b7b16b21	ΣΣb7b7b17b21	ΣΣb7b7b18b21	ΣΣb7b7b19b21	ΣΣb7b7b20b21	ΣΣb7b7b21b21	ΣΣb7b8b19b21
48	b8b19	ΣΣb6b8b19b19	ΣΣb7b8b16b19	ΣΣb7b8b17b19	ΣΣb7b8b18b19	ΣΣb7b8b19b19	ΣΣb7b8b19b20	ΣΣb7b8b19b21	ΣΣb8b8b19b19
49	b8b20	ΣΣb6b8b19b20	ΣΣb7b8b16b20	ΣΣb7b8b17b20	ΣΣb7b8b18b20	ΣΣb7b8b19b20	ΣΣb7b8b20b20	ΣΣb7b8b2021	ΣΣb8b8b19b20
50	b8b21	ΣΣb6b8b19b21	ΣΣb7b8b16b21	ΣΣb7b8b17b21	ΣΣb7b8b18b21	ΣΣb7b8b19b21	ΣΣb7b8b20b21	ΣΣb7b8b21b21	ΣΣb8b8b19b21
51	b9b21	ΣΣb6b9b19b21	ΣΣb7b9b16b21	ΣΣb7b9b17b21	ΣΣb7b9b18b21	ΣΣb7b9b19b21	ΣΣb7b9b20b21	ΣΣb7b9b21b21	ΣΣb8b9b19b21
52	b12b19	ΣΣb6b12b19b19	ΣΣb7b12b16b19	ΣΣb7b12b17b19	ΣΣb7b12b18b19	ΣΣb7b12b19b19	ΣΣb7b12b19b20	ΣΣb7b12b19b21	ΣΣb8b12b19b19
53	b12b20	ΣΣb6b12b19b20	ΣΣb7b12b16b20	ΣΣb7b12b17b20	ΣΣb7b12b18b20	ΣΣb7b12b19b20	ΣΣb7b12b20b20	ΣΣb7b12b20b21	ΣΣb8b12b19b20
54	b12b21	ΣΣb6b12b19b21	ΣΣb7b12b16b21	ΣΣb7b12b17b21	ΣΣb7b12b18b21	ΣΣb7b12b19b21	ΣΣb7b12b20b21	ΣΣb7b12b21b21	ΣΣb8b12b19b21
55	b13b21	ΣΣb6b13b19b21	ΣΣb7b13b16b21	ΣΣb7b13b17b21	ΣΣb7b13b18b21	ΣΣb7b13b19b21	ΣΣb7b13b20b21	ΣΣb7b13b21b21	ΣΣb8b13b19b21
56	b16b21	ΣΣb6b16b19b21	ΣΣb7b16b16b21	ΣΣb7b16b17b21	ΣΣb7b16b18b21	ΣΣb7b16b19b21	ΣΣb7b16b20b21	ΣΣb7b16b21b21	ΣΣb8b16b19b21
57	b5b7b16	ΣΣb7b16b19b21	ΣΣb5b7b7b16b16	ΣΣb5b7b7b16b17	ΣΣb5b7b7b17b18	ΣΣb5b7b7b17b19	ΣΣb5b7b7b16b20	ΣΣb5b7b7b16b21	ΣΣb5b7b8b16b19
58	b6b7b16	b6b7b16	ΣΣb6b6b7b19b19	ΣΣb6b7b7b16b16	ΣΣb6b7b7b16b17	ΣΣb6b7b7b17b18	ΣΣb6b7b7b17b19	ΣΣb6b7b7b16b20	ΣΣb6b7b7b16b21
59	b6b7b17	b6b7b17	ΣΣb6b6b7b17b19	ΣΣb6b7b7b16b17	ΣΣb6b7b7b17b17	ΣΣb6b7b7b17b18	ΣΣb6b7b7b17b19	ΣΣb6b7b7b17b20	ΣΣb6b7b7b17b21
60	b6b7b19	b6b7b19	ΣΣb6b6b7b19b19	ΣΣb6b7b7b16b19	ΣΣb6b7b7b17b19	ΣΣb6b7b7b18b19	ΣΣb6b7b7b19b19	ΣΣb6b7b7b19b20	ΣΣb6b7b7b19b21
61	b5b7b16	b6b8b19	ΣΣb6b6b8b19b19	ΣΣb6b7b8b16b19	ΣΣb6b7b8b17b19	ΣΣb6b7b8b18b19	ΣΣb6b7b8b19b19	ΣΣb6b7b8b19b20	ΣΣb6b7b8b19b21
62	b6b7b16	b6b12b19	ΣΣb6b6b12b19b19	ΣΣb6b7b12b16b19	ΣΣb6b7b12b17b19	ΣΣb6b7b12b18b19	ΣΣb6b7b12b19b19	ΣΣb6b7b12b19b20	ΣΣb6b7b12b19b21
63	b6b7b17	b7b16b21	ΣΣb6b7b16b19b21	ΣΣb7b7b16b16b21	ΣΣb7b7b16b17b21	ΣΣb7b7b16b18b21	ΣΣb7b7b16b19b21	ΣΣb7b7b16b20b21	ΣΣb7b7b16b21b21

Table 2 K: Elements of matrix [AA] for Observation Point 49-56 for first half

S.No.	Var.	49	50	51	52	53	54	55	56
1	b1	ΣΣb1b8b20	ΣΣb1b8b21	ΣΣb1b9b21	ΣΣb1b12b19	ΣΣb1b12b20	ΣΣb1b12b21	ΣΣb1b13b21	ΣΣb1b16b21
2	b2	ΣΣb2b8b20	ΣΣb2b8b21	ΣΣb2b9b21	ΣΣb2b12b19	ΣΣb2b12b20	ΣΣb2b12b21	ΣΣb2b13b21	ΣΣb2b16b21
3	b3	ΣΣb3b8b20	ΣΣb3b8b21	ΣΣb3b8b22	ΣΣb3b12b19	ΣΣb3b12b20	ΣΣb3b12b21	ΣΣb3b13b21	ΣΣb3b16b21
4	b4	ΣΣb4b8b20	ΣΣb4b8b21	ΣΣb4b9b21	ΣΣb4b12b19	ΣΣb4b12b20	ΣΣb4b12b21	ΣΣb4b13b21	ΣΣb4b16b21
5	b5	ΣΣb5b8b20	ΣΣb5b8b21	ΣΣb5b9b21	ΣΣb5b12b19	ΣΣb5b12b20	ΣΣb5b12b21	ΣΣb5b13b21	ΣΣb5b16b21
6	b6	ΣΣb6b8b20	ΣΣb6b8b21	ΣΣb6b9b21	ΣΣb6b12b19	ΣΣb6b12b20	ΣΣb6b12b21	ΣΣb6b13b21	ΣΣb6b16b21
7	b7	ΣΣb7b8b20	ΣΣb7b8b21	ΣΣb7b9b21	ΣΣb7b12b19	ΣΣb7b12b20	ΣΣb7b12b21	ΣΣb7b13b21	ΣΣb7b16b21
8	b8	ΣΣb8b8b20	ΣΣb8b8b21	ΣΣb8b9b21	ΣΣb8b12b19	ΣΣb8b12b20	ΣΣb8b12b21	ΣΣb8b13b21	ΣΣb8b16b21
9	b9	ΣΣb8b9b20	ΣΣb8b9b21	ΣΣb9b9b21	ΣΣb9b12b19	ΣΣb9b12b20	ΣΣb9b12b21	ΣΣb9b13b21	ΣΣb9b16b21
10	b10	ΣΣb8b10b20	ΣΣb8b10b21	ΣΣb9b10b21	ΣΣb10b12b19	ΣΣb10b12b20	ΣΣb10b12b21	ΣΣb10b13b21	ΣΣb10b16b21
11	b11	ΣΣb8b11b120	ΣΣb8b11b21	ΣΣb9b11b21	ΣΣb11b12b19	ΣΣb11b12b20	ΣΣb11b12b21	ΣΣb11b13b21	ΣΣb11b16b21
12	b12	ΣΣb8b12b20	ΣΣb8b12b21	ΣΣb9b12b21	ΣΣb12b12b19	ΣΣb12b12b20	ΣΣb12b12b21	ΣΣb12b13b21	ΣΣb12b16b21
13	b13	ΣΣb8b13b20	ΣΣb8b13b21	ΣΣb9b13b21	ΣΣb12b13b19	ΣΣb12b13b20	ΣΣb12b13b21	ΣΣb13b13b21	ΣΣb13b16b21
14	b14	ΣΣb8b14b20	ΣΣb8b14b21	ΣΣb9b14b21	ΣΣb12b14b19	ΣΣb12b14b20	ΣΣb12b14b21	ΣΣb13b14b21	ΣΣb16b14b21
15	b15	ΣΣb8b15b20	ΣΣb8b15b21	ΣΣb9b15b21	ΣΣb12b15b19	ΣΣb12b15b20	ΣΣb12b15b21	ΣΣb13b15b21	ΣΣb16b15b21
16	b16	ΣΣb8b16b20	ΣΣb8b16b21	ΣΣb9b16b21	ΣΣb12b16b19	ΣΣb12b16b20	ΣΣb12b16b21	ΣΣb13b16b21	ΣΣb16b16b21
17	b17	ΣΣb8b17b20	ΣΣb8b17b21	ΣΣb9b17b21	ΣΣb12b17b19	ΣΣb12b17b20	ΣΣb12b17b21	ΣΣb13b17b21	ΣΣb16b17b21
18	b18	ΣΣb8b18b20	ΣΣb8b18b21	ΣΣb9b18b21	ΣΣb12b18b19	ΣΣb12b18b20	ΣΣb12b18b21	ΣΣb13b18b21	ΣΣb16b18b21
19	b19	ΣΣb8b19b20	ΣΣb8b19b21	ΣΣb9b19b21	ΣΣb12b19b19	ΣΣb12b19b20	ΣΣb12b19b21	ΣΣb13b19b21	ΣΣb16b19b21
20	b20	ΣΣb8b20b20	ΣΣb8b20b21	ΣΣb9b20b21	ΣΣb12b19b20	ΣΣb12b20b20	ΣΣb12b20b21	ΣΣb13b20b21	ΣΣb16b20b21
21	b21	ΣΣb8b20b21	ΣΣb8b21b21	ΣΣb9b21b21	ΣΣb12b19b21	ΣΣb12b20b21	ΣΣb12b21b21	ΣΣb13b21b21	ΣΣb16b21b21
22	b3b7	ΣΣb3b7b8b20	ΣΣb3b7b8b21	ΣΣb3b7b9b21	ΣΣb3b7b12b19	ΣΣb3b7b12b20	ΣΣb3b7b12b21	ΣΣb3b7b13b21	ΣΣb3b7b16b21
23	b4b7	ΣΣb4b7b8b20	ΣΣb4b7b8b21	ΣΣb4b7b9b21	ΣΣb4b7b12b19	ΣΣb4b7b12b20	ΣΣb4b7b12b21	ΣΣb4b7b13b21	ΣΣb4b7b16b21
24	b5b7	ΣΣb5b7b8b20	ΣΣb5b7b8b21	ΣΣb5b7b9b21	ΣΣb5b7b12b19	ΣΣb5b7b12b20	ΣΣb5b7b12b21	ΣΣb5b7b13b21	ΣΣb5b7b16b21
25	b6b7	ΣΣb6b7b8b20	ΣΣb6b7b8b21	ΣΣb6b7b9b21	ΣΣb6b7b12b19	ΣΣb6b7b12b20	ΣΣb6b7b12b21	ΣΣb6b7b13b21	ΣΣb6b7b16b21
26	b4b8	ΣΣb4b8b8b20	ΣΣb4b8b8b21	ΣΣb4b8b9b21	ΣΣb4b8b12b19	ΣΣb4b8b12b20	ΣΣb4b8b12b21	ΣΣb4b8b13b21	ΣΣb4b8b16b21
27	b5b8	ΣΣb5b8b8b20	ΣΣb5b8b8b21	ΣΣb5b8b9b21	ΣΣb5b8b12b19	ΣΣb5b8b12b20	ΣΣb5b8b12b21	ΣΣb5b8b13b21	ΣΣb5b8b16b21
28	b6b8	ΣΣb6b8b8b20	ΣΣb6b8b8b21	ΣΣb6b8b9b21	ΣΣb6b8b12b19	ΣΣb6b8b12b20	ΣΣb6b8b12b21	ΣΣb6b8b13b21	ΣΣb6b8b16b21
29	b5b9	ΣΣb5b8b9b20	ΣΣb5b8b9b21	ΣΣb5b9b9b21	ΣΣb5b9b12b19	ΣΣb5b9b12b20	ΣΣb5b9b12b21	ΣΣb5b9b13b21	ΣΣb5b9b16b21
30	b6b9	ΣΣb1b8b20	ΣΣb1b8b21	ΣΣb1b9b22	ΣΣb1b12b20	ΣΣb6b9b12b20	ΣΣb6b9b12b21	ΣΣb6b9b13b21	ΣΣb6b9b16b21

Table 2 L: Elements of matrix [AA] for Observation Point 49-56 for second half

S.No.	Var.	49	50	51	52	53	54	55	56
31	b6b10	ΣΣb2b8b20	ΣΣb2b8b21	ΣΣb2b9b22	ΣΣb2b12b20	ΣΣb6b10b12b20	ΣΣb6b10b12b21	ΣΣb6b10b13b21	ΣΣb6b10b16b21
32	b4b12	ΣΣb3b8b20	ΣΣb3b8b21	ΣΣb3b8b22	ΣΣb3b12b20	ΣΣb4b12b12b20	ΣΣb4b12b12b21	ΣΣb4b12b13b21	ΣΣb4b12b16b21
33	b5b12	ΣΣb5b8b12b20	ΣΣb5b8b12b21	ΣΣb5b8b12b22	ΣΣb5b12b12b19	ΣΣb5b12b12b20	ΣΣb5b12b12b21	ΣΣb5b12b13b21	ΣΣb5b12b16b21
34	b6b12	ΣΣb6b8b12b20	ΣΣb6b8b12b21	ΣΣb6b9b12b21	ΣΣb6b12b12b19	ΣΣb6b12b12b20	ΣΣb6b12b12b21	ΣΣb6b12b13b21	ΣΣb6b12b16b21
35	b5b13	ΣΣb5b8b13b20	ΣΣb5b8b13b21	ΣΣb5b9b13b21	ΣΣb5b12b13b19	ΣΣb5b12b13b20	ΣΣb5b12b13b21	ΣΣb5b13b13b21	ΣΣb5b13b16b21
36	b6b13	ΣΣb6b8b13b20	ΣΣb6b8b13b21	ΣΣb6b9b13b21	ΣΣb6b12b13b19	ΣΣb6b12b13b20	ΣΣb6b12b13b21	ΣΣb6b13b13b21	ΣΣb6b13b16b21
37	b6b14	ΣΣb6b8b14b19	ΣΣb6b8b14b20	ΣΣb6b8b14b21	ΣΣb6b9b14b21	ΣΣb6b12b14b19	ΣΣb6b12b14b20	ΣΣb6b13b14b21	ΣΣb6b14b16b21
38	b5b16	ΣΣb5b8b16b20	ΣΣb5b8b16b21	ΣΣb5b9b16b21	ΣΣb5b12b16b19	ΣΣb5b12b16b20	ΣΣb5b12b16b21	ΣΣb5b13b16b21	ΣΣb5b16b16b21
39	b6b16	ΣΣb6b8b16b20	ΣΣb6b8b16b21	ΣΣb6b9b16b21	ΣΣb6b12b16b19	ΣΣb6b12b16b20	ΣΣb6b12b16b21	ΣΣb6b13b16b21	ΣΣb6b16b16b21
40	b6b17	ΣΣb6b8b17b20	ΣΣb6b8b17b21	ΣΣb6b9b17b21	ΣΣb6b12b17b19	ΣΣb6b12b17b20	ΣΣb6b12b17b21	ΣΣb6b13b17b21	ΣΣb6b16b17b21
41	b6b19	ΣΣb6b8b19b20	ΣΣb6b8b19b21	ΣΣb6b9b19b21	ΣΣb6b12b19b19	ΣΣb6b12b19b20	ΣΣb6b12b19b21	ΣΣb6b13b19b21	ΣΣb6b16b19b21
42	b7b16	ΣΣb7b8b16b20	ΣΣb7b8b16b21	ΣΣb7b9b16b21	ΣΣb7b12b16b19	ΣΣb7b12b16b20	ΣΣb7b12b16b21	ΣΣb7b13b16b21	ΣΣb7b16b16b21
43	b7b17	ΣΣb7b8b17b20	ΣΣb7b8b17b21	ΣΣb7b9b17b21	ΣΣb7b12b17b19	ΣΣb7b12b17b20	ΣΣb7b12b17b21	ΣΣb7b13b17b21	ΣΣb7b16b17b21
44	b7b18	ΣΣb7b8b18b20	ΣΣb7b8b18b21	ΣΣb7b9b18b21	ΣΣb7b12b18b19	ΣΣb7b12b18b20	ΣΣb7b12b18b21	ΣΣb7b13b18b21	ΣΣb7b16b18b21
45	b7b19	ΣΣb7b8b19b20	ΣΣb7b8b19b21	ΣΣb7b9b19b21	ΣΣb7b12b19b19	ΣΣb7b12b19b20	ΣΣb7b12b19b21	ΣΣb7b13b19b21	ΣΣb7b16b19b21
46	b7b20	ΣΣb7b8b20b20	ΣΣb7b8b20b21	ΣΣb7b9b20b21	ΣΣb7b12b19b20	ΣΣb7b12b20b20	ΣΣb7b12b20b21	ΣΣb7b13b20b21	ΣΣb7b16b20b21
47	b7b21	ΣΣb7bb8b2021	ΣΣb7b8b21b21	ΣΣb7b9b21b21	ΣΣb7b12b19b21	ΣΣb7b12b20b21	ΣΣb7b12b21b21	ΣΣb7b13b21b21	ΣΣb7b16b21b21
48	b8b19	ΣΣb8b8b19b20	ΣΣb8b8b19b21	ΣΣb8b9b19b21	ΣΣb8b12b19b19	ΣΣb8b12b19b20	ΣΣb8b12b19b21	ΣΣb8b13b19b21	ΣΣb8b16b19b21
49	b8b20	ΣΣb8b8b20b20	ΣΣb8b8b20b21	ΣΣb8b9b20b21	ΣΣb8b12b19b20	ΣΣb8b12b20b20	ΣΣb8b12b20b21	ΣΣb8b13b20b21	ΣΣb8b16b20b21
50	b8b21	ΣΣb8b8b20b21	ΣΣb8b8b21b21	ΣΣb8b9b21b21	ΣΣb8b12b19b21	ΣΣb8b12b20b21	ΣΣb8b12b21b21	ΣΣb8b13b21b21	ΣΣb8b16b21b21
51	b9b21	ΣΣb8b9b20b21	ΣΣb8b9b21b21	ΣΣb9b9b21b21	ΣΣb9b12b19b21	ΣΣb9b12b19b21	ΣΣb9b12b21b21	ΣΣb9b13b21b21	ΣΣb9b16b21b21
52	b12b19	ΣΣb8b12b19b20	ΣΣb8b12b19b21	ΣΣb9b12b19b21	ΣΣb12b12b19b19	ΣΣb12b12b19b20	ΣΣb12b12b19b21	ΣΣb12b13b19b21	ΣΣb12b16b19b21
53	b12b20	ΣΣb8b12b20b20	ΣΣb8b12b20b21	ΣΣb9b12b19b21	ΣΣb12b12b19b20	ΣΣb12b12b20b20	ΣΣb12b12b20b21	ΣΣb12b13b20b21	ΣΣb12b16b20b21
54	b12b21	ΣΣb8b12b20b21	ΣΣb8b12b21b21	ΣΣb9b12b21b21	ΣΣb12b12b19b21	ΣΣb12b12b20b21	ΣΣb12b12b21b21	ΣΣb12b13b21b21	ΣΣb12b16b21b21
55	b13b21	ΣΣb8b13b20b21	ΣΣb8b13b21b21	ΣΣb9b13b21b21	ΣΣb12b13b19b21	ΣΣb12b13b20b21	ΣΣb12b13b21b21	ΣΣb13b132b21b21	ΣΣb13b16b21b21
56	b16b21	ΣΣb8b16b20b21	ΣΣb8b16b21b21	ΣΣb9b16b21b21	ΣΣb12b16b19b21	ΣΣb12b16b20b21	ΣΣb12b16b21b21	ΣΣb13b16b21b21	ΣΣb16b162b21b21
57	b5b7b16	ΣΣb5b7b8b16b20	ΣΣb5b7b8b16b21	ΣΣb5b7b9b16b21	ΣΣb5b7b12b16b19	ΣΣb5b7b12b16b20	ΣΣb5b7b12b16b21	ΣΣb5b7b13b16b21	ΣΣb5b7b16b16b21
58	b6b7b16	ΣΣb6b7b8b16b20	ΣΣb6b7b8b16b21	ΣΣb6b7b9b16b21	ΣΣb6b7b12b16b19	ΣΣb6b7b12b16b20	ΣΣb6b7b12b16b21	ΣΣb6b7b13b16b21	ΣΣb6b7b16b16b21
59	b6b7b17	b6b7b17	ΣΣb6b7b8b17b20	ΣΣb6b7b8b17b21	ΣΣb6b7b9b17b21	ΣΣb6b7b12b17b19	ΣΣb6b7b12b17b20	ΣΣb6b7b12b17b21	ΣΣb6b7b13b17b21
60	b6b7b19	b6b7b19	ΣΣb6b7b8b19b20	ΣΣb6b7b8b19b21	ΣΣb6b7b9b19b21	ΣΣb6b7b12b19b19	ΣΣb6b7b12b19b20	ΣΣb6b7b12b19b21	ΣΣb6b7b13b19b21
61	b5b7b16	b6b8b19	ΣΣb6b8b8b19b20	ΣΣb6b8b8b19b21	ΣΣb6b7b9b19b21	ΣΣb6b7b12b19b19	ΣΣb6b7b12b19b20	ΣΣb6b7b12b19b21	ΣΣb6b8b13b19b21
62	b6b7b16	b6b12b19	ΣΣb6b8b12b19b20	ΣΣb6b8b12b19b21	ΣΣb6b7b9b20b21	ΣΣb6b7b12b19b20	ΣΣb6b7b12b20b20	ΣΣb6b7b12b20b21	ΣΣb6b12b13b19b21
63	b6b7b17	b7b16b21	ΣΣb7b8b16b20b21	ΣΣb7b8b16b21b21	ΣΣb7b9b1621b21	ΣΣb7b12b16b19b21	ΣΣb7b12b16b20b21	ΣΣb7b12b16b21b21	ΣΣb7b13b16b21b21

Table 2M: Elements of matrix [AA] for Observation Point 57-63 for first half

S.No.	Var.	57	58	59	60	61	62	63
1	b1	ΣΣb7b10b16	ΣΣb7b11b16	ΣΣb7b11b17	ΣΣb7b11b19	ΣΣb8b11b19	ΣΣb11b12b19	ΣΣb1b7b16b21
2	b2	ΣΣb2b5b7b16	ΣΣb2b6b7b16	ΣΣb2b6b7b17	ΣΣb2b6b7b19	ΣΣb2b6b8b19	ΣΣb2b6b12b19	ΣΣb2b7b16b21
3	b3	ΣΣb7b16b17	ΣΣb7b16b18	ΣΣb7b17b18	ΣΣb7b18b19	ΣΣb8b18b19	ΣΣb12b18b19	ΣΣb3b7b16b21
4	b4	ΣΣb7b16b19	ΣΣb7b16b20	ΣΣb7b17b20	ΣΣb7b19b20	ΣΣb8b19b20	ΣΣb12b19b20	ΣΣb4b7b16b21
5	b5	ΣΣb5b5b7b16	ΣΣb7b16b21	ΣΣb7b17b21	ΣΣb7b19b21	ΣΣb8b19b21	ΣΣb12b19b21	ΣΣb5b7b16b21
6	b6	ΣΣb7b16b21	ΣΣb6b6b7b16	ΣΣb6b6b7b17	ΣΣb6b6b7b19	ΣΣb6b6bb8b19	ΣΣb6b6b12b19	ΣΣb6b7b16b21
7	b7	ΣΣb5b7b7b16	ΣΣb6b7b7b16	ΣΣb6b7bb7b17	ΣΣb6b7b7b19	ΣΣb6b7b8b1b9	ΣΣb6b7b12b19	ΣΣb6b7b7b16b21
8	b8	ΣΣb5b7b8b16	ΣΣb6b7b8b16	ΣΣb6b7b8b17	ΣΣb6b7b8b19	ΣΣb6b8b8b19	ΣΣb6b8b12b19	ΣΣb7b8b16b21
9	b9	ΣΣb5b7b9b16	ΣΣb6b7b9b16	ΣΣb6b7b9b17	ΣΣb6b7b9b19	ΣΣb6b8b9b19	ΣΣb6b9b12b19	ΣΣb7b9b16b21
10	b10	ΣΣb5b7b10b16	ΣΣb6b7b10b16	ΣΣb6b7b10b17	ΣΣb6b7b10b19	ΣΣb6b8b10b19	ΣΣb6b10b12b19	ΣΣb7b10b16b21
11	b11	ΣΣb5b7b11b16	ΣΣb6b7b11b16	ΣΣb6b7b11b17	ΣΣb6b7b11b19	ΣΣb6b8b11b19	ΣΣb6b11b12b19	ΣΣb7b11b16b21
12	b12	ΣΣb5b7b12b16	ΣΣb6b7b12b16	ΣΣb6b7b12b17	ΣΣb6b7b12b19	ΣΣb6b8b12b19	ΣΣb6b12b12b19	ΣΣb7b12b16b21
13	b13	ΣΣb5b7b13b16	ΣΣb6b7b13b16	ΣΣb6b7b13b17	ΣΣb6b7b13b19	ΣΣb6b8b13b19	ΣΣb6b12b13b19	ΣΣb7b13b16b21
14	b14	ΣΣb5b7b14b16	ΣΣb6b7b14b16	ΣΣb6b7b14b17	ΣΣb6b7b14b19	ΣΣb6b8b14b19	ΣΣb6b12b14b19	ΣΣb7b14b16b21
15	b15	ΣΣb5b7b15b16	ΣΣb6b7b15b16	ΣΣb6b7b15b17	ΣΣb6b7b15b19	ΣΣb6b8b15b19	ΣΣb6b12b15b19	ΣΣb7b15b16b21
16	b16	ΣΣb5b7b16b16	ΣΣb6b7b16b16	ΣΣb6b7b16b17	ΣΣb6b7b16b19	ΣΣb6b8b16b19	ΣΣb6b12b16b19	ΣΣb7b16b16b21
17	b17	ΣΣb5b7b16b17	ΣΣb6b7b16b17	ΣΣb6b7b17b17	ΣΣb6b7b17b19	ΣΣb6b8b17b19	ΣΣb6b12b17b19	ΣΣb7b16b17b21
18	b18	ΣΣb5b7b16b18	ΣΣb6b7b16b18	ΣΣb6b7b17b18	ΣΣb6b7b18b19	ΣΣb6b8b18b19	ΣΣb6b12b18b19	ΣΣb7b16bb1821
19	b19	ΣΣb5b7b16b19	ΣΣb6b7b16b19	ΣΣb6b7b17b19	ΣΣb6b7b19b19	ΣΣb6b8b19b19	ΣΣb6b12b19	ΣΣb7b16b19b21
20	b20	ΣΣb5b7b16b20	ΣΣb6b7b16b20	ΣΣb6b7b17b20	ΣΣb6b7b19b20	ΣΣb6b8b19b20	ΣΣb6b12b19b20	ΣΣb7b16b20b21
21	b21	ΣΣb5b7b16b21	ΣΣb6b7b16b21	ΣΣb6b7b17b21	ΣΣb6b7b19b21	ΣΣb6b8b19b21	ΣΣb6b12b19b21	ΣΣb7b16b21b21
22	b3b7	ΣΣb3b7b5b7b16	ΣΣb3b7b6b7b16	ΣΣb3b7b6b7b17	ΣΣb3b7b6b7b19	ΣΣb3b7b6b8b19	ΣΣb3b7b6b12b19	ΣΣb3b7b7b16b21
23	b4b7	ΣΣb4b7b5b7b16	ΣΣb4b7b6b7b16	ΣΣb4b7b6b7b17	ΣΣb4b7b6b7b19	ΣΣb4b7b6b8b19	b4ΣΣb7b6b12b19	ΣΣb4b7b7b16b21
24	b5b7	ΣΣb5b7b5b7b16	ΣΣb7b7b16b21	ΣΣb7b7b17b21	ΣΣb7b7b19b21	ΣΣb7b8b19b21	ΣΣb7b12b19b21	ΣΣb5b7b7b16b21
25	b6b7	ΣΣb7b7b16b21	ΣΣb6b6b7b7b16	ΣΣb6b6b7b7b17	ΣΣb6b6b7b7b19	ΣΣb6b6b7b8b19	ΣΣb6b6b7b12b19	ΣΣb6b7b7b16b21
26	b4b8	ΣΣb7b8b16b19	ΣΣb7b8b16b20	ΣΣb7b8b17b20	ΣΣb7b8b19b20	ΣΣb8b8b19b20	ΣΣb8b12b19b20	ΣΣb4b7b8b16b21
27	b5b8	ΣΣb5b5b7b8b16	ΣΣb7b8b16b21	ΣΣb7b8b17b21	ΣΣb7b8b19b21	ΣΣb8b8b19b21	ΣΣb8b12b19b21	ΣΣb5b7b8b16b21
28	b6b8	ΣΣb7b8b16b21	ΣΣb6b6b7b8b16	ΣΣb6b6b7b8b17	ΣΣb6b6b7b8b19	ΣΣb6b6b8b8b19	ΣΣb6b6b8b12b19	ΣΣb6b7b8b16b21
29	b5b9	ΣΣb5b5b7b9b16	ΣΣb7b9b16b21	ΣΣb7b9b17b21	ΣΣb7b9b19b21	ΣΣb8b9b19b21	ΣΣb9b12b19b21	ΣΣb5b7b9b16b21
30	b6b9	ΣΣb21b7b9b16	ΣΣb6b6b7b9b16	ΣΣb6b6b7b9b17	ΣΣb6b6b7b9b19	ΣΣb6b6b8b9b19	ΣΣb6b6b9b12b19	ΣΣb6b7b9b16b21

Table 2 N: Elements of matrix [AA] for Observation Point 49-56 for second half

S.No.	Var.	57	58	59	60	61	62	63
31	b6b10	ΣΣb7b10b16b21	ΣΣb6b6b7b10b16	ΣΣb6b6b7b10b17	ΣΣb6b6b7b10b17	ΣΣb6b6b8b10b19	ΣΣb6b6b10b12b19	ΣΣb6b7b10b16b21
32	b4b12	ΣΣb7b12b16b19	ΣΣb7b12b16b20	ΣΣb7b12b17b20	ΣΣb7b12b19b20	ΣΣb8b12b19b20	ΣΣb12b1b2b19b20	ΣΣb4b7b12b16b21
33	b5b12	ΣΣb5b5b7b12b16	ΣΣb7b12b16b21	ΣΣb7b12b17b21	ΣΣb7b12b19b21	ΣΣb21b8b12b19	ΣΣb12b12b19b21	ΣΣb5b7b12b1b6b21
34	b6b12	ΣΣb7b12b16b21	ΣΣb6b6b7b12b16	ΣΣb6b6b7b12b17	ΣΣb6b6b7b12b19	ΣΣb6b6b8b12b19	ΣΣb6b6b12b12b19	ΣΣb6b7b12b16b21
35	b5b13	ΣΣb5b5b7b13b16	ΣΣb7b13b16b21	ΣΣb7b13b17b21	ΣΣb7b13b19b21	ΣΣb8b13b19b21	ΣΣb12b13b19b21	ΣΣb5b7b13b16b21
36	b6b13	ΣΣb7b13b16b21	ΣΣb6b6b7b13b16	ΣΣb6b6b7b13b17	ΣΣb6b6b7b13b19	ΣΣb6b6b8b13b19	ΣΣb6b6b12b13b19	ΣΣb6b7b13b16b21
37	b6b14	ΣΣb7b14b16b21	ΣΣb6b6b7b14b16	ΣΣb6b6b7b14b17	ΣΣb6b6b7b14b19	ΣΣb6b6b8b14b19	ΣΣb6b6b12b14b19	ΣΣb6b7b14b16b21
38	b5b16	ΣΣb5b5b7b16b16	ΣΣb7b16b16b21	ΣΣb7b16b17b21	ΣΣb7b16b19b21	ΣΣb8b16b19b21	ΣΣb21b12b16b19	ΣΣb5b7b16b16b21
39	b6b16	ΣΣb7b16b16b21	ΣΣb6b6b7b16b16	ΣΣb6b6b7b16b17	ΣΣb6b6b7b16b19	ΣΣb6b6b8b16b19	ΣΣb6b6b12b16b19	ΣΣb6b7b16b16b21
40	b6b17	ΣΣb7b16b17b21	ΣΣb6b6b7b17b17	ΣΣb6b6b7b17b17	ΣΣb6b6b7b17b19	ΣΣb6b6b8b17b19	ΣΣb6b6b12b17b19	ΣΣb6b7b16b17b21
41	b6b19	ΣΣb7b16b19b21	ΣΣb6b6b7b19b19	ΣΣb6b6b7b17b19	ΣΣb6b6b7b19b19	ΣΣb6b6b8b19b19	ΣΣb6b6b12b19b19	ΣΣb6b7b16b19b21
42	b7b16	ΣΣb5b7b7b16b16	ΣΣb6b7b7b16b16	ΣΣb6b7b7b16b17	ΣΣb6b7b7b16b19	ΣΣb6b7b8b16b19	ΣΣb6b7b12b16b19	ΣΣb7b7b16b16b21
43	b7b17	ΣΣb5b7b7b16b17	ΣΣb6b7b7b16b17	ΣΣb6b7b7b17b17	ΣΣb6b7b7b17b19	ΣΣb6b7b8b17b19	ΣΣb6b7b12b17b19	ΣΣb7b7b16b17b21
44	b7b18	ΣΣb5b7b7b17b18	ΣΣb6b7b7b17b18	ΣΣb6b7b7b17b18	ΣΣb6b7b7b18b19	ΣΣb6b7b8b18b19	ΣΣb6b7b12b18b19	ΣΣb7b7b16b18b21
45	b7b19	ΣΣb5b7b7b17b19	ΣΣb6b7b7b17b19	ΣΣb6b7b7b17b19	ΣΣb6b7b7b19b19	ΣΣb6b7b8b19b19	ΣΣb6b7b12b19b19	ΣΣb7b7b16b19b21
46	b7b20	ΣΣb5b7b7b16b20	ΣΣb6b7b7b16b20	ΣΣb6b7b7b17b20	ΣΣb6b7b7b19b20	ΣΣb6b7b8b19b20	ΣΣb6b7b12b19b20	ΣΣb7b7b16b20b21
47	b7b21	ΣΣb5b7b7b16b21	ΣΣb6b7b7b16b21	ΣΣb6b7b7b17b21	ΣΣb6b7b7b19b21	ΣΣb6b7b8b19b21	ΣΣb6b7b12b19b21	ΣΣb7b7b16b21b21
48	b8b19	ΣΣb5b7b8b16b19	ΣΣb6b7b8b16b19	ΣΣb6b7b8b17b19	ΣΣb6b7b8b19b19	ΣΣb6b8b8b19b19	ΣΣb6b8b12b19b19	ΣΣb7b8b16b19b21
49	b8b20	ΣΣb5b7b8b16b20	ΣΣb6b7b8b16b20	ΣΣb6b7b8b17b20	ΣΣb6b7b8b19b20	ΣΣb6b8b8b19b20	ΣΣb6b8b12b19b20	ΣΣb7b8b16b20b21
50	b8b21	ΣΣb5b7b8b16b21	ΣΣb6b7b8b16b21	ΣΣb6b7b8b17b21	ΣΣb6b7b8b19b21	ΣΣb6b8b8b19b21	ΣΣb6b8b12b19b21	ΣΣb7b8b16b21b21
51	b9b21	ΣΣb5b7b9b16b21	ΣΣb6b7b9b16b21	ΣΣb6b7b9b17b21	ΣΣb6b7b9b18b21	ΣΣb6b7b9b19b21	ΣΣb6b7b9b20b21	ΣΣb6b7b9b21b21
52	b12b19	ΣΣb5b7b12b16b19	ΣΣb6b7b12b16b19	ΣΣb6b7b12b17b19	ΣΣb6b7b12b18b19	ΣΣb6b7b12b19b19	ΣΣb6b7b12b19b20	ΣΣb6b7b12b19b21
53	b12b20	ΣΣb5b7b12b16b20	ΣΣb6b7b12b16b20	ΣΣb6b7b12b17b20	ΣΣb6b7b12b18b20	ΣΣb6b7b12b19b20	ΣΣb6b7b12b20b20	ΣΣb6b7b12b20b21
54	b12b21	ΣΣb5b7b12b16b21	ΣΣb6b7b12b16b21	ΣΣb6b7b12b17b21	ΣΣb6b7b12b18b21	ΣΣb6b7b12b19b21	ΣΣb6b7b12b20b21	ΣΣb6b7b12b21b21
55	b13b21	ΣΣb5b7b13b16b21	ΣΣb6b7b13b16b21	ΣΣb6b7b13b17b21	ΣΣb6b7b13b18b21	ΣΣb6b7b13b19b21	ΣΣb6b7b13b20b21	ΣΣb6b7b13b21b21
56	b16b21	ΣΣb5b7b16b16b21	ΣΣb6b7b16b16b21	ΣΣb6b7b16b17b21	ΣΣb6b7b16b18b21	ΣΣb6b7b16b19b21	ΣΣb6b7b16b20b21	ΣΣb6b7b16b21b21
57	b5b7b16	b5b5b7b7b16b16	b5b6b7b7b16b16	b5b6b7b7b16b17	b5b6b7b7b16b18	ΣΣb5b6b7b7b16b19	ΣΣb5b6b7b7b16b20	ΣΣb5b6b7b7b16b21
58	b6b7b16	b5b6b7b7b16b16	b6b6b7b7b16b16	b6b6b7b7b16b17	b6b6b7b7b16b18	ΣΣb6b6b7b7b16b19	ΣΣb6b6b7b7b16b20	ΣΣb6b6b7b7b16b21
59	b6b7b17	b5b6b7b7b16b17	b6b6b7b7b16b17	b6b6b7b7b17b17	b6b6b7b7b17b18	ΣΣb6b6b7b7b17b19	ΣΣb6b6b7b7b17b20	ΣΣb6b6b7b7b17b21

60	b6b7b19	b5b6b7b7b16b19	b6b6b7b7b16b19	b6b6b7b7b17b19	b6b6b7b7b19b19	ΣΣb6b6b7b7b19b19	ΣΣb6b6b7b7b19b20	ΣΣb6b6b7b7b19b21
61	b5b7b16	b5b6b7b8b16b19	b6b6b7b8b16b19	b6b6b7b8b17b19	b6b6b7b8b18b19	ΣΣb6b6b7b8b19b19	ΣΣb6b6b7b8b19b20	ΣΣb6b6b7b8b19b21
62	b6b7b16	b5b6b7b12b16b19	b6b6b7b12b16b19	b6b6b7b12b17b19	b6b6b7b12b18b19	ΣΣb6b6b7b12b19b19	ΣΣb6b6b7b12b19b20	ΣΣb6b6b7b12b19b21
63	b6b7b17	b5b7b7b16b16b21	b6b7b7b16b16b21	b6b7b7b16b17b21	b6b7b7b16b19b21	ΣΣb6b7b8b16b19b21	ΣΣb6b7b12b16b19b21	ΣΣb7b7b16b16b21b21

Table 3: Mixes for Formulation of Model

S/N	E_1	E_2	E_3	E_4	E_5	E_6	E_7	E_8	E_9	E_{10}	E_{11}	E_{12}
Water	0.45	0.55	0.65	0.70	0.45	0.55	0.65	0.70	0.45	0.55	0.65	0.70
Cement	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
F.A.	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.95	1.95	1.95	2.00
C.A	1.75	1.75	1.75	1.75	1.95	1.95	1.95	1.95	2.55	2.55	2.55	2.50
Blend ratio	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.50	1.50	1.50	1.50
Time lag	0.75	0.75	0.75	0.75	1.50	1.50	1.50	1.50	2.25	2.25	2.25	2.25

Table 4: Control Mixes

S/N	C_1	C_2	C_3	C_4	C_5	C_6	C_7	C_8	C_9
Water	0.575	0.5	0.6	0.575	0.5	0.6	0.575	0.5	0.6
Cement	1	1	1	1	1	1	1	1	1
F.A.	1.45	1.45	1.45	1.45	1.45	1.45	1.95	1.95	1.95
C.A	1.75	1.75	1.75	2.05	2.05	2.05	2.55	2.55	2.55
Blend ratio	0.33	0.33	0.33	1.00	1	1	1.5	1.5	1.5
Time lag	0.75	0.75	0.75	0.75	1.50	1.50	1.50	1.50	2.25

The materials used are water, cement, sand, and gravel; but the components of the mix are water(S_1), cement(S_2), F.A(S_3),C.A.(S_4) blend ratio(S_5) and time lag (S_6) for the purpose of delay in placing the concrete after casting (Kayes, 2016).The total component

$S = S_1 + S_2 + S_3 + S_4 + S_5 + S_6$ and $B_i = S_i / S$. Table 5A,5B , 5C and 5D shows values of S and B, while table 4 shows the B-matrix for the concrete mixes. The blend ratio and time lag especially considered for partially set concrete .The strength of which can be enhanced by tempering and can be predicted by neural analysis (Kasperkiewicz & Dubrawskp, 1996)

Table 5 A: Values of S and B (for 1 to 11 totals out of 63)

Sr. No.	Var/ Obs.	E_1	E_2	E_3	E_4	E_5	E_6	E_7	E_8	E_9	E_{10}	E_{11}	E_{12}
	Water(S_1)	0.45	0.55	0.65	0.7	0.45	0.55	0.65	0.7	0.45	0.55	0.65	0.7
	Cement(S_2)	1	1	1	1	1	1	1	1	1	1	1	1
	F.A. (S_3)	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.95	1.95	1.95	2
	C.A(S_4)	1.75	1.75	1.75	1.75	1.95	1.95	1.95	1.95	2.55	2.55	2.55	2.5
	r(S_5)	0.33	0.33	0.33	0.33	1	1	1	1	1.5	1.5	1.5	1.5
	t(S_6)	0.75	0.75	0.75	0.75	1.5	1.5	1.5	1.5	2.25	2.25	2.25	2.25
	Total (S)	5.73	5.83	5.93	5.98	7.35	7.45	7.55	7.6	9.7	9.8	9.9	9.95
1	B_1	0.079	0.094	0.110	0.117	0.061	0.074	0.086	0.092	0.046	0.056	0.066	0.070
2	B_2	0.175	0.172	0.169	0.167	0.136	0.134	0.132	0.132	0.103	0.102	0.101	0.101
3	B_3	0.253	0.249	0.245	0.242	0.197	0.195	0.192	0.191	0.201	0.199	0.197	0.201
4	B_4	0.305	0.300	0.295	0.293	0.265	0.262	0.258	0.257	0.263	0.260	0.258	0.251
5	B_5	0.058	0.057	0.056	0.055	0.136	0.134	0.132	0.132	0.155	0.153	0.152	0.151
6	B_6	0.131	0.129	0.126	0.125	0.204	0.201	0.199	0.197	0.232	0.230	0.227	0.226
7	B_1B_2	0.014	0.016	0.018	0.020	0.008	0.010	0.011	0.012	0.005	0.006	0.007	0.007
8	B_1B_3	0.020	0.023	0.027	0.028	0.012	0.014	0.017	0.018	0.009	0.011	0.013	0.014
9	B_1B_4	0.024	0.028	0.032	0.034	0.016	0.019	0.022	0.024	0.012	0.015	0.017	0.018
10	B_1B_5	0.005	0.005	0.006	0.006	0.008	0.010	0.011	0.012	0.007	0.009	0.010	0.011
11	B_1B_6	0.010	0.012	0.014	0.015	0.012	0.015	0.017	0.018	0.011	0.013	0.015	0.016

Table 5 B: Values of S and B (for 12 to 30 total out of 63)

Sr. No.	Var/ Obs.	E_1	E_2	E_3	E_4	E_5	E_6	E_7	E_8	E_9	E_{10}	E_{11}	E_{12}
12	B_2B_3	0.044	0.043	0.041	0.041	0.027	0.026	0.025	0.025	0.021	0.020	0.020	0.020
13	B_2B_4	0.053	0.051	0.050	0.049	0.036	0.035	0.034	0.034	0.027	0.027	0.026	0.025
14	B_2B_5	0.010	0.010	0.009	0.009	0.019	0.018	0.018	0.017	0.016	0.016	0.015	0.015
15	B_2B_6	0.023	0.022	0.021	0.021	0.028	0.027	0.026	0.026	0.024	0.023	0.023	0.023
16	B_3B_4	0.077	0.075	0.072	0.071	0.052	0.051	0.050	0.049	0.053	0.052	0.051	0.051
17	B_3B_5	0.015	0.014	0.014	0.013	0.027	0.026	0.025	0.025	0.031	0.030	0.030	0.030
18	B_3B_6	0.033	0.032	0.031	0.030	0.040	0.039	0.038	0.038	0.047	0.046	0.045	0.045
19	B_4B_5	0.018	0.017	0.016	0.016	0.036	0.035	0.034	0.034	0.041	0.040	0.039	0.038
20	B_4B_6	0.040	0.039	0.037	0.037	0.054	0.053	0.051	0.051	0.061	0.060	0.059	0.057
21	B_5B_6	0.008	0.007	0.007	0.007	0.028	0.027	0.026	0.026	0.036	0.035	0.034	0.034
22	$B_1B_2B_3$	0.003	0.004	0.005	0.005	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001
23	$B_1B_2B_4$	0.004	0.005	0.005	0.006	0.002	0.003	0.003	0.003	0.001	0.001	0.002	0.002
24	$B_1B_2B_5$	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.001
25	$B_1B_2B_6$	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.002	0.002
26	$B_1B_3B_4$	0.006	0.007	0.008	0.008	0.003	0.004	0.004	0.005	0.002	0.003	0.003	0.004
27	$B_1B_3B_5$	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.002	0.002
28	$B_1B_3B_6$	0.003	0.003	0.003	0.004	0.002	0.003	0.003	0.003	0.002	0.003	0.003	0.003
29	$B_1B_4B_5$	0.001	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.002	0.002	0.003	0.003
30	$B_1B_4B_6$	0.003	0.004	0.004	0.004	0.003	0.004	0.004	0.005	0.003	0.003	0.004	0.004

Table 5 C: Values of S and B (for 31 to 47 total out of 63)

Sr. No.	Var/ Obs.	E_1	E_2	E_3	E_4	E_5	E_6	E_7	E_8	E_9	E_{10}	E_{11}	E_{12}
31	$B_1B_5B_6$	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
32	$B_2B_3B_4$	0.013	0.013	0.012	0.012	0.007	0.007	0.007	0.006	0.005	0.005	0.005	0.005
33	$B_2B_3B_5$	0.003	0.002	0.002	0.002	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.003
34	$B_2B_3B_6$	0.0057805	0.0054881	0.0052151	0.0050854	0.0054777	0.0052601	0.0050538	0.0049547	0.0048073	0.0046616	0.0045218	0.0045682
35	$B_2B_4B_5$	0.0030696	0.0029144	0.0027694	0.0027005	0.004911	0.0047159	0.004531	0.0044422	0.004191	0.004064	0.0039421	0.0038068
36	$B_2B_4B_6$	0.0069765	0.0066236	0.0062941	0.0061376	0.0073665	0.0070739	0.0067965	0.0066632	0.0062865	0.006096	0.0059131	0.0057102
37	$B_2B_5B_6$	0.0013156	0.001249	0.0011869	0.0011574	0.0037777	0.0036276	0.0034854	0.003417	0.0036979	0.0035859	0.0034783	0.0034261
38	$B_3B_4B_5$	0.004451	0.0042259	0.0040157	0.0039158	0.007121	0.0068381	0.0065699	0.0064411	0.0081724	0.0079248	0.0076871	0.0076136
39	$B_3B_4B_6$	0.0101159	0.0096042	0.0091265	0.0088995	0.0106815	0.0102571	0.0098549	0.0096617	0.0122586	0.0118872	0.0115306	0.0114205
40	$B_3B_5B_6$	0.0019076	0.0018111	0.001721	0.0016782	0.0054777	0.0052601	0.0050538	0.0049547	0.007211	0.0069925	0.0067827	0.0068523
41	$B_4B_5B_6$	0.0023022	0.0021858	0.0020771	0.0020254	0.0073665	0.0070739	0.0067965	0.0066632	0.0094297	0.009144	0.0088697	0.0085653
42	$B_1B_2B_3B_4$	0.0010593	0.0012081	0.0013338	0.001389	0.000436	0.0005048	0.0005656	0.0005933	0.0002528	0.0002965	0.0003365	0.0003571
43	$B_1B_2B_3B_5$	0.0001997	0.0002278	0.0002515	0.0002619	0.0002236	0.0002589	0.0002901	0.0003042	0.0001487	0.0001744	0.0001979	0.0002143
44	$B_1B_2B_3B_6$	0.000454	0.0005177	0.0005716	0.0005953	0.0003354	0.0003883	0.0004351	0.0004564	0.000223	0.0002616	0.0002969	0.0003214
45	$B_1B_2B_4B_5$	0.0002411	0.0002749	0.0003036	0.0003161	0.0003007	0.0003482	0.0003901	0.0004091	0.0001944	0.0002281	0.0002588	0.0002678
46	$B_1B_2B_4B_6$	0.0005479	0.0006249	0.0006899	0.0007184	0.000451	0.0005222	0.0005851	0.0006137	0.0002916	0.0003421	0.0003882	0.0004017
47	$B_1B_2B_5B_6$	0.0001033	0.0001178	0.0001301	0.0001355	0.0002313	0.0002678	0.0003001	0.0003147	0.0001716	0.0002012	0.0002284	0.000241

Table 5 D: Values of S and B (for 48 to 63)

Sr.No.	Var/ Obs	E_1	E_2	E_3	E_4	E_5	E_6	E_7	E_8	E_9	E_{10}	E_{11}	E_{12}
48	$B_1B_3B_4B_5$	0.0003496	0.0003987	0.0004402	0.0004584	0.000436	0.0005048	0.0005656	0.0005933	0.0003791	0.0004448	0.0005047	0.0005356
49	$B_1B_3B_4B_6$	0.0007944	0.0009061	0.0010004	0.0010417	0.000654	0.0007572	0.0008484	0.0008899	0.0005687	0.0006671	0.0007571	0.0008034
50	$B_1B_3B_5B_6$	0.0001498	0.0001709	0.0001886	0.0001964	0.0003354	0.0003883	0.0004351	0.0004564	0.0003345	0.0003924	0.0004453	0.0004821
51	$B_1B_4B_5B_6$	0.0001808	0.0002062	0.0002277	0.0002371	0.000451	0.0005222	0.0005851	0.0006137	0.0004375	0.0005132	0.0005824	0.0006026
52	$B_2B_3B_4B_5$	0.0007768	0.0007248	0.0006772	0.0006548	0.0009688	0.0009179	0.0008702	0.0008475	0.0008425	0.0008087	0.0007765	0.0007652
53	$B_2B_3B_4B_6$	0.0017654	0.0016474	0.001539	0.0014882	0.0014533	0.0013768	0.0013053	0.0012713	0.0012638	0.001213	0.0011647	0.0011478
54	$B_2B_3B_5B_6$	0.0003329	0.0003106	0.0002902	0.0002806	0.0007453	0.000706	0.0006694	0.0006519	0.0007434	0.0007135	0.0006851	0.0006887
55	$B_2B_4B_5B_6$	0.0004018	0.0003749	0.0003503	0.0003387	0.0010023	0.0009495	0.0009002	0.0008767	0.0009721	0.0009331	0.0008959	0.0008608
56	$B_3B_4B_5B_6$	0.0005826	0.0005436	0.0005079	0.0004911	0.0014533	0.0013768	0.0013053	0.0012713	0.0018957	0.0018195	0.0017471	0.0017217
57	$B_1B_2B_3B_4B_5$	0.000061	0.0000684	0.0000742	0.0000766	0.0000593	0.0000678	0.0000749	0.0000781	0.0000391	0.0000454	0.000051	0.0000538
58	$B_1B_2B_3B_4B_6$	0.0001386	0.0001554	0.0001687	0.0001742	0.000089	0.0001016	0.0001124	0.0001171	0.0000586	0.0000681	0.0000765	0.0000807
59	$B_1B_2B_3B_5B_6$	0.0000261	0.0000293	0.0000318	0.0000328	0.0000456	0.0000521	0.0000576	0.00006	0.0000345	0.00004	0.000045	0.0000484
60	$B_1B_2B_4B_5B_6$	0.0000316	0.0000354	0.0000384	0.0000396	0.0000614	0.0000701	0.0000775	0.0000808	0.0000451	0.0000524	0.0000588	0.0000606
61	$B_1B_3B_4B_5B_6$	0.0000458	0.0000513	0.0000557	0.0000575	0.000089	0.0001016	0.0001124	0.0001171	0.0000879	0.0001021	0.0001147	0.0001211
62	$B_2B_3B_4B_5B_6$	0.0001017	0.0000932	0.0000856	0.0000821	0.0001977	0.0001848	0.0001729	0.0001673	0.0001954	0.0001857	0.0001765	0.000173
63	$B_1B_2B_3B_4B_5B_6$	0.000008	0.0000088	0.0000094	0.0000096	0.0000121	0.0000136	0.0000149	0.0000154	0.0000091	0.0000104	0.0000116	0.0000122

Table 6: B-Matrix of concrete mixes for formulation of the model using the values from b matrix into the AA matrix of table 3 for a mix considering six components; [AA] is a 63x 63 matrix. Table 6 .60 is a B matrix having values of Bi=S_i/S [The nomenclature used here is B=b)

Table 6A: Values of b for 1-12 Variables Vs 1-15 Variable

Sr.No.		1	2	3	4	5	6	7	8	9	10	11	12
		b1	b2	b3	b4	b5	b6	b1b2	b1b3	b1b4	b1b5	b1b6	b2b3
1	b1	0.0804	0.1282	0.2066	0.2617	0.1005	0.1681	0.0117	0.0178	0.0224	0.0085	0.0135	0.0297
2	b2	0.1282	0.229	0.3532	0.4476	0.1718	0.2873	0.0196	0.0297	0.0373	0.0131	0.0226	0.0508
3	b3	0.2066	0.3532	0.5538	0.7028	0.2808	0.4642	0.0262	0.0455	0.0573	0.0208	0.0355	0.0779
4	b4	0.2617	0.4476	0.7028	0.8938	0.3637	0.5204	0.0373	0.0573	0.0724	0.0269	0.0455	0.0982
5	b5	0.1005	0.1718	0.2808	0.3637	0.1771	0.2754	0.0131	0.0208	0.0269	0.0124	0.0195	0.0357
6	b6	0.1681	0.2873	0.4642	0.5204	0.2754	0.4353	0.0226	0.0355	0.0455	0.0195	0.0315	0.0609
7	b1b2	0.0117	0.0196	0.0262	0.0373	0.0131	0.0226	0.0018	0.0026	0.0592	0.0011	0.0019	0.0044
8	b1b3	0.0178	0.0297	0.0455	0.0573	0.0208	0.0355	0.0026	0.004	0.005	0.0016	0.0029	0.0067
9	b1b4	0.0224	0.0373	0.0573	0.0724	0.0269	0.0455	0.0592	0.005	0.0062	0.0021	0.0037	0.0083
10	b1b5	0.0085	0.0131	0.0208	0.0269	0.0124	0.0195	0.0011	0.0016	0.0021	0.0009	0.0015	0.0028
11	b1b6	0.0135	0.0226	0.0355	0.0455	0.0195	0.0315	0.0019	0.0029	0.0037	0.0015	0.0179	0.0038
12	b2b3	0.0297	0.0508	0.0779	0.0982	0.0357	0.0609	0.0044	0.0067	0.0083	0.0028	0.0038	0.0114
13	b2b4	0.0373	0.064	0.0982	0.1241	0.0461	0.0779	0.0055	0.0083	0.0105	0.0034	0.0062	0.0143
14	b2b5	0.0131	0.0224	0.0357	0.0461	0.0212	0.0334	0.0018	0.0028	0.0035	0.0015	0.0024	0.0047
15	b2b6	0.0215	0.0386	0.0609	0.0779	0.0334	0.0539	0.0025	0.0049	0.0062	0.0024	0.004	0.0083

Table 6 B: Values of b for 1-12 Variables Vs 16-30 Variables

Sr. No.		1	2	3	4	5	6	7	8	9	10	11	12
		b1	b2	b3	b4	b5	b6	b1b2	b1b3	b1b4	b1b5	b1b6	b2b3
16	b3b4	0.0573	0.0982	0.1532	0.1938	0.075	0.1253	0.0083	0.0127	0.016	0.0056	0.0097	0.0219
17	b3b5	0.0208	0.0357	0.0581	0.075	0.0355	0.0557	0.0028	0.0044	0.0056	0.0025	0.004	0.0075
18	b3b6	0.0355	0.0609	0.0978	0.1253	0.0557	0.0891	0.0049	0.0076	0.0097	0.004	0.0065	0.0131
19	b4b5	0.0269	0.0461	0.075	0.0969	0.0464	0.0725	0.0035	0.0056	0.0072	0.0032	0.0052	0.0096
20	b4b6	0.0455	0.0779	0.1253	0.1609	0.0725	0.1154	0.0062	0.0097	0.0124	0.0052	0.0084	0.0166
21	b5b6	0.0195	0.0334	0.0557	0.0725	0.0376	0.0571	0.0024	0.004	0.0052	0.0025	0.0039	0.0133
22	b1b2b3	0.0026	0.0044	0.0067	0.0083	0.0028	0.0049	0.0004	0.0006	0.0007	0.0002	0.0004	0.0010
23	b1b2b4	0.0033	0.0055	0.0083	0.0105	0.0035	0.0062	0.0005	0.0007	0.0009	0.0003	0.0005	0.0013
24	b1b2b5	0.0011	0.0018	0.0028	0.0035	0.0015	0.0024	0.0005	0.0002	0.0003	0.0001	0.0002	0.0004
25	b1b2b6	0.0019	0.0032	0.0049	0.0062	0.0024	0.0040	0.0003	0.0004	0.0005	0.0002	0.0003	0.0007
26	b1b3b4	0.0050	0.0083	0.0127	0.0160	0.0056	0.0097	0.0007	0.0011	0.0014	0.0003	0.0008	0.0019
27	b1b3b5	0.0016	0.0028	0.0044	0.0056	0.0025	0.0040	0.0002	0.0004	0.0004	0.0002	0.0003	0.0006
28	b1b3b6	0.0029	0.0049	0.0076	0.0097	0.0040	0.0065	0.0004	0.0006	0.0008	0.0003	0.0005	0.0011
29	b1b4b5	0.0021	0.0035	0.0056	0.0072	0.0032	0.0052	0.0003	0.0006	0.0006	0.0002	0.0004	0.0007
30	b1b4b6	0.0037	0.0062	0.0097	0.0124	0.0052	0.0084	0.0005	0.0008	0.0010	0.0004	0.0007	0.0013

Table 6C: Values of b for 1-12 Variables Vs 31-45 Variables

Sr.No.		1	2	3	4	5	6	7	8	9	10	11	12
		b1	b2	b3	b4	b5	b6	b1b2	b1b3	b1b4	b1b5	b1b6	b2b3
31	b1b5b6	0.0015	0.0024	0.0040	0.0052	0.0025	0.0039	0.0002	0.0003	0.0004	0.0002	0.0003	0.0005
32	b2b3b4	0.0083	0.0143	0.0219	0.0275	0.0096	0.0166	0.0013	0.0019	0.0024	0.0007	0.0013	0.0032
33	b2b3b5	0.0028	0.0047	0.0075	0.0096	0.0043	0.0068	0.0004	0.0005	0.0007	0.0003	0.0005	0.0010
34	b2b3b6	0.0048567	0.0083398	0.0130592	0.0166359	0.0068177	0.011165	0.0006914	0.0010601	0.001341	0.0005035	0.0008481	0.0018246
35	b2b4b5	0.0035329	0.0060676	0.0096309	0.0123983	0.005572	0.0088563	0.0004828	0.0007496	0.0009593	0.0004015	0.0006515	0.0012901
36	b2b4b6	0.0061769	0.0106114	0.0166359	0.0212401	0.0088563	0.0144171	0.0008736	0.001341	0.0017003	0.0006515	0.0010893	0.0023088
37	b2b5b6	0.0024428	0.0041925	0.0068177	0.0088563	0.0043528	0.0067427	0.0003169	0.0005035	0.0006515	0.0003042	0.0004774	0.0008657
38	b3b4b5	0.0056107	0.0096309	0.0155994	0.0200909	0.0093288	0.0147157	0.0007496	0.0011843	0.0015166	0.0006565	0.0010562	0.0020368
39	b3b4b6	0.0096885	0.0166359	0.0265741	0.0339682	0.0147157	0.0237158	0.001341	0.0020904	0.0026538	0.0010562	0.0017467	0.0035971
40	b3b5b6	0.0039753	0.0068177	0.0113355	0.0147157	0.0074194	0.0114388	0.0005035	0.0008165	0.0246357	0.000507	0.0007911	0.0014027
41	b4b5b6	0.0051594	0.0088563	0.0147157	0.0191308	0.0097053	0.0149317	0.0006515	0.0010562	0.0013686	0.0006628	0.0010312	0.001816
42	b1b2b3b4	0.0007488	0.0012555	0.0018854	0.0023523	0.0007496	0.001341	0.0001158	0.0001663	0.0002132	6.21E-05	0.0001151	0.000289
43	b1b2b3b5	0.000226	0.0003784	0.0005871	0.0007496	0.0003084	0.0005035	3.22E-05	4.90E-05	6.21E-05	2.36E-05	3.95E-05	8.22E-05
44	b1b2b3b6	0.0004127	0.0006914	0.0010601	0.001341	0.0005035	0.0008481	6.08E-05	9.16E-05	0.0001151	3.95E-05	6.86E-05	0.0001538
45	b1b2b4b5	0.0002882	0.0004828	0.0007496	0.0009593	0.0004015	0.0006515	4.08E-05	6.21E-05	7.90E-05	3.06E-05	5.09E-05	0.0001043

Table 6 D: Values of b for 1-12 Variables Vs. 46-60 Variables

Sr.No.		1	2	3	4	5	6	7	8	9	10	11	12
		b1	b2	b3	b4	b5	b6	b1b2	b1b3	b1b4	b1b5	b1b6	b2b3
46	b1b2b4b6	0.0005213	0.0008736	0.001341	0.0017003	0.0006515	0.0010893	7.62E-05	0.0001151	0.0001449	5.09E-05	8.76E-05	0.0001933
47	b1b2b5b6	0.0001893	0.0003169	0.0005035	0.0006515	0.0003042	0.0004774	2.54E-05	3.95E-05	5.09E-05	2.24E-05	3.57E-05	6.62E-05
48	b1b3b4b5	0.0004476	0.0007496	0.0011843	0.0015165	0.0006565	0.0010562	5.31E-05	9.60E-05	0.0001222	4.89E-05	8.05E-05	0.0001611
49	b1b3b4b6	0.0008005	0.001341	0.0020904	0.0026538	0.0010562	0.0017467	0.0001151	0.0001758	0.0002216	8.05E-05	0.0001372	0.0002951
50	b1b3b5b6	0.000301	0.0005035	0.0007492	0.0010562	0.000507	0.0007911	6.62E-05	6.25E-05	8.05E-05	3.65E-05	5.78E-05	0.0001048
51	b1b4b5b6	0.0003892	0.0006515	0.0010562	0.0013686	0.0006628	0.0010312	5.09E-05	8.05E-05	0.0001039	4.76E-05	7.52E-05	0.0001351
52	b2b3b4b5	0.0007496	0.0012901	0.0020368	0.0026099	0.0011284	0.001816	9.37E-05	0.0001362	0.0002051	8.19E-05	0.0001351	0.0002779
53	b2b3b4b6	0.001341	0.0023088	0.0035971	0.0045688	0.001816	0.001816	0.0001803	0.000255	0.0003722	0.0001351	0.0002303	0.0005093
54	b2b3b5b6	0.0005035	0.0008657	0.0014027	0.001816	0.001816	0.001359	6.62E-05	0.0001048	0.0001351	6.11E-05	9.68E-05	0.0001806
55	b2b4b5b6	0.0006515	0.001121	0.001816	0.002355	0.0011396	0.0017732	8.53E-05	0.0001351	0.0001744	7.98E-05	0.000126	0.0002328
56	b3b4b5b6	0.0010562	0.001816	0.0030071	0.0038983	0.0019383	0.0029999	0.0001351	0.0002181	0.0002816	0.0001327	0.0002082	0.0003756
57	b1b2b3b4b5	6.21E-05	0.0001043	0.0001611	0.0002051	8.19E-05	0.001816	8.95E-06	1.36E-05	1.72E-05	6.30E-06	1.07E-05	2.28E-05
58	b1b2b3b4b6	0.0001151	0.0001933	0.0002951	0.0003721	0.0001351	0.0002303	1.71E-05	2.58E-05	3.23E-05	1.07E-05	1.88E-05	4.34E-05
59	b1b2b3b5b6	3.95E-05	6.62E-05	0.0001048	0.0001351	6.11E-05	9.68E-05	5.38E-06	8.34E-06	1.07E-05	4.52E-06	7.30E-06	1.40E-05
60	b1b2b4b5b6	5.09E-05	8.53E-05	0.0001351	0.0001744	7.98E-05	0.000126	6.89E-06	1.07E-05	1.37E-05	5.89E-06	9.47E-06	1.80E-05

Table 6 E: Values of b for 1-12 Variables Vs 61-63 Variables

Sr.No.		1	2	3	4	5	6	7	8	9	10	11	12
		b1	b2	b3	b4	b5	b6	b1b2	b1b3	b1b4	b1b5	b1b6	b2b3
61	b1b3b4b5b6	8.05E-05	0.0001351	0.0002181	0.0002816	0.0001327	0.0002082	1.07E-05	1.68E-05	2.16E-05	9.57E-06	1.53E-05	2.83E-05
62	b2b3b4b5b6	0.0001351	0.0002328	0.0003756	0.0004854	0.0002285	0.0003586	1.80E-05	2.83E-05	3.64E-05	1.61E-05	2.57E-05	4.89E-05
63	b1b2b3b4b5b6	1.07E-05	1.80E-05	2.83E-05	3.64E-05	1.61E-05	2.57E-05	1.47E-06	2.27E-06	2.90E-06	1.19E-06	1.95E-06	3.83E-06

Table 6 F: Values of b for 13-24 Variables Vs 1-15 Variables

Sr.No.		13	14	15	16	17	18	19	20	21	22	23	24
		b2b4	b2b5	b2b6	b3b4	b3b5	b3b6	b4b5	b4b6	b5b6	b1b2b3	b1b2b4	b1b2b5
1	b1	0.03731703	0.01306942	0.0214935	0.05731461	0.0208474	0.03554466	0.02688138	0.04547982	0.01950869	0.00264189	0.00330128	0.00109405
2	b2	0.06397834	0.02238952	0.03864188	0.09823012	0.03569389	0.06087435	0.04605795	0.07793771	0.03340486	0.00441846	0.00552231	0.00176588
3	b3	0.09823012	0.03569389	0.06087435	0.15315343	0.05809473	0.09777568	0.0749763	0.1252981	0.05570248	0.006659	0.00833266	0.00275304
4	b4	0.12409063	0.04605795	0.07793771	0.1937885	0.0749763	0.1252981	0.09693419	0.16089017	0.07249936	0.00833266	0.01045094	0.0035329
5	b5	0.04605795	0.02115724	0.03340486	0.0749763	0.03552162	0.05570248	0.04638573	0.07249936	0.0376442	0.00275304	0.0035329	0.00151823
6	b6	0.07793771	0.03340486	0.05390049	0.1252981	0.05570248	0.08905386	0.07249936	0.11538713	0.05706685	0.00485669	0.00617693	0.00244283
7	b1b2	0.00552231	0.00176588	0.00248025	0.00833266	0.00275304	0.00485669	0.0035329	0.00617693	0.00244283	0.00040475	0.00050275	0.00050275
8	b1b3	0.00833266	0.00275304	0.00485669	0.01272162	0.00437025	0.00760972	0.00561067	0.00968849	0.00397526	0.0006023	0.00074883	0.00022596
9	b1b4	0.01045094	0.0035329	0.00617693	0.0159785	0.00561067	0.00968849	0.00721812	0.01236294	0.00515944	0.00074883	0.00093301	0.00028818
10	b1b5	0.00342577	0.00151823	0.00244283	0.00561067	0.0024902	0.00397526	0.00324656	0.00515944	0.00253783	0.00022596	0.00028818	0.00011502
11	b1b6	0.00617693	0.00244283	0.00404035	0.00968849	0.00397526	0.00650824	0.00515944	0.00839735	0.00393086	0.00041266	0.00052125	0.00018931
12	b2b3	0.01431969	0.00472572	0.00833979	0.02185333	0.00749664	0.01305921	0.00963086	0.01663591	0.01329673	0.0010097	0.00125553	0.00037842
13	b2b4	0.01796466	0.00606756	0.01061142	0.02745767	0.00963086	0.01663591	0.01239829	0.02124008	0.00885633	0.00125553	0.00156457	0.00048281
14	b2b5	0.00606756	0.00260516	0.00419249	0.00963086	0.00426989	0.00681774	0.005572	0.00885633	0.00435276	0.00037842	0.00048281	0.00019251
15	b2b6	0.01061142	0.00419249	0.00693592	0.01663591	0.00681774	0.01116502	0.00885633	0.01441705	0.00674271	0.00069138	0.00087356	0.00031692

Table 6 G: Values of b for 13-24 Variables Vs 16-28 Variables

Sr.No.		13	14	15	16	17	18	19	20	21	22	23	24
		b2b4	b2b5	b2b6	b3b4	b3b5	b3b6	b4b5	b4b6	b5b6	b1b2b3	b1b2b4	b1b2b5
16	b3b4	0.02745767	0.00963086	0.01663591	0.04257854	0.01559942	0.02657408	0.0200909	0.03396817	0.0147157	0.0018854	0.00235234	0.00071999
17	b3b5	0.00963086	0.00426989	0.00681774	0.01559942	0.00715787	0.01133551	0.00932875	0.0147157	0.00741944	0.00058711	0.0007496	0.00030844
18	b3b6	0.01663591	0.00681774	0.01116502	0.02657408	0.01133551	0.01836395	0.0147157	0.02371576	0.01143883	0.00106011	0.00134097	0.0005035
19	b4b5	0.01239829	0.005572	0.00885633	0.0200909	0.00932875	0.0147157	0.01217252	0.01827001	0.00970532	0.0007496	0.00095929	0.00040149
20	b4b6	0.02124008	0.00885633	0.01441705	0.03396817	0.0147157	0.02371576	0.01827001	0.03067825	0.01338416	0.00127645	0.00161967	0.00060314
21	b5b6	0.000482805	0.000192505	0.000316921	0.000719993	0.000308444	0.000503504	0.000401493	0.000651527	0.000304178	3.21602E-05	4.07595E-05	1.5025E-05
22	b1b2b3	0.000873563	0.000316921	0.000539392	0.001340968	0.000503504	0.000848071	0.000651527	0.001089307	0.00047739	6.07587E-05	7.62477E-05	2.5387E-05
23	b1b2b4	0.002352336	0.000749601	0.001340968	0.003575366	0.001184254	0.002090403	0.001643924	0.002653813	0.001056167	0.000171937	0.000213193	6.2119E-05
24	b1b2b5	0.000665134	0.000308444	0.000503504	0.001184254	0.000504847	0.000816486	0.000656466	0.001056167	0.000507011	4.89768E-05	6.21191E-05	2.3574E-05
25	b1b2b6	0.001340968	0.000503504	0.000848071	0.002090403	0.000816486	0.001359309	0.001056167	0.001746675	0.000791145	9.16169E-05	0.000115086	3.9493E-05
26	b1b3b4	0.000959293	0.000401493	0.000651527	0.001516548	0.000656466	0.001056167	0.000854875	0.001368566	0.000662826	6.21191E-05	7.89837E-05	3.0582E-05
27	b1b3b5	0.001700312	0.000651527	0.001089307	0.002653813	0.001056167	0.001746675	0.001368566	0.002248879	0.000900622	0.000115086	0.000144915	0.001635
28	b1b3b6	0.000651527	0.000304178	0.00047739	0.001056167	0.000507011	0.000791145	0.000662826	0.001031205	0.000531969	3.94932E-05	5.08598E-05	2.2369E-05

Table 6 H: Values of b for 13-24 Variables Vs 29-40 Variables

Sr.No.		13	14	15	16	17	18	19	20	21	22	23	24
		b2b4	b2b5	b2b6	b3b4	b3b5	b3b6	b4b5	b4b6	b5b6	b1b2b3	b1b2b4	b1b2b5
29	b1b4b5	0.000959293	0.000401493	0.000651527	0.001516548	0.000656466	0.001056167	0.000854875	0.001368566	0.000662826	6.21191E-05	7.89837E-05	3.05827E-05
30	b1b4b6	0.001700312	0.000651527	0.001089307	0.002653813	0.001056167	0.001746675	0.001368566	0.002248879	0.000900622	0.000115086	0.000144915	0.00163596
31	b1b5b6	0.000651527	0.000304178	0.00047739	0.001056167	0.000507011	0.000791145	0.000662826	0.001031205	0.000531969	3.94932E-05	5.08598E-05	2.23693E-05
32	b2b3b4	0.004053424	0.001290089	0.002308816	0.006158594	0.002036828	0.003597082	0.002609935	0.004568847	0.001815972	0.000288976	0.000358356	0.000104291
33	b2b3b5	0.001290089	0.000530173	0.000865725	0.002036828	0.000867012	0.001402694	0.001128437	0.001815972	0.000870798	8.22008E-05	0.000100006	3.95254E-05
34	b2b3b6	0.002308816	0.000865725	0.001458738	0.003597082	0.001402694	0.002336259	0.001815972	0.00300422	0.001359046	0.000153848	0.000193303	6.62402E-05
35	b2b4b5	0.00165175	0.000690624	0.001120982	0.002609935	0.001128437	0.001815972	0.0014708	0.002355029	0.001139615	0.000104291	0.000134989	5.13044E-05
36	b2b4b6	0.002928622	0.001120982	0.001874757	0.004568847	0.001815972	0.00300422	0.002355029	0.003870791	0.001773206	0.000193303	0.000243464	6.75894E-05
37	b2b5b6	0.001120982	0.000522863	0.000820742	0.001815972	0.000870798	0.001359046	0.001139615	0.001773206	0.000913995	6.62402E-05	8.53471E-05	0.004496781
38	b3b4b5	0.002609935	0.001128437	0.001815972	0.004206098	0.001885533	0.003007107	0.002455005	0.00389831	0.001689535	0.000161102	0.000205086	8.19347E-05
39	b3b4b6	0.004568847	0.001815972	0.00300422	0.093876719	0.003007107	0.004917041	0.00389831	0.006337924	0.002999883	0.000295111	0.000372147	0.000135068
40	b3b5b6	0.001815972	0.000870798	0.001359046	0.003007107	0.001483746	0.002302251	0.001938264	0.002999883	0.001578749	8.97517E-05	0.000135068	6.10678E-05

Table 6 I: Values of b for 13-24 Variables Vs 41-52 Variables

Sr.No.		13	14	15	16	17	18	19	20	21	22	23	24
		b2b4	b2b5	b2b6	b3b4	b3b5	b3b6	b4b5	b4b6	b5b6	b1b2b3	b1b2b4	b1b2b5
41	b4b5b6	0.002355029	0.001139615	0.001773206	0.00389831	0.001938264	0.002999883	0.002534452	0.0039133	0.002066515	0.000135068	0.0001744	7.98235E-05
42	b1b2b3b4	0.000358356	0.000104291	0.000193303	0.000536315	0.000161102	0.000295111	0.000205086	0.000372147	0.000135068	2.69856E-05	3.3286E-05	9.75685E-06
43	b1b2b3b5	0.000104291	3.95254E-05	6.62402E-05	0.000161102	6.3159E-05	0.000104819	8.19347E-05	0.000135068	6.10678E-05	7.25546E-06	8.9465E-06	2.19582E-06
44	b1b2b3b6	0.000193303	6.62402E-05	0.000115161	0.000295111	0.000104819	0.000180139	0.000135068	0.000230253	9.68157E-05	1.37326E-05	1.7140E-05	5.38021E-06
45	b1b2b4b5	0.000132646	5.13044E-05	8.53471E-05	0.000205086	8.19347E-05	0.000135068	0.00011155	0.0001744	7.98235E-05	8.94653E-06	1.1302E-05	4.03055E-06
46	b1b2b4b6	0.000243464	8.53471E-05	0.00014709	0.000372147	0.000135068	0.000230253	0.018301717	0.000294971	0.000126028	1.71405E-05	2.144E-05	0.001547136
47	b1b2b5b6	8.53471E-05	3.74983E-05	5.98434E-05	0.000135068	6.10678E-05	9.68157E-05	7.98235E-05	0.000126028	6.25262E-05	5.38021E-06	6.892E-06	0.000895576
48	b1b3b4b5	0.000205086	8.19347E-05	0.000135068	0.000322422	0.000133626	0.00021808	0.000173516	0.000281565	0.000132717	1.35743E-05	1.716E-05	6.30321E-06
49	b1b3b4b6	0.000372147	0.000135068	0.000230253	0.000577184	0.00021808	0.000367214	0.000281565	0.000470736	0.000208199	2.57565E-05	3.225E-05	1.06827E-05
50	b1b3b5b6	0.000135068	6.10678E-05	9.68157E-05	0.00021808	0.000101704	0.000160117	0.000132717	0.000208199	0.000105727	8.33601E-06	1.0682E-05	4.51517E-06
51	b1b4b5b6	0.0001744	7.98235E-05	0.000126028	0.000281565	0.000132717	0.033505279	0.00017339	0.000271097	0.000138401	1.06827E-05	1.372E-05	5.89089E-06
52	b2b3b4b5	0.000353897	0.000141191	0.000232838	0.000556031	0.000972079	0.000375638	0.000299018	4.89299E-06	0.000228509	2.2841E-05	2.8615E-05	1.05934E-05

Table 6 J: Values of b for 13-24 Variables Vs 53-63 Variables

Sr.No.		13	14	15	16	17	18	19	20	21	22	23	24
		b2b4	b2b5	b2b6	b3b4	b3b5	b3b6	b4b5	b4b6	b5b6	b1b2b3	b1b2b4	b1b2b5
53	b2b3b4b6	0.000642479	0.000232838	0.0003971	0.000972729	0.000361726	0.00063283	0.000485366	0.000811775	0.000358552	4.33643E-05	5.43171E-05	1.79617E-05
54	b2b3b5b6	0.000232838	0.000105137	0.000166727	0.000375638	0.000185362	0.000275473	0.000228509	0.000358552	0.000181885	1.40099E-05	1.79617E-05	5.71835E-06
55	b2b4b5b6	0.000300824	0.000137548	0.00021721	0.000485366	0.000228509	0.000358552	0.000298843	0.000467319	0.000238372	1.79617E-05	2.30813E-05	9.89791E-06
56	b3b4b5b6	0.000485366	0.000228509	0.000358552	0.000800262	0.000388373	0.000605453	0.000507079	0.000788248	0.000411036	2.83015E-05	3.63806E-05	1.42974E-05
57	b1b2b3b4b5	2.88873E-05	1.05934E-05	0.027780692	4.44296E-05	1.68651E-05	2.83015E-05	2.18368E-05	3.63806E-05	1.60752E-05	1.99121E-06	2.5012E-06	8.42217E-07
58	b1b2b3b4b6	5.43171E-05	1.79617E-05	3.16509E-05	0.154494973	2.83015E-05	4.92794E-05	3.63806E-05	6.28105E-05	2.56665E-05	3.90334E-06	4.85794E-06	1.47191E-06
59	b1b2b3b5b6	1.79617E-05	7.58105E-06	1.22594E-05	2.83015E-05	1.23281E-05	1.97795E-05	1.60752E-05	2.56665E-05	1.24581E-05	1.15529E-06	1.47191E-06	0.001005325
60	b1b2b4b5b6	2.30813E-05	9.89791E-06	1.31916E-05	3.63806E-05	1.60752E-05	2.56665E-05	2.09905E-05	3.3361E-05	1.63229E-05	1.47191E-06	1.88001E-06	7.51144E-07
61	b1b3b4b5b6	3.63806E-05	1.60752E-05	2.56665E-05	5.84736E-05	2.66946E-05	4.22948E-05	3.48052E-05	5.49269E-05	2.75454E-05	2.27155E-06	2.9028E-06	1.19384E-06
62	b2b3b4b5b6	5.13181E-05	2.77452E-05	0.022201531	0.049687312	4.60305E-05	7.29549E-05	6.0077E-05	9.48333E-05	4.75045E-05	3.82745E-06	4.89299E-06	2.00926E-06
63	b1b2b3b4b5b6	4.89299E-06	2.00926E-06	3.27854E-06	7.67581E-06	3.25717E-06	5.26949E-06	4.24177E-06	6.82578E-06	3.25882E-06	3.1861E-07	4.04659E-07	1.53773E-07

Table 6 K: Values of b for 25-36 Variables Vs 1-15 Variables

Sr. No.		25	26	27	28	29	30	31	32	33	34	35	36
		b1b2b6	b1b3b4	b1b3b5	b1b3b6	b1b4b5	b1b4b6	b1b5b6	b2b3b4	b2b3b5	b2b3b6	b2b4b5	b2b4b6
1	b1	0.00188433	0.00498266	0.00164798	0.00290626	0.00211369	0.00369467	0.00146248	0.00833266	0.00275304	0.00485669	0.0035329	0.00617693
2	b2	0.00315029	0.00833266	0.00275304	0.00485669	0.0035329	0.00617693	0.00244283	0.01431969	0.00472572	0.00833979	0.00606756	0.01061142
3	b3	0.00485669	0.01272162	0.00437025	0.00760972	0.00561067	0.00968849	0.00397526	0.02185333	0.00749664	0.01305921	0.00963086	0.01663591
4	b4	0.00617693	0.0159785	0.00561067	0.00968849	0.00721812	0.01236294	0.00515944	0.02745767	0.00963086	0.01663591	0.01239829	0.02124008
5	b5	0.00244283	0.00561067	0.0024902	0.00397526	0.00324656	0.00515944	0.00253783	0.00963086	0.00426989	0.00681774	0.005572	0.00885633
6	b6	0.00404035	0.00968849	0.00397526	0.00650824	0.00515944	0.00839735	0.00393086	0.01663591	0.00681774	0.01116502	0.00885633	0.01441705
7	b1b2	0.00027243	0.00074883	0.00022596	0.00041266	0.00028818	0.00052125	0.00018931	0.00125553	0.00037842	0.00069138	0.00048281	0.00087356
8	b1b3	0.00041266	0.00112485	0.00035077	0.00063305	0.00057462	0.00080047	0.00030095	0.0018854	0.00054404	0.00106011	0.0007496	0.00134097
9	b1b4	0.00052125	0.00140312	0.00044763	0.00080047	0.00057258	0.00101458	0.00038915	0.00235234	0.0007496	0.00134097	0.00095929	0.00170031
10	b1b5	0.00018931	0.00032738	0.00018441	0.00030095	0.00023986	0.00038915	0.00018185	0.0007496	0.00030844	0.0005035	0.00040149	0.00065153
11	b1b6	0.00032209	0.00080047	0.00030095	0.00050671	0.00038915	0.00065046	0.00028535	0.00134097	0.0005035	0.00084807	0.00065153	0.00108931
12	b2b3	0.00069138	0.0018854	0.00058711	0.00106011	0.0007496	0.00134097	0.0005035	0.00324815	0.00100996	0.00182457	0.00129009	0.00230882
13	b2b4	0.00087356	0.00235234	0.00066513	0.00134097	0.00095929	0.00170031	0.00065153	0.00405342	0.00129009	0.00230882	0.00165175	0.00292862
14	b2b5	0.00031692	0.0007496	0.00030844	0.0005035	0.00040149	0.00065153	0.00030418	0.00129009	0.00053017	0.00086573	0.00069062	0.00112098
15	b2b6	0.00053939	0.00134097	0.0005035	0.00084807	0.00065153	0.00108931	0.00047739	0.00230882	0.00086573	0.00145874	0.00112098	0.00187476

Table 6 L: Values of b for 25-36 Variables Vs 16-28 Variables

Sr. No.		25	26	27	28	29	30	31	32	33	34	35	36
		b1b2b6	b1b3b4	b1b3b5	b1b3b6	b1b4b5	b1b4b6	b1b5b6	b2b3b4	b2b3b5	b2b3b6	b2b4b5	b2b4b6
16	b3b4	0.00134097	0.00357537	0.00118425	0.0020904	0.00151655	0.00265381	0.00105617	0.00615859	0.00203683	0.00359708	0.00260994	0.00456885
17	b3b5	0.0005035	0.00118425	0.00050485	0.00081649	0.00065647	0.00105617	0.00050701	0.00203683	0.00086701	0.00140269	0.00112844	0.00181597
18	b3b6	0.00084807	0.0020904	0.00081649	0.00135931	0.00105617	0.00174668	0.00079115	0.00359708	0.00140269	0.00233626	0.00181597	0.00300422
19	b4b5	0.00065153	0.00164392	0.00065647	0.00105617	0.00085488	0.00136857	0.00066283	0.00260994	0.00112844	0.00181597	0.0014708	0.00235503
20	b4b6	0.00101673	0.00249252	0.00095939	0.00160151	0.0012476	0.00206742	0.00092233	0.00433843	0.00167772	0.00279684	0.00218221	0.00361157
21	b5b6	0.00047739	0.00105617	0.00050701	0.00079115	0.00066283	0.00090062	0.00053197	0.00181597	0.0008708	0.00135905	0.00113962	0.00177321
22	b1b2b3	6.08E-05	0.00017194	4.90E-05	9.16E-05	6.21E-05	0.00011509	3.95E-05	0.00028898	8.22E-05	0.00015385	0.00010429	0.0001933
23	b1b2b4	7.62E-05	0.00021319	6.21E-05	0.00011509	7.90E-05	0.00014492	5.09E-05	0.00035836	0.00010001	0.0001933	0.00013499	0.00024346
24	b1b2b5	2.54E-05	6.21E-05	2.36E-05	3.95E-05	3.06E-05	0.00163596	2.24E-05	0.00010429	3.95E-05	6.62E-05	5.13E-05	6.76E-05
25	b1b2b6	4.46E-05	0.00011509	3.95E-05	6.86E-05	5.09E-05	8.76E-05	3.57E-05	0.0001933	6.62E-05	0.0060855	7.33E-05	0.00014709
26	b1b3b4	0.00011509	0.00031915	9.60E-05	0.00017578	0.00012217	0.00022159	8.05E-05	0.00053632	0.0001611	0.00029511	0.00020509	0.00020509
27	b1b3b5	3.95E-05	9.60E-05	3.77E-05	6.25E-05	4.89E-05	8.05E-05	3.65E-05	0.0001611	6.32E-05	0.00016775	7.95E-05	0.00014277
28	b1b3b6	6.86E-05	0.00017578	6.25E-05	0.00010742	8.05E-05	0.00013724	5.78E-05	0.00029511	0.00010482	0.00018014	0.00013507	0.00023025

Table 6 M: Values of b for 25-36 Variables Vs 29-40 Variables

Sr. No.		25	26	27	28	29	30	31	32	33	34	35	36
		b1b2b6	b1b3b4	b1b3b5	b1b3b6	b1b4b5	b1b4b6	b1b5b6	b2b3b4	b2b3b5	b2b3b6	b2b4b5	b2b4b6
29	b1b4b5	5.09E-05	0.00012217	4.89E-05	8.05E-05	6.35E-05	0.00010392	4.76E-05	0.00020509	8.19E-05	0.00013507	0.00010648	0.00018033
30	b1b4b6	8.76E-05	0.00022159	8.05E-05	0.00013724	0.00010392	0.00017572	7.52E-05	0.00037215	0.00013507	0.00023025	0.0001744	0.00029497
31	b1b5b6	3.57E-05	8.05E-05	3.65E-05	5.78E-05	4.76E-05	7.52E-05	2.65E-05	0.00013507	6.11E-05	9.68E-05	7.98E-05	0.00025846
32	b2b3b4	0.0001933	0.00053632	0.0001611	0.00029511	0.00020509	0.00037215	0.00013507	0.00092652	0.00027788	0.00050932	0.0003539	0.00064248
33	b2b3b5	6.62E-05	0.0001611	6.32E-05	0.00010482	8.19E-05	0.00013507	6.11E-05	0.00027788	0.00010876	0.00018058	0.00014119	0.00023284
34	b2b3b6	0.0060855	0.00029511	0.00016775	0.00018014	0.00013507	0.00023025	9.68E-05	0.00050932	0.00018058	0.00031051	0.00023284	0.0003971
35	b2b4b5	7.33E-05	0.00020509	7.95E-05	0.00013507	0.00010648	0.0001744	7.98E-05	0.0003539	0.00014119	0.00023284	0.00018361	0.00030082
36	b2b4b6	0.00014709	0.00020509	0.00014277	0.00023025	0.00018033	0.00029497	0.00025846	0.00064248	0.00023284	0.0003971	0.00030082	0.00050898
37	b2b5b6	5.98E-05	0.00013507	6.11E-05	9.68E-05	7.98E-05	0.00012603	6.25E-05	0.00023284	0.00010514	0.00016673	0.00013755	0.00021721
38	b3b4b5	0.00013507	0.00032242	0.00013363	0.00021808	0.00017352	0.00028157	0.00013272	0.00055603	0.00023008	0.00037564	0.00029902	0.00048537
39	b3b4b6	0.00023025	0.00057718	0.00021808	0.00036721	0.00028157	0.00047074	0.0002082	0.00099592	0.00037564	0.00063283	0.00048537	0.00081178
40	b3b5b6	9.68E-05	0.00021808	0.0001017	0.00016012	0.00013272	0.0002082	0.00010573	0.00037564	0.00017493	0.00027547	0.00022851	0.00035855

Table 6 N: Values of b for 25-36 Variables Vs 41-52 Variables

Sr. No.		25	26	27	28	29	30	31	32	33	34	35	36
		b1b2b6	b1b3b4	b1b3b5	b1b3b6	b1b4b5	b1b4b6	b1b5b6	b2b3b4	b2b3b5	b2b3b6	b2b4b5	b2b4b6
41	b4b5b6	0.00012603	0.00028157	0.00013272	0.0002082	0.00017339	0.0002711	0.0001384	0.00048537	0.00022851	0.00035855	0.00029884	0.00046732
42	b1b2b3b4	1.71E-05	4.93E-05	1.36E-05	2.58E-05	1.72E-05	3.23E-05	1.07E-05	8.30E-05	2.28E-05	4.34E-05	2.89E-05	5.43E-05
43	b1b2b3b5	5.38E-06	1.36E-05	4.88E-06	8.79E-06	6.30E-06	1.07E-05	4.52E-06	2.28E-05	8.20E-06	1.40E-05	1.06E-05	1.80E-05
44	b1b2b3b6	9.66E-06	2.58E-05	8.34E-06	1.48E-05	1.04E-05	1.88E-05	7.30E-06	4.34E-05	1.40E-05	2.49E-05	1.80E-05	3.17E-05
45	b1b2b4b5	6.89E-06	1.72E-05	6.30E-06	1.07E-05	8.16E-06	1.37E-05	5.89E-06	2.89E-05	1.06E-05	1.80E-05	1.37E-05	2.31E-05
46	b1b2b4b6	1.23E-05	3.23E-05	1.07E-05	1.88E-05	1.37E-05	2.40E-05	9.47E-06	5.43E-05	1.80E-05	3.17E-05	2.31E-05	4.03E-05
47	b1b2b5b6	4.61E-06	1.07E-05	4.52E-06	7.30E-06	5.89E-06	9.47E-06	4.49E-06	1.80E-05	7.58E-06	1.23E-05	9.90E-06	1.59E-05
48	b1b3b4b5	1.07E-05	2.64E-05	1.00E-05	1.68E-05	1.30E-05	2.16E-05	9.57E-06	4.44E-05	1.69E-05	2.83E-05	2.18E-05	3.64E-05
49	b1b3b4b6	1.88E-05	4.91E-05	1.68E-05	2.93E-05	2.16E-05	3.56E-05	1.53E-05	8.26E-05	2.83E-05	4.93E-05	3.64E-05	6.28E-05
50	b1b3b5b6	7.30E-06	1.68E-05	7.35E-06	1.18E-05	9.57E-06	1.53E-05	7.43E-06	2.83E-05	1.23E-05	1.98E-05	1.61E-05	2.57E-05
51	b1b4b5b6	9.47E-06	2.16E-05	9.57E-06	1.53E-05	1.25E-05	1.98E-05	9.72E-06	3.64E-05	1.61E-05	2.57E-05	2.10E-05	3.34E-05
52	b2b3b4b5	1.80E-05	4.44E-05	1.69E-05	2.83E-05	2.18E-05	3.64E-05	0.00762787	7.68E-05	2.91E-05	4.89E-05	3.77E-05	6.29E-05

Table 6 P: Values of b for 25-36 Variables Vs 53-63 Variables

Sr. No.		25	26	27	28	29	30	31	32	33	34	35	36
		b1b2b6	b1b3b4	b1b3b5	b1b3b6	b1b4b5	b1b4b6	b1b5b6	b2b3b4	b2b3b5	b2b3b6	b2b4b5	b2b4b6
53	b2b3b4b6	3.17E-05	8.26E-05	2.83E-05	4.93E-05	3.64E-05	6.28E-05	2.57E-05	0.000142	4.89E-05	8.52E-05	6.29E-05	0.000108
54	b2b3b5b6	1.23E-05	2.83E-05	1.23E-05	1.98E-05	1.61E-05	2.57E-05	1.25E-05	4.89E-05	2.13E-05	3.41E-05	2.77E-05	4.43E-05
55	b2b4b5b6	1.59E-05	3.64E-05	1.61E-05	2.57E-05	2.10E-05	3.34E-05	2.74E-05	6.29E-05	2.77E-05	4.43E-05	3.63E-05	5.76E-05
56	b3b4b5b6	2.57E-05	5.85E-05	2.67E-05	4.23E-05	3.48E-05	5.49E-05	2.75E-05	0.0001009	4.60E-05	7.30E-05	6.01E-05	9.48E-05
57	b1b2b3b4b5	1.47E-06	3.78E-06	1.31E-06	2.27E-06	1.69E-06	2.90E-06	1.19E-06	6.38E-06	2.21E-06	3.83E-06	2.85E-06	4.89E-06
58	b1b2b3b4b6	2.68E-06	7.28E-06	2.27E-06	3.77E-06	3.22E-06	5.18E-06	0.003178	1.23E-05	3.83E-06	6.90E-06	4.89E-06	8.74E-06
59	b1b2b3b5b6	9.55E-07	2.27E-06	9.18E-07	1.40E-06	1.26E-06	1.95E-06	8.97E-07	3.83E-06	1.54E-06	2.53E-06	2.01E-06	3.28E-06
60	b1b2b4b5b6	1.23E-06	2.90E-06	1.19E-06	1.95E-06	1.56E-06	2.52E-06	1.17E-06	4.89E-06	2.01E-06	3.28E-06	2.62E-06	4.25E-06
61	b1b3b4b5b6	1.95E-06	4.56E-06	1.94E-06	3.13E-06	2.52E-06	3.72E-06	1.94E-06	7.68E-06	3.26E-06	5.27E-06	4.24E-06	6.83E-06
62	b2b3b4b5b6	3.28E-06	7.68E-06	3.26E-06	5.27E-06	4.45E-06	6.83E-06	3.26E-06	1.33E-05	5.63E-06	9.11E-06	7.34E-06	1.18E-05
63	b1b2b3b4b5b6	2.57E-07	6.22E-07	2.44E-07	3.51E-07	3.17E-07	5.21E-07	2.35E-07	1.05E-06	4.11E-07	6.82E-07	5.34E-07	8.80E-07

Table 6 Q: Values of b for 37-48 Variables Vs 1-15 Variables

Sr. No.		37	38	39	40	41	42	43	44	45	46	47	48
		b2b5b6	b3b4b5	b3b4b6	b3b5b6	b4b5b6	b1b2b3b4	b1b2b3b5	b1b2b3b6	b1b2b4b5	b1b2b4b6	b1b2b5b6	b1b3b4b5
1	b1	0.00244283	0.00561067	0.00968849	0.00397526	0.00515944	0.00074883	0.00022596	0.00041266	0.00028818	0.00052125	0.00018931	0.00044763
2	b2	0.00419249	0.00963086	0.01663591	0.00681774	0.00885633	0.00125553	0.00037842	0.00069138	0.00048281	0.00087356	0.00031692	0.0007496
3	b3	0.00681774	0.01559942	0.02657408	0.01133551	0.0147157	0.0018854	0.00058711	0.00106011	0.0007496	0.00134097	0.0005035	0.00118425
4	b4	0.00885633	0.0200909	0.03396817	0.0147157	0.01913085	0.00235234	0.0007496	0.00134097	0.00095929	0.00170031	0.00065153	0.00151655
5	b5	0.00435276	0.00932875	0.0147157	0.00741944	0.00970532	0.0007496	0.00030844	0.0005035	0.00040149	0.00065153	0.00030418	0.00065647
6	b6	0.00674271	0.0147157	0.02371576	0.01143883	0.01493172	0.00134097	0.0005035	0.00084807	0.00065153	0.00108931	0.00047739	0.00105617
7	b1b2	0.00031692	0.0007496	0.00134097	0.0005035	0.00065153	0.00011585	3.22E-05	6.08E-05	4.08E-05	7.62E-05	2.54E-05	5.31E-05
8	b1b3	0.0005035	0.00118425	0.0020904	0.00081649	0.00105617	0.00016627	4.90E-05	9.16E-05	6.21E-05	0.00011509	3.95E-05	9.60E-05
9	b1b4	0.00065153	0.00151655	0.00265381	0.0246357	0.00136857	0.00021319	6.21E-05	0.00011509	7.90E-05	0.00014492	5.09E-05	0.00012217
10	b1b5	0.00030418	0.00065647	0.00105617	0.00050701	0.00066283	6.21E-05	2.36E-05	3.95E-05	3.06E-05	5.09E-05	2.24E-05	4.89E-05
11	b1b6	0.00047739	0.00105617	0.00174668	0.00079115	0.00103121	0.00011509	3.95E-05	6.86E-05	5.09E-05	8.76E-05	3.57E-05	8.05E-05
12	b2b3	0.00086573	0.00203683	0.00359708	0.00140269	0.00181597	0.00028898	8.22E-05	0.00015385	0.00010429	0.0001933	6.62E-05	0.0001611
13	b2b4	0.00112098	0.00260994	0.00456885	0.00181597	0.00235503	0.00035836	0.00010429	0.0001933	0.00013265	0.00024346	8.53E-05	0.00020509
14	b2b5	0.00052286	0.00112844	0.00181597	0.0008708	0.00113962	0.00010429	3.95E-05	6.62E-05	5.13E-05	8.53E-05	3.75E-05	8.19E-05
15	b2b6	0.00082074	0.00181597	0.00300422	0.00135905	0.00177321	0.0001933	6.62E-05	0.00011516	8.53E-05	0.00014709	5.98E-05	0.00013507

Table 6 R: Values of b for 37-48 Variables Vs.16-28 Variables

Sr. No.		37	38	39	40	41	42	43	44	45	46	47	48
		b2b5b6	b3b4b5	b3b4b6	b3b5b6	b4b5b6	b1b2b3b4	b1b2b3b5	b1b2b3b6	b1b2b4b5	b1b2b4b6	b1b2b5b6	b1b3b4b5
16	b3b4	0.00181597	0.0042061	0.09387672	0.00300711	0.00389831	0.00053632	0.0001611	0.00029511	0.00020509	0.00037215	0.00013507	0.00032242
17	b3b5	0.0008708	0.00188553	0.00300711	0.00148375	0.00193826	0.0001611	6.32E-05	0.00010482	8.19E-05	0.00013507	6.11E-05	0.00013363
18	b3b6	0.00135905	0.00300711	0.00491704	0.00230225	0.00299988	0.00029511	0.00010482	0.00018014	0.00013507	0.00023025	9.68E-05	0.00021808
19	b4b5	0.00113962	0.00245501	0.00389831	0.00193826	0.00253445	0.00020509	8.19E-05	0.00013507	0.00011155	0.01830172	7.98E-05	0.00017352
20	b4b6	0.00161767	0.00355268	0.00581948	0.00268882	0.00352447	0.00035594	0.00012534	0.00021566	0.00016224	0.00027673	0.00011509	0.00025725
21	b5b6	0.000914	0.00168954	0.00299988	0.00157875	0.00206652	0.00013507	6.11E-05	9.68E-05	7.98E-05	0.00012603	6.25E-05	0.00013272
22	b1b2b3	6.62E-05	0.0001611	0.00029511	8.98E-05	0.00013507	2.70E-05	7.26E-06	1.37E-05	8.95E-06	1.71E-05	5.38E-06	1.36E-05
23	b1b2b4	8.53E-05	0.00020509	0.00037215	0.00013507	0.0001744	3.33E-05	8.95E-06	1.71E-05	1.13E-05	2.14E-05	6.89E-06	1.72E-05
24	b1b2b5	0.00449678	8.19E-05	0.00013507	6.11E-05	7.98E-05	9.76E-06	2.20E-06	5.38E-06	4.03E-06	0.00154714	0.00089558	6.30E-06
25	b1b2b6	5.98E-05	0.00013507	0.00023025	9.68E-05	0.00012603	1.71E-05	5.38E-06	9.66E-06	6.89E-06	1.23E-05	4.61E-06	1.07E-05
26	b1b3b4	0.00013507	0.00032242	0.00057718	0.00021808	0.00028157	4.93E-05	1.36E-05	2.58E-05	1.72E-05	3.23E-05	1.07E-05	2.64E-05
27	b1b3b5	6.11E-05	0.00013363	0.00021808	0.0001017	0.00013272	1.36E-05	4.88E-06	8.34E-06	6.30E-06	1.07E-05	4.52E-06	1.00E-05
28	b1b3b6	9.68E-05	0.00021808	0.00036721	0.00016012	0.0002082	2.58E-05	8.79E-06	1.48E-05	1.07E-05	1.88E-05	7.30E-06	1.68E-05

Table 6 S: Values of b for 37-48 Variables Vs.29-40 Variables

Sr. No.		37	38	39	40	41	42	43	44	45	46	47	48
		b2b5b6	b3b4b5	b3b4b6	b3b5b6	b4b5b6	b1b2b3b4	b1b2b3b5	b1b2b3b6	b1b2b4b5	b1b2b4b6	b1b2b5b6	b1b3b4b5
29	b1b4b5	7.98E-05	0.00017352	0.00028157	0.00013272	0.00017339	1.72E-05	6.30E-06	1.04E-05	8.16E-06	1.37E-05	5.89E-06	1.30E-05
30	b1b4b6	0.00012603	0.00028157	0.00047074	0.0002082	0.0002711	3.23E-05	1.07E-05	1.88E-05	1.37E-05	2.40E-05	9.47E-06	2.16E-05
31	b1b5b6	6.25E-05	0.00013272	0.0002082	0.00010573	0.0001384	1.07E-05	4.52E-06	7.30E-06	5.89E-06	9.47E-06	4.49E-06	9.57E-06
32	b2b3b4	0.00023284	0.00055603	0.00099592	0.00037564	0.00048537	8.30E-05	2.28E-05	4.34E-05	2.89E-05	5.43E-05	1.80E-05	4.44E-05
33	b2b3b5	0.00010514	0.00023008	0.00037564	0.00017493	0.00022851	2.28E-05	8.20E-06	1.40E-05	1.06E-05	1.80E-05	7.58E-06	1.69E-05
34	b2b3b6	0.00016673	0.00037564	0.00063283	0.00027547	0.00035855	4.34E-05	1.40E-05	2.49E-05	1.80E-05	3.17E-05	1.23E-05	2.83E-05
35	b2b4b5	0.00013755	0.00029902	0.00048537	0.00022851	0.00029884	2.89E-05	1.06E-05	1.80E-05	1.37E-05	2.31E-05	9.90E-06	2.18E-05
36	b2b4b6	0.00021721	0.00048537	0.00081178	0.00035855	0.00046732	5.43E-05	1.80E-05	3.17E-05	2.31E-05	4.03E-05	1.59E-05	3.64E-05
37	b2b5b6	0.00010766	0.00022851	0.00035855	0.00018189	0.00023837	1.80E-05	7.58E-06	1.23E-05	9.90E-06	1.59E-05	7.54E-06	1.61E-05
38	b3b4b5	0.00022851	0.0004979	0.00080026	0.00038837	0.00050708	4.44E-05	1.69E-05	2.83E-05	2.18E-05	3.64E-05	1.61E-05	3.55E-05
39	b3b4b6	0.00035855	0.00080026	0.0013218	0.00060545	0.00078825	8.26E-05	2.83E-05	4.93E-05	3.64E-05	6.28E-05	2.57E-05	5.85E-05
40	b3b5b6	0.00018189	0.00038837	0.00060545	0.00031431	0.00041104	2.83E-05	1.23E-05	1.98E-05	1.61E-05	2.57E-05	1.25E-05	2.67E-05

Table 6 T: Values of b for 37-48 Variables Vs.41-52 Variables

Sr. No.		37	38	39	40	41	42	43	44	45	46	47	48
		b2b5b6	b3b4b5	b3b4b6	b3b5b6	b4b5b6	b1b2b3b4	b1b2b3b5	b1b2b3b6	b1b2b4b5	b1b2b4b6	b1b2b5b6	b1b3b4b5
41	b4b5b6	0.00023837	0.00050708	0.00078825	0.00041104	0.00053796	3.64E-05	1.61E-05	2.57E-05	2.10E-05	3.34E-05	1.63E-05	3.48E-05
42	b1b2b3b4	1.80E-05	4.44E-05	8.26E-05	2.83E-05	3.64E-05	7.80E-06	1.99E-06	3.90E-06	2.50E-06	4.86E-06	1.47E-06	3.78E-06
43	b1b2b3b5	7.58E-06	1.69E-05	2.83E-05	1.23E-05	1.61E-05	1.99E-06	6.55E-07	1.16E-06	8.42E-07	1.47E-06	5.77E-07	1.31E-06
44	b1b2b3b6	1.23E-05	2.83E-05	4.93E-05	1.98E-05	2.57E-05	3.90E-06	1.16E-06	2.13E-06	1.47E-06	2.68E-06	9.55E-07	2.27E-06
45	b1b2b4b5	9.90E-06	2.18E-05	3.64E-05	1.61E-05	2.10E-05	2.50E-06	8.42E-07	1.47E-06	1.09E-06	1.88E-06	7.51E-07	1.69E-06
46	b1b2b4b6	1.59E-05	3.64E-05	6.28E-05	2.57E-05	3.34E-05	4.86E-06	1.47E-06	2.68E-06	1.88E-06	3.39E-06	1.23E-06	2.90E-06
47	b1b2b5b6	7.54E-06	1.61E-05	2.57E-05	1.25E-05	1.63E-05	1.47E-06	5.77E-07	9.55E-07	7.51E-07	1.23E-06	5.54E-07	1.19E-06
48	b1b3b4b5	1.61E-05	3.55E-05	5.85E-05	2.67E-05	3.48E-05	3.78E-06	1.31E-06	2.27E-06	1.69E-06	2.90E-06	1.19E-06	2.68E-06
49	b1b3b4b6	2.57E-05	5.85E-05	9.97E-05	4.23E-05	5.49E-05	7.28E-06	2.27E-06	4.09E-06	2.90E-06	5.18E-06	1.95E-06	4.56E-06
50	b1b3b5b6	1.25E-05	2.67E-05	4.23E-05	2.11E-05	2.75E-05	2.27E-06	9.18E-07	1.51E-06	1.19E-06	1.95E-06	8.97E-07	1.94E-06
51	b1b4b5b6	1.63E-05	3.48E-05	5.49E-05	2.75E-05	3.60E-05	2.90E-06	1.19E-06	1.95E-06	1.56E-06	2.52E-06	1.17E-06	2.52E-06
52	b2b3b4b5	2.77E-05	6.12E-05	0.00010099	4.60E-05	6.01E-05	6.38E-06	2.21E-06	3.83E-06	2.85E-06	4.89E-06	2.01E-06	4.52E-06

Table 6 U: Values of b for 37-48 Variables Vs.53-63 Variables

Sr. No.		37	38	39	40	41	42	43	44	45	46	47	48
		b2b5b6	b3b4b5	b3b4b6	b3b5b6	b4b5b6	b1b2b3b4	b1b2b3b5	b1b2b3b6	b1b2b4b5	b1b2b4b6	b1b2b5b6	b1b3b4b5
53	b2b3b4b6	4.43E-05	0.00010099	0.00017221	7.30E-05	9.48E-05	1.23E-05	3.83E-06	6.90E-06	4.89E-06	8.74E-06	3.28E-06	7.68E-06
54	b2b3b5b6	2.15E-05	4.60E-05	7.30E-05	3.63E-05	4.75E-05	3.83E-06	1.54E-06	2.53E-06	2.01E-06	3.28E-06	1.51E-06	3.26E-06
55	b2b4b5b6	2.82E-05	6.01E-05	9.48E-05	4.75E-05	6.22E-05	4.89E-06	2.01E-06	3.28E-06	2.62E-06	4.25E-06	1.98E-06	4.24E-06
56	b3b4b5b6	4.75E-05	0.00010183	0.00015959	8.19E-05	0.00010712	7.68E-06	3.26E-06	5.27E-06	4.24E-06	6.83E-06	3.26E-06	7.02E-06
57	b1b2b3b4b5	2.01E-06	4.52E-06	7.68E-06	3.26E-06	4.24E-06	5.61E-07	1.78E-07	3.19E-07	2.28E-07	4.05E-07	1.54E-07	3.55E-07
58	b1b2b3b4b6	3.28E-06	7.68E-06	1.35E-05	5.27E-06	6.83E-06	1.11E-06	3.19E-07	5.95E-07	4.05E-07	7.48E-07	2.57E-07	6.22E-07
59	b1b2b3b5b6	1.51E-06	3.26E-06	5.27E-06	2.49E-06	3.26E-06	3.19E-07	1.19E-07	2.00E-07	1.54E-07	2.57E-07	1.11E-07	2.44E-07
60	b1b2b4b5b6	1.98E-06	4.24E-06	6.83E-06	3.26E-06	4.27E-06	4.05E-07	1.54E-07	2.57E-07	2.00E-07	3.32E-07	1.46E-07	3.17E-07
61	b1b3b4b5b6	3.26E-06	7.02E-06	1.12E-05	5.50E-06	7.19E-06	6.22E-07	2.44E-07	4.04E-07	3.17E-07	5.21E-07	2.35E-07	5.12E-07
62	b2b3b4b5b6	5.63E-06	1.21E-05	1.94E-05	9.50E-06	1.24E-05	1.05E-06	4.11E-07	6.82E-07	5.34E-07	8.80E-07	3.96E-07	8.63E-07
63	b1b2b3b4b5b6	3.96E-07	8.63E-07	1.41E-06	6.53E-07	8.54E-07	8.83E-08	3.18E-08	5.42E-08	4.11E-08	6.96E-08	2.94E-08	6.50E-08

Table 6 V: Values of b for 49-60 Variables Vs 1-15Variables

Sr. No.		49	50	51	52	53	54	55	56	57	58	59	60
		b1b3b4b6	b1b3b5b6	b1b4b5b6	b2b3b4b5	b2b3b4b6	b2b3b5b6	b2b4b5b6	b3b4b5b6	b1b2b3b4b5	b1b2b3b4b6	b1b2b3b5b6	b1b2b4b5b6
1	b1	0.00080047	0.00030095	0.00038915	0.0007496	0.00134097	0.0005035	0.00065153	0.00105617	6.21E-05	0.00011509	3.95E-05	5.09E-05
2	b2	0.00134097	0.0005035	0.00065153	0.00129009	0.00230882	0.00086573	0.00112098	0.00181597	0.00010429	0.0001933	6.62E-05	8.53E-05
3	b3	0.0020904	0.00074924	0.00105617	0.00203683	0.00359708	0.00140269	0.00181597	0.00300711	0.0001611	0.00029511	0.00010482	0.00013507
4	b4	0.00265381	0.00105617	0.00136857	0.00260994	0.00456885	0.00181597	0.00235503	0.00389831	0.00020509	0.00037215	0.00013507	0.0001744
5	b5	0.00105617	0.00050701	0.00066283	0.00112844	0.00181597	0.00181597	0.00113962	0.00193826	8.19E-05	0.00013507	6.11E-05	7.98E-05
6	b6	0.00174668	0.00079115	0.00103121	0.00181597	0.00181597	0.00135905	0.00177321	0.00299988	0.00181597	0.00023025	9.68E-05	0.00012603
7	b1b2	0.00011509	6.62E-05	5.09E-05	9.37E-05	0.00018031	6.62E-05	8.53E-05	0.00013507	8.95E-06	1.71E-05	5.38E-06	6.89E-06
8	b1b3	0.00017578	6.25E-05	8.05E-05	0.00013621	0.00025497	0.00010482	0.00013507	0.00021808	1.36E-05	2.58E-05	8.34E-06	1.07E-05
9	b1b4	0.00022159	8.05E-05	0.00010392	0.00020509	0.00037215	0.00013507	0.0001744	0.00028157	1.72E-05	3.23E-05	1.07E-05	1.37E-05
10	b1b5	8.05E-05	3.65E-05	4.76E-05	8.19E-05	0.00013507	6.11E-05	7.98E-05	0.00013272	6.30E-06	1.07E-05	4.52E-06	5.89E-06
11	b1b6	0.00013724	5.78E-05	7.52E-05	0.00013507	0.00023025	9.68E-05	0.00012603	0.0002082	1.07E-05	1.88E-05	7.30E-06	9.47E-06
12	b2b3	0.00029511	0.00010482	0.00013507	0.00027788	0.00050932	0.00018058	0.00023284	0.00037564	2.28E-05	4.34E-05	1.40E-05	1.80E-05
13	b2b4	0.00037215	0.00013507	0.0001744	0.0003539	0.00064248	0.00023284	0.00030082	0.00048537	2.89E-05	5.43E-05	1.80E-05	2.31E-05
14	b2b5	0.00013507	6.11E-05	7.98E-05	0.00014119	0.00023284	0.00010514	0.00013755	0.00022851	1.06E-05	1.80E-05	7.58E-06	9.90E-06
15	b2b6	0.00023025	9.68E-05	0.00012603	0.00023284	0.0003971	0.00016673	0.00021721	0.00035855	0.02778069	3.17E-05	1.23E-05	1.32E-05

Table 6 W: Values of b for 49-60 Variables Vs.15-28Variables

Sr.No.		49	50	51	52	53	54	55	56	57	58	59	60
		b1b3b4b6	b1b3b5b6	b1b4b5b6	b2b3b4b5	b2b3b4b6	b2b3b5b6	b2b4b5b6	b3b4b5b6	b1b2b3b4b5	b1b2b3b4b6	b1b2b3b5b6	b1b2b4b5b6
16	b3b4	0.00057718	0.00021808	0.00028157	0.00055603	0.00097273	0.00037564	0.00048537	0.00080026	4.44E-05	0.15449497	2.83E-05	3.64E-05
17	b3b5	0.00021808	0.0001017	0.00013272	0.00097208	0.00036173	0.00018536	0.00022851	0.00038837	1.69E-05	2.83E-05	1.23E-05	1.61E-05
18	b3b6	0.00036721	0.00016012	0.03350528	0.00037564	0.00063283	0.00027547	0.00035855	0.00060545	2.83E-05	4.93E-05	1.98E-05	2.57E-05
19	b4b5	0.00028157	0.00013272	0.00017339	0.00029902	0.00048537	0.00022851	0.00029884	0.00050708	2.18E-05	3.64E-05	1.61E-05	2.10E-05
20	b4b6	0.00043426	0.00018632	0.00024374	4.89E-06	0.00075967	0.00032729	0.00042824	0.00071009	3.39E-05	5.91E-05	2.35E-05	3.06E-05
21	b5b6	0.0002082	0.00010573	0.0001384	0.00022851	0.00035855	0.00018189	0.00023837	0.00041104	1.61E-05	2.57E-05	1.25E-05	1.63E-05
22	b1b2b3	2.58E-05	8.34E-06	1.07E-05	2.28E-05	4.34E-05	1.40E-05	1.80E-05	2.83E-05	1.99E-06	3.90E-06	1.16E-06	1.47E-06
23	b1b2b4	3.23E-05	1.07E-05	1.37E-05	2.86E-05	5.43E-05	1.80E-05	2.31E-05	3.64E-05	2.50E-06	4.86E-06	1.47E-06	1.88E-06
24	b1b2b5	1.07E-05	4.52E-06	5.89E-06	1.06E-05	1.80E-05	5.72E-06	9.90E-06	1.43E-05	8.42E-07	1.47E-06	0.00100533	7.51E-07
25	b1b2b6	1.88E-05	7.30E-06	9.47E-06	1.80E-05	3.17E-05	1.23E-05	1.59E-05	2.57E-05	1.47E-06	2.68E-06	9.55E-07	1.23E-06
26	b1b3b4	4.91E-05	1.68E-05	2.16E-05	4.44E-05	8.26E-05	2.83E-05	3.64E-05	5.85E-05	3.78E-06	7.28E-06	2.27E-06	2.90E-06
27	b1b3b5	1.68E-05	7.35E-06	9.57E-06	1.69E-05	2.83E-05	1.23E-05	1.61E-05	2.67E-05	1.31E-06	2.27E-06	9.18E-07	1.19E-06
28	b1b3b6	2.93E-05	1.18E-05	1.53E-05	2.83E-05	4.93E-05	1.98E-05	2.57E-05	4.23E-05	2.27E-06	3.77E-06	1.40E-06	1.95E-06

Table 6 X: Values of b for 49-60 Variables Vs.29-40Variables

Sr. No.		49	50	51	52	53	54	55	56	57	58	59	60
		b1b3b4b6	b1b3b5b6	b1b4b5b6	b2b3b4b5	b2b3b4b6	b2b3b5b6	b2b4b5b6	b3b4b5b6	b1b2b3b4b5	b1b2b3b4b6	b1b2b3b5b6	b1b2b4b5b6
29	b1b4b5	2.16E-05	9.57E-06	1.25E-05	2.18E-05	3.64E-05	1.61E-05	2.10E-05	3.48E-05	1.69E-06	3.22E-06	1.26E-06	1.56E-06
30	b1b4b6	3.56E-05	1.53E-05	1.98E-05	3.64E-05	6.28E-05	2.57E-05	3.34E-05	5.49E-05	2.90E-06	5.18E-06	1.95E-06	2.52E-06
31	b1b5b6	1.53E-05	7.43E-06	9.72E-06	0.00762787	2.57E-05	1.25E-05	2.74E-05	2.75E-05	1.19E-06	0.00317805	8.97E-07	1.17E-06
32	b2b3b4	8.26E-05	2.83E-05	3.64E-05	7.68E-05	0.00014291	4.89E-05	6.29E-05	0.00010099	6.38E-06	1.23E-05	3.83E-06	4.89E-06
33	b2b3b5	2.83E-05	1.23E-05	1.61E-05	2.91E-05	4.89E-05	2.13E-05	2.77E-05	4.60E-05	2.21E-06	3.83E-06	1.54E-06	2.01E-06
34	b2b3b6	4.93E-05	1.98E-05	2.57E-05	4.89E-05	8.52E-05	3.41E-05	4.43E-05	7.30E-05	3.83E-06	6.90E-06	2.53E-06	3.28E-06
35	b2b4b5	3.64E-05	1.61E-05	2.10E-05	3.77E-05	6.29E-05	2.77E-05	3.63E-05	6.01E-05	2.85E-06	4.89E-06	2.01E-06	2.62E-06
36	b2b4b6	6.28E-05	2.57E-05	3.34E-05	6.29E-05	0.00010862	4.43E-05	5.76E-05	9.48E-05	4.89E-06	8.74E-06	3.28E-06	4.25E-06
37	b2b5b6	2.57E-05	1.25E-05	1.63E-05	2.77E-05	4.43E-05	2.15E-05	2.82E-05	4.75E-05	2.01E-06	3.28E-06	1.51E-06	1.98E-06
38	b3b4b5	5.85E-05	2.67E-05	3.48E-05	6.12E-05	0.00010099	4.60E-05	6.01E-05	0.00010183	4.52E-06	7.68E-06	3.26E-06	4.24E-06
39	b3b4b6	9.97E-05	4.23E-05	5.49E-05	0.00010099	0.00017221	7.30E-05	9.48E-05	0.00015959	7.68E-06	1.35E-05	5.27E-06	6.83E-06
40	b3b5b6	4.23E-05	2.11E-05	2.75E-05	4.60E-05	7.30E-05	3.63E-05	4.75E-05	8.19E-05	3.26E-06	5.27E-06	2.49E-06	3.26E-06

Table 6 Y: Values of b for 49-60 Variables Vs.41-52Variables

Sr. No.		49	50	51	52	53	54	55	56	57	58	59	60
		b1b3b4b6	b1b3b5b6	b1b4b5b6	b2b3b4b5	b2b3b4b6	b2b3b5b6	b2b4b5b6	b3b4b5b6	b1b2b3b4b5	b1b2b3b4b6	b1b2b3b5b6	b1b2b4b5b6
41	b4b5b6	5.49E-05	2.75E-05	3.60E-05	6.01E-05	9.48E-05	4.75E-05	6.22E-05	0.00010712	4.24E-06	6.83E-06	3.26E-06	4.27E-06
42	b1b2b3b4	7.28E-06	2.27E-06	2.90E-06	6.38E-06	1.23E-05	3.83E-06	4.89E-06	7.68E-06	5.61E-07	1.11E-06	3.19E-07	4.05E-07
43	b1b2b3b5	2.27E-06	9.18E-07	1.19E-06	2.21E-06	3.83E-06	1.54E-06	2.01E-06	3.26E-06	1.78E-07	3.19E-07	1.19E-07	1.54E-07
44	b1b2b3b6	4.09E-06	1.51E-06	1.95E-06	3.83E-06	6.90E-06	2.53E-06	3.28E-06	5.27E-06	3.19E-07	5.95E-07	2.00E-07	2.57E-07
45	b1b2b4b5	2.90E-06	1.19E-06	1.56E-06	2.85E-06	4.89E-06	2.01E-06	2.62E-06	4.24E-06	2.28E-07	4.05E-07	1.54E-07	2.00E-07
46	b1b2b4b6	5.18E-06	1.95E-06	2.52E-06	4.89E-06	8.74E-06	3.28E-06	4.25E-06	6.83E-06	4.05E-07	7.48E-07	2.57E-07	3.32E-07
47	b1b2b5b6	1.95E-06	8.97E-07	1.17E-06	2.01E-06	3.28E-06	1.51E-06	1.98E-06	3.26E-06	1.54E-07	2.57E-07	1.11E-07	1.46E-07
48	b1b3b4b5	4.56E-06	1.94E-06	2.52E-06	4.52E-06	7.68E-06	3.26E-06	4.24E-06	7.02E-06	3.55E-07	6.22E-07	2.44E-07	3.17E-07
49	b1b3b4b6	8.04E-06	3.13E-06	4.05E-06	7.68E-06	1.35E-05	5.27E-06	6.83E-06	1.12E-05	6.22E-07	1.14E-06	4.04E-07	5.21E-07
50	b1b3b5b6	3.13E-06	1.48E-06	1.94E-06	3.26E-06	5.27E-06	2.49E-06	3.26E-06	5.50E-06	2.44E-07	4.04E-07	1.80E-07	2.35E-07
51	b1b4b5b6	4.05E-06	1.94E-06	2.54E-06	4.24E-06	6.83E-06	3.26E-06	4.27E-06	7.19E-06	3.17E-07	5.21E-07	2.35E-07	3.08E-07
52	b2b3b4b5	7.68E-06	3.26E-06	4.24E-06	7.82E-06	1.33E-05	5.63E-06	7.34E-06	1.21E-05	5.99E-07	1.05E-06	4.11E-07	5.34E-07

Table 6 Z: Values of b for 49-60 Variables Vs.53-63Variables

Sr. No.		49	50	51	52	53	54	55	56	57	58	59	60
		b1b3b4b6	b1b3b5b6	b1b4b5b6	b2b3b4b5	b2b3b4b6	b2b3b5b6	b2b4b5b6	b3b4b5b6	b1b2b3b4b5	b1b2b3b4b6	b1b2b3b5b6	b1b2b4b5b6
53	b2b3b4b6	1.35E-05	5.27E-06	6.83E-06	1.33E-05	2.35E-05	9.11E-06	1.18E-05	1.94E-05	1.05E-06	1.92E-06	6.82E-07	8.80E-07
54	b2b3b5b6	5.27E-06	2.49E-06	3.26E-06	5.63E-06	9.11E-06	4.30E-06	5.63E-06	9.50E-06	4.11E-07	6.82E-07	3.03E-07	3.96E-07
55	b2b4b5b6	6.83E-06	3.26E-06	4.27E-06	7.34E-06	1.18E-05	5.63E-06	7.38E-06	1.24E-05	5.34E-07	8.80E-07	3.96E-07	5.19E-07
56	b3b4b5b6	1.12E-05	5.50E-06	7.19E-06	1.21E-05	1.94E-05	9.50E-06	1.24E-05	2.14E-05	8.63E-07	1.41E-06	6.53E-07	8.54E-07
57	b1b2b3b4b5	6.22E-07	2.44E-07	3.17E-07	5.99E-07	1.05E-06	4.11E-07	5.34E-07	8.63E-07	4.03E-08	8.83E-08	3.18E-08	4.11E-08
58	b1b2b3b4b6	1.14E-06	4.04E-07	5.21E-07	1.05E-06	1.92E-06	6.82E-07	8.80E-07	1.41E-06	8.83E-08	1.67E-07	5.42E-08	6.96E-08
59	b1b2b3b5b6	4.04E-07	1.80E-07	2.35E-07	4.11E-07	6.82E-07	3.03E-07	3.96E-07	6.53E-07	3.18E-08	5.42E-08	2.25E-08	2.94E-08
60	b1b2b4b5b6	5.21E-07	2.35E-07	3.08E-07	5.34E-07	8.80E-07	3.96E-07	5.19E-07	8.54E-07	4.11E-08	6.96E-08	2.94E-08	3.84E-08
61	b1b3b4b5b6	8.35E-07	3.88E-07	5.07E-07	8.63E-07	1.41E-06	6.53E-07	8.54E-07	1.44E-06	6.50E-08	9.32E-08	4.74E-08	2.94E-08
62	b2b3b4b5b6	1.41E-06	6.53E-07	8.54E-07	1.50E-06	2.44E-06	1.13E-06	1.48E-06	2.40E-06	1.10E-07	1.84E-07	8.00E-08	1.04E-07
63	b1b2b3b4b5b6	1.09E-07	4.74E-08	6.18E-08	1.10E-07	1.84E-07	8.00E-08	1.04E-07	1.72E-07	8.56E-09	1.48E-08	5.97E-09	7.77E-09

Table 6 AB: Values of b for 61-63 Variables Vs.1-24Variables

Sr. No.		61	62	63	Sr. No.		61	62	63
		b1b3b4b5b6	b2b3b4b5b6	b1b2b3b4b5b6			b1b3b4b5b6	b2b3b4b5b6	b1b2b3b4b5b6
1	b1	8.05E-05	0.0001351	1.07E-05	13	b2b4	3.64E-05	5.13E-05	4.89E-06
2	b2	0.0001351	0.0002328	1.80E-05	14	b2b5	1.61E-05	2.77E-05	2.01E-06
3	b3	0.0002181	0.0003756	2.83E-05	15	b2b6	2.57E-05	0.0222015	3.28E-06
4	b4	0.0002816	0.0004854	3.64E-05	16	b3b4	5.85E-05	0.0496873	7.68E-06
5	b5	0.0001327	0.0002285	1.61E-05	17	b3b5	2.67E-05	4.60E-05	3.26E-06
6	b6	0.0002082	0.0003586	2.57E-05	18	b3b6	4.23E-05	7.30E-05	5.27E-06
7	b1b2	1.07E-05	1.80E-05	1.47E-06	19	b4b5	3.48E-05	6.01E-05	4.24E-06
8	b1b3	1.68E-05	2.83E-05	2.27E-06	20	b4b6	4.94E-05	8.70E-05	6.27E-06
9	b1b4	2.16E-05	3.64E-05	2.90E-06	21	b5b6	2.75E-05	4.75E-05	3.26E-06
10	b1b5	9.57E-06	1.61E-05	1.19E-06	22	b1b2b3	2.27E-06	3.83E-06	3.19E-07
11	b1b6	1.53E-05	2.57E-05	1.95E-06	23	b1b2b4	2.90E-06	4.89E-06	4.05E-07
12	b2b3	2.83E-05	4.89E-05	3.83E-06	24	b1b2b5	1.19E-06	2.01E-06	1.54E-07

Table 6AC: Values of b for 61-63 Variables Vs.25-48 Variables

Sr. No.		61	62	63	Sr. No.		61	62	63
		b1b3b4b5b6	b2b3b4b5b6	b1b2b3b4b5b6			b1b3b4b5b6	b2b3b4b5b6	b1b2b3b4b5b6
25	b1b2b6	1.95E-06	3.28E-06	2.57E-07	37	b2b5b6	3.26E-06	5.63E-06	3.96E-07
26	b1b3b4	4.56E-06	7.68E-06	6.22E-07	38	b3b4b5	7.02E-06	1.21E-05	8.63E-07
27	b1b3b5	1.94E-06	3.26E-06	2.44E-07	39	b3b4b6	1.12E-05	1.94E-05	1.41E-06
28	b1b3b6	3.13E-06	5.27E-06	3.51E-07	40	b3b5b6	5.50E-06	9.50E-06	6.53E-07
29	b1b4b5	2.52E-06	4.45E-06	3.17E-07	41	b4b5b6	7.19E-06	1.24E-05	8.54E-07
30	b1b4b6	3.72E-06	6.83E-06	5.21E-07	42	b1b2b3b4	6.22E-07	1.05E-06	8.83E-08
31	b1b5b6	1.94E-06	3.26E-06	2.35E-07	43	b1b2b3b5	2.44E-07	4.11E-07	3.18E-08
32	b2b3b4	7.68E-06	1.33E-05	1.05E-06	44	b1b2b3b6	4.04E-07	6.82E-07	5.42E-08
33	b2b3b5	3.26E-06	5.63E-06	4.11E-07	45	b1b2b4b5	3.17E-07	5.34E-07	4.11E-08
34	b2b3b6	5.27E-06	9.11E-06	6.82E-07	46	b1b2b4b6	5.21E-07	8.80E-07	6.96E-08
35	b2b4b5	4.24E-06	7.34E-06	5.34E-07	47	b1b2b5b6	2.35E-07	3.96E-07	2.94E-08
36	b2b4b6	6.83E-06	1.18E-05	8.80E-07	48	b1b3b4b5	5.12E-07	8.63E-07	6.50E-08

Table 6AD: Values of b for 61-63 Variables Vs.49-63 Variables

Sr. No.		61	62	63	Sr. No.		61	62	63
		b1b3b4b5b6	b2b3b4b5b6	b1b2b3b4b5b6			b1b3b4b5b6	b2b3b4b5b6	b1b2b3b4b5b6
49	b1b3b4b6	8.35E-07	1.41E-06	1.09E-07	57	b1b2b3b4b5	6.50E-08	1.10E-07	8.56E-09
50	b1b3b5b6	3.88E-07	6.53E-07	4.74E-08	58	b1b2b3b4b6	9.32E-08	1.84E-07	1.48E-08
51	b1b4b5b6	5.07E-07	8.54E-07	6.18E-08	59	b1b2b3b5b6	4.74E-08	8.00E-08	5.97E-09
52	b2b3b4b5	8.63E-07	1.50E-06	1.10E-07	60	b1b2b4b5b6	2.94E-08	2.94E-08	7.77E-09
53	b2b3b4b6	1.41E-06	2.44E-06	1.84E-07	61	b1b3b4b5b6	1.02E-07	1.72E-07	1.25E-08
54	b2b3b5b6	6.53E-07	1.13E-06	8.00E-08	62	b2b3b4b5b6	1.72E-07	2.98E-07	1.70E-08
55	b2b4b5b6	8.54E-07	1.48E-06	1.04E-07	63	b1b2b3b4b5b6	1.25E-08	1.70E-08	1.59E-09
56	b3b4b5b6	1.44E-06	2.40E-06	1.72E-07					

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Table 7: [AA]$^{-1}$Matrix (63×63)

The inverse matrix is obtained from the elements of B matrix as shown in below table 7

Table 7 A: Values of b for inverse matrix for 1-12 Variables Vs. 1-15 Variables

Sr.No.		1	2	3	4	5	6	7	8	9	10	11	12
		b1	b2	b3	b4	b5	b6	b1b2	b1b3	b1b4	b1b5	b1b6	b2b3
1	b1	-0.0009334	-174.6234951	0.00087016	-0.000215737	-4.02E-06	-0.00011109	0.001625476	0.00269434	-0.00010383	0.01554695	0.000113829	-0.00152415
2	b2	-174.61584	0.017775902	-0.0025491	-0.137917557	1.31E-05	0.000292659	-0.00472744	-0.00697837	0.00045106	-0.03910857	-0.00102051	-0.0015421
3	b3	0.00472584	0.030281333	-0.0046883	0.003104019	2.27E-05	0.00057367	-0.0087319	-0.01382367	0.00067036	-0.07890256	-0.00113480	0.00365298
4	b4	1.25383525	249.478619	120.429795	-39.47237742	-0.38311887	-12.5543992	222.4167042	301.869547	-2.02268873	1769.31525	70.2371571	1043.82988
5	b5	0.00037155	0.002426714	-0.0003723	-12.23737575	1.81E-06	4.52E-05	-0.00069312	-0.00108886	5.47E-05	-0.00620282	-9.68E-05	0.000231264
6	b6	-0.0001024	-0.000582976	9.56E-05	-12.97909152	-4.41E-07	-1.22E-05	0.000178643	0.00029636	-1.14E-05	0.00171144	1.24E-05	-0.00016890
7	b1b2	0.00874715	0.056024008	-0.0086757	0.00584305	4.19E-05	0.001061744	-0.01615848	-0.02558539	0.00123974	-0.14604288	-0.00209637	0.00679139
8	b1b3	0.01237872	0.078656161	-0.0122257	0.00946612	5.89E-05	0.001500652	-0.02277494	-0.03617892	0.00172776	-0.20668973	-0.00286217	0.0103847
9	b1b4	-0.0001738	-0.001130481	0.00017394	-0.000114877	-8.45E-07	-2.12E-05	0.000323839	0.00050986	-2.54E-05	0.00290736	4.45E-05	-0.0001155
10	b1b5	0.07233198	0.459290116	-0.0714141	0.077698687	0.000343953	0.008768711	-0.13303874	-0.21141412	0.01008314	-1.20800523	-0.01666680	0.0611753
11	b1b6	0.00234703	0.015541127	-0.0023702	0.000371571	1.16E-05	0.000286512	-0.00441077	-0.00689072	0.00035437	-0.03919773	-0.00064685	-918.1941
12	b2b3	0.03148751	0.209061271	-0.0318384	0.004756718	0.000155919	0.003844406	-0.05924448	-0.09244236	0.00477841	-0.52564717	-918.20414	-13014.21
13	b2b4	-0.014352	-1094.600193	0.01448812	-0.005341926	-7.05E-05	-0.00175763	0.026967996	0.04229932	-0.00214173	-9334.516	0.00384282	-0.0084530
14	b2b5	1136.66908	-1697.904686	-2092.1594	-7635.857931	-2.98573997	207.8773365	-3863.92298	-5244.27324	35.1580704	-15179.6749	4.11802921	183.91816
15	b2b6	5.73E-06	3.04E-05	-5.35E-06	0.78582304	2.41E-08	6.83E-07	-9.99E-06	-1.66E-05	6.26E-07	-9.56E-05	-6.79E-07	9.36E-06

Table 7 B: Values of b for inverse matrix for 1-12 Variables Vs. 16-30 Variables

Sr. No.		1	2	3	4	5	6	7	8	9	10	11	12
		b1	b2	b3	b4	b5	b6	b1b2	b1b3	b1b4	b1b5	b1b6	b2b3
16	b3b4	-1.38E-06	-8.94E-06	1.38E-06	-1.13E-08	-6.69E-09	-1.68E-07	2.57E-06	4.05E-06	-2.00E-07	2.31E-05	3.47E-07	-9.55E-07
17	b3b5	-0.0351942	-0.229780329	0.03526157	1108.519176	-0.00017163	-0.00428482	0.065642586	0.10313643	-0.00517565	0.58755065	0.009159412	-0.0220084
18	b3b6	-2.53E-06	-1.62E-05	2.51E-06	-1.81E-06	-1.21E-08	-3.07E-07	4.68E-06	7.41E-06	-3.59E-07	4.23E-05	6.08E-07	-1.96E-06
19	b4b5	-4.05E-07	-2.48E-06	3.93E-07	-6.08E-07	-1.87E-09	-4.88E-08	7.32E-07	1.18E-06	-5.27E-08	6.77E-06	7.87E-08	-4.50E-07
20	b4b6	-0.0542736	-0.354184797	0.05436383	1711.89801	-0.00026456	-0.00660717	0.101204344	0.15904019	-0.00797449	0.90606842	0.014097734	-0.0341388
21	b5b6	0.000397	0.002569209	-0.000396	5.36E-05	1.92E-06	4.83E-05	-0.00073727	-0.00116246	5.74E-05	-0.00662794	-9.96E-05	0.0002756
22	b1b2b3	-0.2602936	-1.693511744	0.26054588	-0.178819487	-0.00126528	-0.03171753	0.485089604	0.76368664	-0.03802515	4.35478629	0.066636279	-0.1726793
23	b1b2b4	-0.106902	-0.677264693	0.1054142	-0.089938568	-0.00050731	-0.01295346	0.196388618	0.31234645	-0.01483551	1.78500013	0.02438347	-0.0921531
24	b1b2b5	-9.92E-06	-6.41E-05	9.88E-06	-4.55E-06	-4.79E-08	-1.21E-06	1.84E-05	2.90E-05	-1.43E-06	0.00016554	2.48E-06	-6.96E-06
25	b1b2b6	0.00111778	0.007082618	-0.0011023	0.000840055	5.31E-06	0.000135447	-0.00205363	-0.00326601	0.00015517	-0.01866436	-0.00025512	0.00096234
26	b1b3b4	-0.0006635	-0.003989661	0.00063655	-0.00108701	-3.00E-06	-7.97E-05	0.001187494	0.00192871	-8.30E-05	0.011083	0.000115725	-0.0008354
27	b1b3b5	-0.1075694	-0.681796868	0.10609771	-0.0800508	-0.00051068	-0.01303531	0.197659767	0.31431204	-0.0149411	1.79615211	0.024586111	-0.0923589
28	b1b3b6	0.06447121	0.421399365	-0.0647123	0.050544186	0.000314697	0.007865835	-0.12047015	-0.18934723	0.00950188	-1.07945622	-0.01681498	0.0406659
29	b1b4b5	0.12377641	0.790905267	-0.1226116	0.077247306	0.000591959	0.015018616	-0.22837753	-0.3619617	0.01746378	-2.06663234	-0.02935428	0.09840185
30	b1b4b6	0.08598313	0.549824604	-0.0852078	0.059843375	0.000411492	0.010434102	-0.15870575	-0.25145974	0.01214891	-1.43559714	-0.02045996	0.0678463

Table 7 C: Values of b for inverse matrix for 1-12 Variables Vs. 31-45 Variables

Sr.No.		1	2	3	4	5	6	7	8	9	10	11	12
		b1	b2	b3	b4	b5	b6	b1b2	b1b3	b1b4	b1b5	b1b6	b2b3
31	b1b5b6	5.27E-05	0.00034681	-5.31E-05	-0.00033117	2.59E-07	6.43E-06	-9.88E-05	-0.00015471	7.86E-06	-0.00088073	-1.41E-05	2.99E-05
32	b2b3b4	1085.83355	-13229.8121	2801.29354	-13662.704	17.58107978	85.20939675	4834.822717	1219.23819	0.38985306	-112773.948	12496.26292	177672.6387
33	b2b3b5	0.19259583	21549.70782	9.18217337	-3.0371590	0.915082042	0.045012988	16.95752441	22.9962162	-0.13600041	183755.997	5.370830619	80.42584459
34	b2b3b6	0.0008052	79.32806626	-0.000817	0.00010311	3.99E-06	9.88E-05	-0.00152047	-0.0023763	0.00012218	676.509479	-0.00022349	0.000416865
35	b2b4b5	0.37918627	39374.88202	-0.3857977	0.04320523	0.001885923	0.046571753	-0.71787737	-1.11993313	0.05804056	335790.261	-0.1071726	0.18263374
36	b2b4b6	-0.0529817	-0.33301598	0.05203004	-0.0543337	-0.00024963	-0.00641261	0.096952869	0.15469967	-0.00724	0.88486165	0.011642724	-0.0489650
37	b2b5b6	-6646.4412	-219516.545	72475.2197	-214399.52	602.152907	-2584.16884	125660.631	62358.1217	-530.251834	-1988726.26	148208.1752	2120828.84
38	b3b4b5	0.77796064	5.17531256	-0.7874526	-21.266278	0.003859103	0.095013371	-1.46521005	-2.28441682	0.11848896	-12.9869083	-23917.7667	-338999.904
39	b3b4b6	94.3768326	2417.829824	-2018.1376	6079.03763	-52.9725509	31.47479593	-3541.53631	-2290.20794	16.0261407	25319.6103	-3545.6358	-50995.0548
40	b3b5b6	-0.0204833	-0.13136456	0.0203301	-0.0138005	-9.83E-05	-0.00248681	0.037863472	0.05992131	42.4067437	0.34198768	0.004937787	-0.01569251
41	b4b5b6	-778.41153	-43914.8196	8801.68369	-71090.1558	23.78813562	147.9884628	15290.40316	-4987.10035	230.42622	-390302.112	27072.23059	387285.0649
42	b1b2b3b4	583.511401	-47746.8198	55873.6908	-18314.844	-119.572906	197.246515	103190.6805	-36365.7582	-938.216237	-574216.279	32587.98659	484313.4081
43	b1b2b3b5	-0.0808534	-2.87262397	0.27645509	-1.3499194	-0.00198212	-0.01749349	0.497814996	0.35942562	4104.52728	1.44683791	0.408966054	2.779674266
44	b1b2b3b6	8700.31364	194795.315	-122791.13	133706.3324	551.6360982	2025.617226	-216263.084	-12489.5017	1659.12667	1832818.9	-128313.821	-1858971.69
45	b1b2b4b5	5038.8139	-110547.8	-109645.81	-163308.464	-305.392541	-3273.74416	-188427.205	168262.488	-559.695865	-899975.02	65634.62756	886794.587

Table 7 D: Values of b for inverse matrix for 1-12 Variables Vs. 46-55 Variables

Sr.No.		1	2	3	4	5	6	7	8	9	10	11	12
		b1	b2	b3	b4	b5	b6	b1b2	b1b3	b1b4	b1b5	b1b6	b2b3
46	b1b2b4b6	-1.4124665	30.9152698	30.682239	126.99022	0.085438433	0.915703481	52.72804206	-47.0734851	0.1562290	251.86221	-18.364359	-248.1329
47	b1b2b5b6	-10364.487	120054.730	255145.636	386934.899	429.2516444	2731.354265	459238.3969	-242194.923	-5652.551	736767.394	-90799.69	-1184887.9
48	b1b3b4b5	114.445673	23681.2580	-32732.564	-3811.2737	-18.9594206	39.77477557	-89938.2953	28686.9806	-192.766101	168135.797	6672.757	99147.541
49	b1b3b4b6	-0.0651016	-0.3811650	0.0621725	12.427776	-0.00028761	-0.00789404	0.11609491	0.19136006	-0.00769014	1.10747226	0.0093911	-0.1000188
50	b1b3b5b6	-0.4613092	-2.8724936	-14869.2	-0.292293	-0.00215528	-0.05574988	0.840263368	1.3456395	-0.06186768	7.7033175	0.0969146	-0.458581
51	b1b4b5b6	-3.29E-05	-0.0002160	3.31E-05	-7.50E-06	-1.61E-07	-4.01E-06	6.15E-05	9.65E-05	-4.89E-06	0.00054896	8.76E-06	-1.91E-05
52	b2b3b4b5	-1.5264476	-303.48894	-146.4098	47.99492	-14.4121091	-0.51654944	-270.398068	-366.9884	2.45873591	-2150.96317	-85.391649	-1269.057
53	b2b3b4b6	-81.356934	-16186.139	-7808.785	2559.807	24.83945078	-27.5432552	-14421.7091	-19573.3891	131.143995	-114721.953	-4554.353	-67684.77
54	b2b3b5b6	-0.0009362	-0.0050345	0.00084104	7.49E-05	1058.006689	-0.00010917	0.001572946	0.00265382	-9.17E-05	0.01532525	6.86E-05	-0.0018148
55	b2b4b5b6	16181.7448	596104.73	-222891.31	941401.34	1377.44446	5400.58918	-381887.176	-114956.34	880.294533	5536189.06	-509649.43	-7301889.3

Table 7 E: Values of b for inverse matrix for 1-12 Variables Vs. 56-63 Variables

Sr.No.		1	2	3	4	5	6	7	8	9	10	11	12
		b1	b2	b3	b4	b5	b6	b1b2	b1b3	b1b4	b1b5	b1b6	b2b3
56	b3b4b5b6	3584.45369	221858.5698	-50645.127	250354.5644	221.3534964	835.3839707	-89196.3726	-5360.69003	-950.061769	1963016.9	-53065.20	-768751.41
57	b1b2b3b4b5	-0.0406097	-6.880276446	-0.0098402	0.271514939	-0.00163182	-0.00443994	-0.01263538	0.06582576	-0.00631617	1.39704495	-0.08186742	-1.3768510
58	b1b2b3b4b6	-52.971378	-1358.85666	1130.94193	-3409.675436	29.71918331	-17.6624063	1984.531609	1281.82966	-8.97307332	-14220.2527	1988.285095	28596.0726
59	b1b2b3b5b6	38715.3023	867978.2972	-548545	608011.9774	2293.398484	9042.107661	-966074.528	-61469.9002	7378.38767	8175302.07	-577193.27	-8361252.84
60	b1b2b4b5b6	25.7139175	659.1145718	-548.30961	1652.945264	-14.4071229	8.567296075	-962.155861	-621.52382	4.36098379	6893.12798	-963.92007	-13863.051
61	b1b3b4b5b6	0.13698579	0.914668109	-0.1391756	-65.58095884	0.00068157	0.0167948	-0.25896532	-0.40382211	0.02101406	-2.29877682	-0.03882296	0.0648232
62	b2b3b4b5b6	0.05427045	0.366196672	-0.0553707	-0.136620639	0.000272731	0.006644617	-0.10299018	-0.15961855	0.00848348	-0.90589848	-0.0161031	0.0192702
63	b1b2b3b4b5b6	-77113.396	-1727862.349	1090335.07	-1195593.4	-4765.4838	-17978.6072	1920295.849	115240.198	20462.6829	-16265789.4	1142486.421	16551344.
59	b1b2b3b5b6	38715.3023	867978.2972	-548545	608011.9774	2293.398484	9042.107661	-966074.528	-61469.9002	7378.38767	8175302.07	-577193.27	-8361252.84
60	b1b2b4b5b6	25.7139175	659.1145718	-548.30961	1652.945264	-14.4071229	8.567296075	-962.155861	-621.52382	4.36098379	6893.12798	-963.92007	-13863.051

Table 7 F: Values of b for inverse matrix for 13-24 Variables Vs. 1-15 Variables

Sr. No.		13	14	15	16	17	18	19	20	21	22	23	24
		b2b4	b2b5	b2b6	b3b4	b3b5	b3b6	b4b5	b4b6	b5b6	b1b2b3	b1b2b4	b1b2b5
1	b1	-0.0214860	1426.143724	6.38E-06	-2.03E-07	0.00014316	-4.65E-07	-1.43E-07	0.0001846	5.84E-05	-0.16077133	-0.0244925	-1.47E-06
2	b2	-1094.4090	61728.21182	-1.84E-05	7.30E-07	-0.000387	1.36E-06	2.65E-07	-0.0008226	-0.00020828	0.6997415	0.061026441	5.12E-06
3	b3	0.14135429	28609.10384	-3.27E-05	1.19E-06	-0.0007456	2.50E-06	6.55E-07	-0.0012060	-0.00034294	1.0389693	0.123835881	8.54E-06
4	b4	264.1607918	966447.3694	0.756794467	-0.0369378	-6.52668421	-0.0645562	-0.0080627	-6.163032	10.605148	-2853.1662	-2566.6463	-0.26431317
5	b5	0.011556691	3017.12688	-2.57E-06	9.62E-08	-5.89E-05	1.99E-07	5.05E-08	-9.86E-05	-2.76E-05	0.0847565	0.00972944	6.86E-07
6	b6	-0.0023575	312.6021488	7.02E-07	-2.22E-08	1.57E-05	-5.11E-08	-1.58E-08	2.02E-05	6.41E-06	-0.017632314	-0.00269466	-1.61E-07
7	b1b2	0.261402223	52838.92127	-6.05E-05	2.21E-06	-0.001379996	4.63E-06	1.21E-06	-0.0022302	-0.00063442	1.921439555	0.229213664	1.58E-05
8	b1b3	0.363915168	71747.19469	-8.55E-05	3.10E-06	-0.0019493	6.53E-06	1.73E-06	-0.0031057	-0.00088899	2.677668183	0.324462194	2.21E-05
9	b1b4	-0.0053623	-484.6369577	1.21E-06	-4.48E-08	2.75E-05	-9.29E-08	-2.38E-08	4.57E-05	1.28E-05	-0.039336448	-0.00455912	-3.19E-07
10	b1b5	-9332.633	436384.853	-0.00049941	1.81E-05	-0.0113897	3.81E-05	1.01E-05	-0.018121	-0.0051897	15.62672499	1.896240099	0.000129309
11	b1b6	0.075031908	17880.31785	-1.63E-05	6.19E-07	-0.0003733	1.27E-06	3.15E-07	-0.0006393	-0.0001773	0.549346554	0.061458065	4.40E-06
12	b2b3	1.0120028	265726.94	-0.000218727	8.33E-06	-0.00501236	1.70E-05	4.21E-06	-0.0086252	-0.0023870	7.407605111	0.82415728	5.92E-05
13	b2b4	-0.4535354	75544.15161	0.000100048	-3.76E-06	0.002277768	-7.74E-06	-1.95E-06	0.003844049	0.00107701	-3.319961624	-0.3777623	-2.68E-05
14	b2b5	9210.308391	-16079029.59	-12.52834023	0.641693473	986.7440298	1.1214986	0.140080284	1560.920406	-184.235324	49596.3004	44589.630	4.591712345
15	b2b6	0.000129355	-19.72650982	1.09E-05	1.25E-09	-8.23E-07	2.85E-09	8.86E-10	-1.11E-06	-3.60E-07	0.000969088	0.000150851	9.02E-09

Table 7G: Values of b for inverse matrix for 13-24 Variables Vs. 16-30 Variables

Sr. No.		13	14	15	16	17	18	19	20	21	22	23	24
		b2b4	b2b5	b2b6	b3b4	b3b5	b3b6	b4b5	b4b6	b5b6	b1b2b3	b1b2b4	b1b2b5
16	b3b4	-4.22E-05	-8.760207863	9.58E-09	-3.54E-10	2.19E-07	-7.36E-10	-1.90E-10	3.60E-07	1.02E-07	-0.000309808	-3.62E-05	-2.53E-09
17	b3b5	-1.093855	-283088.2196	0.000243672	-9.11E-06	0.005580344	-1.88E-05	-4.79E-06	0.009329003	0.002613163	-8.0226255	-0.92161667	-6.49E-05
18	b3b6	-7.57E-05	-15.33785069	1.75E-08	-6.40E-10	4.00E-07	-1.34E-09	-3.51E-10	6.46E-07	1.84E-07	-0.000556663	-6.63E-05	-4.57E-09
19	b4b5	-1.10E-05	-1.922963969	2.78E-09	-9.68E-11	6.33E-08	-2.10E-10	-5.86E-11	9.44E-08	2.78E-08	-8.17E-05	-1.06E-05	-6.96E-10
20	b4b6	-1.68528	-436226.3477	0.00037567	-1.40E-05	0.00860459	-2.90E-05	-7.38E-06	0.014373315	0.00402751	-12.36098469	-1.4212552	-0.0001001
21	b5b6	0.012118	2515.838591	-2.75E-06	1.02E-07	-6.28E-05	2.11E-07	5.45E-08	-0.0001033	-2.92E-05	0.088960453	0.01039974	7.26E-07
22	b1b2b3	-8.0350306	-684369.1607	0.001805186	-6.71E-05	0.041232529	-0.000139144	-3.56E-05	0.068408551	0.019244718	-58.9403225	-6.8286884	-0.0004784
23	b1b2b4	-3.123523	-610200.0032	0.000738197	-2.66E-05	0.01682255	-5.63E-05	-1.50E-05	0.026659961	0.007649095	-22.9915108	-2.8023047	-0.0001906
24	b1b2b5	-0.0003020	-62.74790868	6.87E-08	-2.54E-09	1.57E-06	-5.28E-09	-1.36E-09	2.58E-06	7.28E-07	-0.002217948	-0.0002597	-1.81E-08
25	b1b2b6	0.0326700	6379.062336	-7.72E-06	2.79E-07	-0.000175906	5.89E-07	1.57E-07	-0.0002788	-8.00E-05	0.240471746	0.029301355	1.99E-06
26	b1b3b4	-0.0173373	-2763.178124	4.55E-06	-1.55E-07	0.000103174	-3.40E-07	-9.78E-08	0.000148274	4.45E-05	-0.128558829	-0.0174211	-1.11E-06
27	b1b3b5	-3.1459447	-614847.0529	0.000742985	-2.68E-05	0.016929373	-5.67E-05	-1.51E-05	0.026850761	0.00770111	-23.15520723	-2.8197753	-0.0001919
28	b1b3b6	2.00908309	84598.27462	-0.000447475	1.67E-05	-0.010225314	3.46E-05	8.80E-06	-0.0170923	-0.0047934	14.72869255	1.692167965	0.0001191
29	b1b4b5	3.68113206	738135.9028	-0.000855797	3.12E-05	-0.019516904	6.55E-05	1.72E-05	-0.0314098	-0.0089512	27.06622332	3.243753557	0.000222907
30	b1b4b6	2.56108259	515183.6324	-0.000594447	2.17E-05	-0.013560045	4.55E-05	1.19E-05	-0.02185237	-0.00622389	18.82906931	2.253253385	0.000154979

Table 7H: Values of b for inverse matrix for 13-24 Variables Vs. 31-45 Variables

Sr. No.		13	14	15	16	17	18	19	20	21	22	23	24
		b2b4	b2b5	b2b6	b3b4	b3b5	b3b6	b4b5	b4b6	b5b6	b1b2b3	b1b2b4	b1b2b5
31	b1b5b6	0.001663097	340.0646556	-3.71E-07	1.38E-08	-8.37E-06	2.83E-08	7.12E-09	-1.42E-05	-3.95E-06	0.012185361	0.001381161	9.82E-08
32	b2b3b4	2126.396685	-1774544.2	-5.4188341	-10.543371	-5475.88885	-1.1292668	1.089546209	-668.56492	1655.863752	29235.26595	45135.06741	-13.2545637
33	b2b3b5	12079.26026	-1245162.0	-0.0029283	-0.0028178	-86.038442	-0.0049223	-0.00061	-0.5117205	0.80907609	-189.0136	-233594.10	-0.0201683
34	b2b3b6	44.43901116	-5805.5866	-5.62E-06	2.13E-07	-0.0001280	4.36E-07	1.09E-07	-0.0002194	-6.11E-05	0.189410508	0.021196627	1.52E-06
35	b2b4b5	22057.04948	-2847249.4	-0.0026501	0.000100973	-0.06036958	0.00020601	5.09E-05	-0.1042398	-0.02894042	89.97742454	9.983799667	0.000718116
36	b2b4b6	6718.0496	-285675.36	0.000365494	-1.31E-05	0.008321816	-2.78E-05	-7.49E-06	0.012998179	0.003753894	-11.21967	-1.3893959	-9.36E-05
37	b2b5b6	-2758.3173	119675450	150.93715	-85.996250	-44645.341	-27.545307	24.349862	-13935.227	23948.753	-115586.71	387315.129	-325.350893
38	b3b4b5	25.10001536	6674548.368	-0.0054054	0.000206254	-0.1239011	0.000420494	0.000103697	-0.2139176	-4020.50584	183.6865798	20.36095155	0.001466982
39	b3b4b6	-2703.803438	-4242490.1	-1.7706174	13.77334644	6765.364859	0.832553405	-0.53196630	164.3137695	-552.664919	7732.273218	3571.765094	8.21568094
40	b3b5b6	-0.613790475	-125872.869	0.000141657	-5.19E-06	0.003232618	-1.09E-05	-2.84E-06	0.00523668	0.001488046	-4.51095600	-0.536727	-3.70E-05
41	b4b5b6	15055.63196	6856503.353	-9.8829399	-20.221283	-9776.8523	-4.81129515	3.88882019	-221.36794	4433.297557	467473.136	104691.5035	-42.33608
42	b1b2b3b4	31026.23932	481200328.3	-13.479951	-17.13792	-8298.3965	-29.950947	-3.740424	-2859.8920	4920.4139	-1323392.6	582482.18	-122.63046
43	b1b2b3b5	-25.09274076	-21169623.6	0.000818039	-0.00013811	0.02718493	-0.0001467	3.88E-05	0.209776062	0.03871158	6423344.984	-1.9590924	-0.00090471
44	b1b2b3b6	50662.0755	-670654717	-118.03312	73.448419	35369.52359	66.90119477	-40.616463	13346.86427	-21029.8740	1976588.597	-798455.66	520.4469433
45	b1b2b4b5	-238541.686	-22860588	190.36522	-36.682199	-21067.224	93.880832	-32.58328	-15490.38	11058.933	-556820.6	-1173931.6	-309.23520

Table 7 I: Values of b for inverse matrix for 13-24 Variables Vs. 46-55 Variables

Sr. No.		13	14	15	16	17	18	19	20	21	22	23	24
		b2b4	b2b5	b2b6	b3b4	b3b5	b3b6	b4b5	b4b6	b5b6	b1b2b3	b1b2b4	b1b2b5
46	b1b2b4b6	66.66580055	618873.3225	-0.0532477	0.01026327	5.89516416	-0.0262698	55.174476	4.334998613	-3.0941758	155.2167692	328.4069349	0.086521427
47	b1b2b5b6	465035.5486	2909894774	-161.1264	57.15378528	26015.75345	-197.8194	-13.047634	2670.5274	-13263.157	-9275248.7	2027179.11	129.96326
48	b1b3b4b5	24957.23467	73089721.42	-2.7259080	-3.509839	-2200.3265	-6.1344036	-0.7664732	-584.26182	1007.698342	-272000.23	-243916.66	-25.114661
49	b1b3b4b6	-1.6047005	1794908.318	0.000625526	-1.47E-05	0.01003931	-3.32E-05	-1.01E-05	0.013452856	0.004225448	-11.910377	-1.7363984	-0.00010616
50	b1b3b5b6	-12.9959526	-1897724.5	0.00318192	-0.0001124	0.072271741	-0.0002408	-4E-05	0.110966858	0.03231413	-95.8681	-12.099842	-0.000806
51	b1b4b5b6	-0.0010332	-291.00316	2.28E-07	-8.58E-09	5.23E-06	30.03266385	-4.45E-09	8.82E-06	2.46E-06	-0.0075748	-0.0008612	-6.11E-08
52	b2b3b4b5	-321.220692	-1191155.2	0.035304689	0.044907595	1355.644355	0.078482636	0.009801522	7.493318727	-12.893271	3468.189784	3120.305887	0.32133637
53	b2b3b4b6	-17130.528	-63093028.8	1.882580192	2.39514833	423.4611425	-4.185879177	0.522769142	399.6396603	-687.663124	184987.3361	166422.1062	17.13848743
54	b2b3b5b6	-0.01867359	-25627.208	6.29E-06	-1.88E-07	0.00014203	-4.50E-07	-1.47E-07	0.00016483	5.44E-05	-0.1418413	-0.0242561	-1.38E-06
55	b2b4b5b6	-292555.01	179127686.5	-308.1028	326.3587148	15604221	79.52655	-92.00086	21187.26714	-79726.62	-1142203.4	-1571245.0	1096.092329

Table 7J: Values of b for inverse matrix for 13-24 Variables Vs. 56-63Variables

Sr. No.		13	14	15	16	17	18	19	20	21	22	23	24
		b2b4	b2b5	b2b6	b3b4	b3b5	b3b6	b4b5	b4b6	b5b6	b1b2b3	b1b2b4	b1b2b5
56	b3b4b5b6	-36750.67523	-301559503.1	-45.97043837	30.39507481	15202.71455	27.56679865	-16.738409	5499.105709	-8694.27386	-1743156.2	-327638.406	214.6226367
57	b1b2b3b4b5	-1.503075208	-325287.7328	36.01976652	4.79E-05	0.187587272	-1.29E-06	-1.99E-05	0.016573484	-0.0114200	-10.249327	-1.034181	0.000136618
58	b1b2b3b4b6	1513.578035	2239055.978	0.993652159	-1.249792863	-3795.0402	-0.4664110	0.29848862	-92.108699	309.921613	-4313.950	-1979.086	-4.60613
59	b1b2b3b5b6	-401031.1855	-3119384206	-526.7139015	330.9387333	175054.356	298.1324301	-181.08380	59480.0675	-94519.5606	8757901.41	-3521741.0	2324.120263
60	b1b2b4b5b6	-731.3454862	-2504086.107	-0.481974246	0.605895374	1839.768403	0.226133678	-0.1447002	44.63311068	-150.24951	2108.386903	960.3742506	2.233089808
61	b1b3b4b5b6	4.454805756	-492186.176	-0.001864933	3.65E-05	-0.0218568	7.43E-05	1.83E-05	-0.0378196	-0.0104483	32.57793049	3.599381462	0.000259229
62	b2b3b4b5b6	1.800246189	408866.4241	-0.00037966	1.47E-05	-0.0086699	2.96E-05	7.12E-06	-0.0153325	-0.0041977	13.15245257	1.419834136	0.000104043
63	b1b2b3b4b5b6	792875.6466	6111023115	1047.486308	-654.3938958	-327324.71	-593.48410	360.3880214	-118410.03	187184.2482	37542341.37	7055665.354	-4620.7386

Table 7K: Values of b for inverse matrix for 25-36 Variables Vs. 1-15 Variables

Sr. No.		25	26	27	28	29	30	31	32	33	34	35	36
		b1b2b6	b1b3b4	b1b3b5	b1b3b6	b1b4b5	b1b4b6	b1b5b6	b2b3b4	b2b3b5	b2b3b6	b2b4b5	b2b4b6
1	b1	0.000256244	-0.000285237	-0.02453446	0.050577572	0.024243019	0.016526584	6.92E-06	964.7442104	0.219779216	0.001365728	0.653897321	-0.01572768
2	b2	-0.0006412	0.000472494	0.061629617	-0.22545673	-0.06808017	-0.046848925	-3.71E-05	-40273.8157	21528.39465	79.31647031	39369.33533	0.039959942
3	b3	-0.0012976	0.00126162	0.124425866	-0.330870056	-0.128391967	-0.087857532	-5.01E-05	-10339.001	-1.6750806	-0.009059808	-4.3568454	0.080107429
4	b4	26.83775871	-11.56528175	-2586.832479	346.3130116	3107.169294	2168.34389	1.453603774	-467507.382	-4381.8255	-20.18304136	-9869.1279	-1153.1112
5	b5	-0.0001019	9.66E-05	0.009781008	-0.027035137	-0.010167624	-0.006961998	-4.14E-06	-1272.8805	-0.1393557	-0.000741519	-0.3567912	0.006301815
6	b6	2.82E-05	-3.14E-05	-0.002699184	0.005546232	0.002665099	0.001816647	7.58E-07	41.07526434	0.024100295	0.000149799	0.071724714	-0.0017307
7	b1b2	-0.00240193	0.00233652	0.230302937	-0.611878921	-0.237603681	-0.162587799	-9.26E-05	-19431.692	-3.0964062	-0.016753596	-8.0566702	0.148270702
8	b1b3	-0.00339965	0.003341966	0.325932996	-0.852119074	-0.335228059	-0.229328898	-0.000128222	-31695.169	-4.2779620	-0.023312601	-11.208161	0.2097833
9	b1b4	4.78E-05	-4.56E-05	-0.004582653	0.012542513	0.004753751	0.003254364	1.92E-06	222.7676149	0.064421541	0.000343928	0.165470073	-0.0029526
10	b1b5	-0.0198682	0.019553761	1.904795714	-4.972652371	-1.958442249	-1.33972219	-0.000747734	-305277.37	183596.1889	676.3869845	335731.239	1.226023491
11	b1b6	-0.0006443	0.000598958	0.061807422	-0.175411208	-0.06459421	-0.044249237	-2.71E-05	4812.328255	-0.9153491	-0.0048177	-2.3189949	0.0398409
12	b2b3	-0.0086409	0.007998412	0.828910003	-2.365836716	-0.86729482	-0.594186793	-0.000366248	63560.0762	-12.373745	-0.064991424	-31.2854694	0.534352205
13	b2b4	0.003960076	-0.003732087	-0.379818564	1.059401768	0.39542755	0.27078322	0.000162934	-26201.452	12060.05977	44.4422038	22058.74134	6719.32744
14	b2b5	-466.24505	200.9416073	44940.31459	-6026.503051	-53979.3441	-37669.52693	-25.25276229	7775942.013	-215871.38	-723.4500323	-361670.53	8834.156414
15	b2b6	-1.58E-06	1.77E-06	0.000151222	-0.000304346	-0.000149171	-0.000101578	-4.66E-08	-2.3780629	-0.0013047	-8.21E-06	-0.0039319	9.67E-05

Table 7L: Values of b for inverse matrix for 25-36 Variables Vs. 16-30 Variables

Sr. No.		25	26	27	28	29	30	31	32	33	34	35	36
		b1b2b6	b1b3b4	b1b3b5	b1b3b6	b1b4b5	b1b4b6	b1b5b6	b2b3b4	b2b3b5	b2b3b6	b2b4b5	b2b4b6
16	b3b4	3.79E-07	-3.64E-07	-3.64E-05	9.87E-05	3.77E-05	2.58E-05	1.51E-08	-6.496797	0.000504904	2.71E-06	0.001301984	-2.34E-05
17	b3b5	0.00966036	-0.009157992	-0.926491019	2.558927342	0.96297586	0.659363139	0.000391981	115931.6261	13.18587844	0.070184227	33.76969806	-0.59691989
18	b3b6	6.95E-07	-6.76E-07	-6.67E-05	0.000177275	6.88E-05	4.71E-05	2.68E-08	5.911919631	0.000897487	4.85E-06	0.002334333	-4.29E-05
19	b4b5	1.11E-07	-1.14E-07	-1.07E-05	2.59E-05	1.08E-05	7.40E-06	3.80E-09	1.963266766	0.000125126	7.06E-07	0.000339124	-6.86E-06
20	b4b6	0.014897456	-0.014131713	-1.428753657	3.942561207	1.484750761	1.01661419	0.000603751	186288.4415	152.3747821	0.108128722	52.02631546	-0.9205023
21	b5b6	-0.0001089	0.000104558	0.010452163	-0.028353785	-0.010827198	-0.007411437	-4.32E-06	494.9775468	-0.1449279	-0.000777139	-0.3738335	0.006731526
22	b1b2b3	0.071574006	-0.068308479	-6.863970149	18.79357869	7.120672334	4.874752498	0.002870627	343054.7814	96.54872729	0.515348903	247.9453106	-4.4225411
23	b1b2b4	0.029360742	-0.028973953	-2.814780501	7.314747535	2.891740882	1.97803784	0.001098358	324840.9768	-233362.02	0.20005831	96.17470291	-1.8115277
24	b1b2b5	2.72E-06	-2.61E-06	-0.000261049	0.000706858	0.000270321	0.000185034	1.08E-07	15.61980833	0.003609892	1.94E-05	0.009318584	-0.00016811
25	b1b2b6	-0.0003070	0.000302902	0.029431918	-0.076507052	-0.030238266	-0.02068398	-1.15E-05	-3733.1968	2454.464191	176.5372018	4488.288971	0.018941817
26	b1b3b4	0.000182395	-0.000191868	-0.017474461	0.040699387	0.017599067	0.01201728	5.86E-06	9132.484145	-10738.089	-39.5623919	-19637.077	-5985.8520
27	b1b3b5	0.029543977	-0.029138133	-2.832363134	7.367114899	2.910299035	1.990761399	0.001106 56	350077.0959	-232841.53	-857.8022051	-425778.90	-1.8228723
28	b1b3b6	-0.0177374	0.016834336	1.701115656	-4.698074996	-1.767520414	-1.210183792	-0.000719462	-78904.512	-24.238543	-0.128882882	-62.016799	1.096326188
29	b1b4b5	-0.0339901	0.03316837	3.258957369	-8.617470662	-3.359183964	-2.29844442	-0.001301823	-264259.81	-43.507212	-0.235895069	-113.43210	2.097980131
30	b1b4b6	-0.0236112	0.023017447	2.26386131	-5.995267582	-2.334168619	-1.59714197	-0.000906168	-198776.05	-30.290905	-0.164127281	-78.923722	1.457413223

Table 7M: Values of b for inverse matrix for 25-36Variables Vs. 31-45 Variables

Sr. No.		25	26	27	28	29	30	31	32	33	34	35	36
		b1b2b6	b1b3b4	b1b3b5	b1b3b6	b1b4b5	b1b4b6	b1b5b6	b2b3b4	b2b3b5	b2b3b6	b2b4b5	b2b4b6
31	b1b5b6	-1.45E-05	1.36E-05	0.001388744	-0.003888	-0.0014474	-0.00099136	-5.99E-07	334.5839288	-0.0201737	-0.00010674	-0.05137255	0.000894956
32	b2b3b4	-806.6569679	7881.958697	67980.01351	-40363.850	74847.42021	37756.19117	499.8719043	2065058.207	139947.8878	577.8791504	289528.0924	82276.18229
33	b2b3b5	2456.890942	-10739.1556	-233075.42	16.67646879	236.8250925	165.2937697	0.110483795	575819.151	-474640.08	-1749.1096	-868166.92	-132265.92
34	b2b3b6	176.5390721	-39.563291	-857.98238	-0.0604818	-0.02227011	-0.0152547	-9.35E-06	2744.830714	-1747.589	-6.43921395	-3196.12126	-486.97753
35	b2b4b5	4489.1902	-19637.505	-425865.72	-28.741223	-10.508975	-7.1995537	-0.0044569	1349312.8	-867421.56	-3196.111	-1586399.0	-241714.83
36	b2b4b6	0.014555546	-5985.8552	-1.3952796	3.567019038	1.429013254	0.977224782	0.000532521	207790.7416	-132160.	-486.89379	-241674.4	-0.897745
37	b2b5b6	-2884.1759	76875.01346	183542.3742	-779240.81	2137031.852	1016352.448	3863.293114	-3490726.68	4045524.368	14895.92541	7505777.8	1475722.301
38	b3b4b5	-0.213482459	0.197051885	20.47950868	-58.674480	-21.444390	-14.692589	-0.0090937	1753451.119	-307.38583	-1.6121047	-776.07223	13.20292992
39	b3b4b6	-211.10241	-1113.1070	21892.7235	17693.56374	-57501.072	-29740.233	-661.318566	331174.5882	-21472.1724	-66.922139	-36311.489	-19591.4679
40	b3b5b6	0.005624477	-0.0054618	-0.5392978	1.436668126	0.556676316	0.380939881	0.000217581	46348.90102	7.279616808	0.039341667	18.91983154	-0.347220
41	b4b5b6	-229.0414586	4647.082864	15270.61138	-220644.770	131685.3275	113305.2667	947.168272	-24965.3961	308642.7288	1354.605732	679405.1263	284203.5681
42	b1b2b3b4	-6199.609352	76219.83719	569159.5212	160553.5208	1441577.092	1006005.139	674.5788402	-224565697.	1569524.397	3907.668899	2008713.524	469272.4549
43	b1b2b3b5	0.021994599	0.10653146	-2.2328685	57.73889039	6.106443131	4.401123403	0.011329994	8412623.25	420.2292465	1.648729615	803.0040798	-1.67300733
44	b1b2b3b6	8590.498011	-228352.23	-734054.1	132499.11	-5625942.	-1718217.6	-2973.5353	284004972	-5041470.1	-20305.692	-10162820.	-1380439.4
45	b1b2b4b5	11083.56427	35564.5476	-1095658.0	-1360367.1	2461204.882	-1807768.34	1377.342285	1134504697	6763276.187	15799.42139	8358954.371	598624.3819

Table 7N: Values of b for inverse matrix for 25-36 Variables Vs. 46-55 Variables

Sr. No.		25	26	27	28	29	30	31	32	33	34	35	36
		b1b2b6	b1b3b4	b1b3b5	b1b3b6	b1b4b5	b1b4b6	b1b5b6	b2b3b4	b2b3b5	b2b3b6	b2b4b5	b2b4b6
46	b1b2b4b6	-3.100552	-9.9518782	306.5050851	380.8269882	-688.59197	505.8743661	-0.3853613	-308644.36	-1809.7230	-4.1376633	-2198.4407	-125.481827
47	b1b2b5b6	-27683.5624	137075.8891	2667801.394	3177555.814	66986.75733	3563425.78	-2450.0492	-145502235	-8723428.5	-23533.010	-11812445.4	-442673.67
48	b1b3b4b5	2550.490698	-1099.74	-245835.59	33208.58837	295265.2356	206049.0733	138.1552658	-35422440.8	-414641.457	-1908.4901	-933287.21	-109606.69
49	b1b3b4b6	0.01817243	-0.0199205	-1.7402493	3.757058911	1.7286785	-569747.94	0.000524972	-563954.53	17.10880379	0.102003068	48.91120461	-1.1185769
50	b1b3b5b6	0.126742932	-0.1278146	-12.148042	30.45196354	12.3986864	8.476284916	0.004516643	988296.2089	149.6466705	0.831466162	399.4944883	-7.8131435
51	b1b4b5b6	9.03E-06	-8.49E-06	-0.0008659	0.00241707	0.000902111	0.000617819	3.72E-07	4.902982474	0.012509453	6.63E-05	0.031916385	-0.00055790
52	b2b3b4b5	-32.627138	14.05896452	3144.859467	-420.84988	-3777.4735	-2636.1103	-1.76763966	558213.3302	5327.96575	24.54162725	12000.35778	1401.826206
53	b2b3b4b6	-1740.1746	749.8456889	167731.6718	-22449.861	-201472.01	-140597.25	-94.277171	29729618.82	284145.4571	1308.81265	639983.6962	74766.95505
54	b2b3b5b6	0.000253594	-0.0002954	-0.0242679	0.044304926	0.023588927	0.01605869	5.69E-06	5275.589359	0.171338461	0.001183033	0.56461087	-0.015508
55	b2b4b5b6	-11421.029	-116758.38	1348493.6	3124774.9	-6621393.6	-2955855.8	-14821.787	-285873231.	-5529897.7	-21798.447	-11191205.6	-4103325.12

Table 7P: Values of b for inverse matrix for 25-36 Variables Vs. 56-63Variables

Sr. No.		25	26	27	28	29	30	31	32	33	34	35	36
		b1b2b6	b1b3b4	b1b3b5	b1b3b6	b1b4b5	b1b4b6	b1b5b6	b2b3b4	b2b3b5	b2b3b6	b2b4b5	b2b4b6
56	b3b4b5b6	3507.860915	-42855.71576	-299359.7468	927355.382	-877852.6	-708830.51	-1287.324309	117958670.5	-2505397.9	-9941.2787	-4969189.4	-1438296.12
57	b1b2b3b4b5	0.006207607	-0.040426698	-0.551885376	3.81565785	-0.3385618	0.026381184	-0.017140165	-409006.806	17.14794959	0.090178765	43.31927286	-1.2561275
58	b1b2b3b4b6	118.1637179	624.5180645	-12256.23829	-9927.421596	32226.09497	16662.3333	370.9600507	-345753.27	12094.88239	37.77441431	20483.33126	11000.98285
59	b1b2b3b5b6	37414.10339	-463210.6455	-3186469.016	636035.4571	-9545772.63	-7679815.72	-14971.40782	1309510464	-10209118.2	-45224.328	-22827757.	-6158972.814
60	b1b2b4b5b6	-57.29386276	-302.7538053	5942.592347	4807.095366	-15623.902	-8078.4708	-179.8364773	790506.0855	-5899.4183	-18.4690756	-10005.964	-5332.461118
61	b1b3b4b5b6	-0.037740677	0.034853179	3.620474657	-10.40866267	-3.7904936	-2.5968926	-0.001612186	-1349469.4	-54.701094	-0.2860499	-137.72484	2.335811096
62	b2b3b4b5b6	-0.014889985	0.013453917	1.428686478	-4.205562583	-1.5046207	-1.0313964	-0.000657514	512011.2815	-22.295512	-0.11570936	-55.7233320	0.921452125
63	b1b2b3b4b5b6	-75541.12377	922704.0154	6446829.88	-19969853.64	18898622.98	15260074.72	27715.60607	-2569431969	20348712.32	90233.14007	45538106.22	12252325.32

Table 7Q: Values of b for inverse matrix for 37-48 Variables Vs. 1-15 Variables

Sr. No.		37	38	39	40	41	42	43	44	45	46	47	48
		b2b5b6	b3b4b5	b3b4b6	b3b5b6	b4b5b6	b1b2b3b4	b1b2b3b5	b1b2b3b6	b1b2b4b5	b1b2b4b6	b1b2b5b6	b1b3b4b5
1	b1	-783177.089	-0.013412336	9031.265557	0.010284137	-52303.31527	-163561.6108	-6.320729806	735213.0676	-738636.539	206.6756354	225495.1897	38512974
2	b2	-201292.766	0.143362624	1203.469122	0.019003468	4530.629842	16.15746639	-13.15207694	139070.7658	-415993.60	116.397878	309488.8546	-44165.018
3	b3	-9014219.1	26126.98082	97728.07136	-529.681344	-190001.9838	110701.7805	-89539.26561	6206640.84	-20193694.4	5650.346884	14502191.88	-849456
4	b4	-27490.982	0.009861633	262.9832718	0.001508387	-386.7276866	-5618.35691	-1.030688923	26292.67676	-30363.517	8.495921046	5658.421285	-1144.05183
5	b5	-3506.5098	-0.00536864	42.24257306	-0.00038888	135.9258221	-0.250229553	0.290458846	2920.850088	-4266.1494	1.193699027	2847.334425	-0.2202317
6	b6	-379914.495	0.26610894	2407.250992	0.035166158	7414.466086	29.87316428	-24.3452638	267341.3727	-754176.714	211.0238414	559514.96	-111052.440
7	b1b2	-623396.76	0.396091013	5769.81779	0.049566325	-15513.39205	-176375.8425	-34.499361	643675.5115	-599289.287	167.6852305	-107195.558	29.45786781
8	b1b3	4100.226649	-0.00480128	-38.35338417	42.40894944	301.4851681	-0.617114406	4105.122012	-2762.00433	4664.17588	-1.305067544	-6614.4450	-0.4227734
9	b1b4	-5999686.0	2.327078667	72328.98213	0.2895388	-449462.178	-1394833.651	-201.6194106	5674450.039	-5389952.16	1508.145687	1508144.109	172.0290949
10	b1b5	-11872.845	-23917.49241	-1653.571759	0.009598738	24427.52355	8.706988011	-6.495167335	24603.05324	-113346.72	31.71518434	-58048.5319	5.802803441
11	b1b6	-256605.717	-338999.5431	-22899.25654	0.128926696	348108.8711	117.5853611	-87.09428049	412559.1569	-1769919.0	495.2354363	-701027.97	78.04057818
12	b2b3	-593648.61	-0.369739635	4256.108741	-0.05869297	5925.893032	-91637.81526	39.77857097	618492.3577	-889051.03	248.7628118	568479.3993	-35.314038
13	b2b4	151493364.2	23243.66351	-1616883.418	9152.327689	3214592.901	-3484371.923	1550201.961	-102249703.	346683763.7	-97073.58566	-255587928.	1308015.5
14	b2b5	214.4520117	0.000297916	-2.512946519	2.17E-05	-9.028219552	0.013631949	-0.016262148	-179.534155	259.1695658	-0.072517488	-169.873572	0.011430429
15	b2b6	-1.69791435	-3.91E-05	12.77578668	-5.58E-06	-18.80615749	-0.004847966	0.003838222	-7.03356891	57.60156603	-0.016117309	39.69051683	-0.0033449

Table 7R: Values of b for inverse matrix for 37-48Variables Vs 16-30 Variables

Sr. No.		37	38	39	40	41	42	43	44	45	46	47	48
		b2b5b6	b3b4b5	b3b4b6	b3b5b6	b4b5b6	b1b2b3b4	b1b2b3b5	b1b2b3b6	b1b2b4b5	b1b2b4b6	b1b2b5b6	b1b3b4b5
16	b3b4	2485056.767	-0.936705521	-22965.80872	-0.14285313	28955.14129	508931.9953	97.63600671	-2386155.61	2806865.538	-785.3802854	-466893.455	103629.91
17	b3b5	119.1540071	-7.68E-05	-0.892894862	-1.02E-05	-2.538118527	-0.008656952	0.007046596	-73.4421826	258.0422511	-0.072202004	-226.82261	-0.0060722
18	b3b6	42.55584583	-1.57E-05	-0.74388277	-1.59E-06	4.131384579	-0.001233905	0.001135603	-58.0893028	-12.175632	55.16876643	-16.3781958	-0.000933
19	b4b5	3881649.845	-1.449526777	-45584.46999	-0.22024372	58785.7247	794087.971	150.5783591	-3716636.07	4339539.083	-1214.232888	-751589.031	162478.7338
20	b4b6	-235.399331	-4020.435471	-266.7765637	0.001604508	4032.7073	1.391784775	-1.102966983	2067.720863	-15991.5519	4.474544676	-8293.59751	0.960847 23
21	b5b6	6418612.627	-7.182800158	-68945.32821	-1.05569226	566812.1085	-924.7713766	6424242.088	-4262096.22	6821610.577	-1908.732118	-10633702.1	-633.333403
22	b1b2b3	6214916.745	-3.482904986	-64867.6711	-0.42741296	193155.8275	1772908.524	298.0836708	-6376026.35	5349502.864	-1496.827425	886848.5813	-253.703973
23	b1b2b4	276.2085439	-0.000282923	1.123554057	-4.01E-05	-32.71581182	-0.034680875	0.027551995	-54.615262	363.7260866	-0.101773018	8.930037466	-0.0239775
24	b1b2b5	-63856.804	0.036387034	505.5605294	0.004469435	-1165.425894	-18647.17121	-3.116734347	66930.44174	-57166.24706	15.99550642	-15671.3705	2.653129234
25	b1b2b6	102933.4112	-0.02825694	-1415.186872	-0.00258462	4972.362765	81582.98143	1.865903809	-253390.068	64802.08423	-18.1320711	132447.0131	-1.50080463
26	b1b3b4	6060851.872	-3.495343804	-47193.65178	-0.43017914	105627.2283	1768953.582	299.9223334	-6357454.36	5483045.508	-1534.193583	1509247.629	-255.39324
27	b1b3b5	-1580902.06	1.726546646	27020.10769	0.26217558	-231653.9683	231.6878019	-178.8722507	896353.3745	-2280400.403	638.0714163	3353127.296	157.5605262
28	b1b3b6	-4927943.12	3.823556904	25655.25779	0.497026208	21128.19586	420.19499	-344.6358958	1131147.044	-5444922.994	1523.526494	1472512.443	296.0765872
29	b1b4b5	-3911642.25	2.64323111	28227.70134	0.345396643	36833.68606	292.4512803	-239.3757007	2996038.629	-7322571.105	2048.905846	4538841.278	205.8153985
30	b1b4b6	423.5560625	0.001327172	-618.6450931	0.000214922	853.9471345	0.192412224	-0.146099111	255.800822	-2459.219334	0.688106296	-1471.2423	0.129557183

Table 7S: Values of b for inverse matrix for 37-48Variables Vs 31-45 Variables

Sr. No.		37	38	39	40	41	42	43	44	45	46	47	48
		b2b5b6	b3b4b5	b3b4b6	b3b5b6	b4b5b6	b1b2b3b4	b1b2b3b5	b1b2b3b6	b1b2b4b5	b1b2b4b6	b1b2b5b6	b1b3b4b5
31	b1b5b6	68153923.76	4612259.269	-1798602.0	-11435.6337	2776024.015	38203.87312	-1304233.3	-40328917.6	105117237.9	-29459.881	-119615568	-1182706.97
32	b2b3b4	13186269.3	2015.744064	-129780.86	-40.4253326	446969.2551	3612168.708	-7163.6715	-14005184.3	16075492.09	-4422.5800	-9378206.71	-6265.86519
33	b2b3b5	60090.072	0.019301519	-598.164157	0.003309119	2035.704899	13278.04355	-2.22824517	-63733.7492	65682.35369	-18.100385	-31467.9247	1.997881538
34	b2b3b6	29608443.4	8.746384388	-296102.72	1.562371101	1012274.114	6590583.535	-1048.4957	-31400929.2	32759877.93	-9028.4572	-15697629.8	944.969611
35	b2b4b5	4090809.272	-1.80924	-50228.005	-0.21100772	322580.6533	1004064.725	147.93107	-3884968.4	3528045.175	-945.11020	-946553.95	-124.82793
36	b2b4b6	521106345.1	54823083.73	-34143250.5	-297989.618	65820694.74	39055919.23	-44212186.9	-151789183.	-138424189.	38792.603	-1372344428	-40234297.1
37	b2b5b6	-4737653.58	-8830407.31	-611646.742	3.188550108	9070014.484	-6889.87247	-2151.0948	9263391.89	-42507620.1	11893.92222	-20554544.3	-66.812881
38	b3b4b5	-7361783.268	-1315652.96	849243.9639	8411.530422	-3418347.15	-1210700.39	1272223.287	-641098.1	22679640.4	-6346.3088	28017089.7	1171145.105
39	b3b4b6	905917.0548	-0.6178336	-5754.1544	-0.08240312	-17531.211	-70.1895816	56.9968253	-638472.54	1794585.547	-502.13740	-1329214.78	263073.2662
40	b3b5b6	31154095.13	10053851.5	-3461622.00	-36284.687	5480589.512	-5493782.5	-3377120.2	-363969.72	27087823.25	-7781.8731	-109582090.	-4211090.62
41	b4b5b6	-4336255560	12122458.85	44761354.68	-245747.397	-65346450.3	23992650	-41548243.7	2992219169	-9572553742	2677898.806	6652356155	-39381020.1
42	b1b2b3b4	158305592.1	69.09746314	-1111469.74	-1.08066854	-229849.072	-3479.08463	54.49629957	-138388677.	229864733.8	-64317.7504	-98536255.7	25465422.99
43	b1b2b3b5	5178613044	-47641357.9	-37645610.6	513146.843	46817735.89	-105330163.	55605170.34	-3609140457	12470771955	-3488117.12	-8092287065	82940172.59
44	b1b2b3b6	22979127914	24045503.1	-278825616.	447511.0415	417666589.2	46746948.52	4377950.167	-15620674788	48696840014	-13624861.56	-35808707766	78186351.96
45	b1b2b4b5	-6245351.835	-6728.16836	75852.529	-125.227148	-114277.302	24056.62358	-1217.84752	4195592.275	-13418814.7	3754.439035	9981460.78	-14161.209

Table 7T: Values of b for inverse matrix for 37-48 Variables Vs. 46-55 Variables

Sr. No.		37	38	39	40	41	42	43	44	45	46	47	48
		b2b5b6	b3b4b5	b3b4b6	b3b5b6	b4b5b6	b1b2b3b4	b1b2b3b5	b1b2b3b6	b1b2b4b5	b1b2b4b6	b1b2b5b6	b1b3b4b5
46	b1b2b4b6	-2949523010	-32689916.5	363744602.4	-1090590.74	-541169313	46109519.79	-59823138.7	19866117811	-627603060	17558389.6	47027209928	-215221614.
47	b1b2b5b6	-691341955	2481636.734	7705690.972	212791.2867	-12672228.9	10499912.13	16974379.95	483118199.8	-1617125610	452484.0391	1088555377	25962436.18
48	b1b3b4b5	-10270116.9	299115.0496	14747.02358	-0.25275595	1194301.737	-173.055068	184.1082749	8722951.815	-20810148.2	5822.825225	8838378.369	-144.078992
49	b1b3b4b6	15890137.61	-124748	-140276.64	-1.82879681	30524.93334	-1463.64	1289.938119	-10283732.5	30817743.76	-8623.0164	-27748022.5	5727277.385
50	b1b3b5b6	731.8968355	-0.00083726	18.50002745	-0.00013392	-245.77298	-0.11946597	0.091257708	-714.61071	2629.210294	-0.7356711	-155.93126	-0.0807001
51	b1b4b5b6	10751577.23	-31790.424	-112071.593	643.9489147	156801.5207	-134592.87	108862.9191	-7447754.45	24385808.33	-6823.3317	-17102800.0	103196.8522
52	b2b3b4b5	572614826.6	-1694146.8	-6008438.2	34345.06115	8726906.935	-7178279.9	5806018.641	-396406625.	1296950752	-362896.535	-912061536.	5504109.823
53	b2b3b4b6	100457.5095	1846882	536.3068284	-0.00342363	-22316.629	-1.8970773	2.671506786	-70919.007	267555.5283	-74.8639	-150412.856	-1.9047865
54	b2b3b5b6	-7663562232	-189039214.	187028558.5	905836.3254	-365506337.	113526612.	129107695.7	4579933579	-12180674178	3407682.952	13969702433	116828650.1
55	b2b4b5b6	2298827866	-19702271.4	-9789970.2	211644.7239	4187437.058	-1867144.4	22966988.7	-1665589797	5386254844	-1506939.8	-3399163346	24056990.62

Table 7U: Values of b for inverse matrix for 37-48 Variables Vs. 56-63Variables

Sr. No.		37	38	39	40	41	42	43	44	45	46	47	48
		b2b5b6	b3b4b5	b3b4b6	b3b5b6	b4b5b6	b1b2b3b4	b1b2b3b5	b1b2b3b6	b1b2b4b5	b1b2b4b6	b1b2b5b6	b1b3b4b5
56	b3b4b5b6	-8280400.448	-35.98172092	232192.6582	0.046294502	-2557330.2	-199.68059	152.8854233	4180474.049	-8522994.80	2384.793838	19851211.1	-2757.954
57	b1b2b3b4b5	887414.2952	737775.403	-383895.1189	-4713.45607	889790.4689	678010.2969	-712747.874	1979797.275	-15950190.	4463.191741	-7871443.75	-656184.191
58	b1b2b3b4b6	23918118435	-214304904.1	-171878069.2	2292321.35	188896120.1	-214360701.	249453713.4	-16994670183	56428338355	-15787193.2	-35728223727	369956315.6
59	b1b2b3b5b6	11748389.59	-357664.6533	78012.60572	2285.196675	-185061.606	-328377.62	345443.1455	-13346034.36	20758568.39	-5808.4984	4962061.448	318240.4263
60	b1b2b4b5b6	-27387787.89	3.127762096	698859.1405	0.563555128	-7310293.01	518.3435158	-378.7673446	13574304.35	-29275625.3	8191.523195	67124587.61	341.6117821
61	b1b3b4b5b6	10364940.25	1.074836199	-290847.619	0.224123077	3204459.705	210.5830141	-149.6690956	-5231281.789	10659297.13	-2982.5462	-24856309.26	136.5266106
62	b2b3b4b5b6	-46950038856	424193784.2	339184142.1	-4556490.1	-376618925.	424645019.7	-494649795.9	33145997847	-1.12E+11	31249217.66	71209900683	-517814887.4
63	b1b2b3b4b5b6	-9190.944545	-0.048516191	124.3011624	-0.00353834	-811.50713	-2.2831112	2.645832246	11220.32351	2515.469259	-0.70384029	-10309.50812	-2.006207249

Table 7V: Values of b for inverse matrix for 49-60 Variables Vs. 1-15 Variables

Sr. No.		49	50	51	52	53	54	55	56	57	58	59	60
		b1b3b4b6	b1b3b5b6	b1b4b5b6	b2b3b4b5	b2b3b4b6	b2b3b5b6	b2b4b5b6	b3b4b5b6	b1b2b3b4b5	b1b2b3b4b6	b1b2b3b5b6	b1b2b4b5b6
1	b1	-0.2903979	-0.17479215	-5.79E-06	4.06E-05	0.017003527	0.001011963	19923.95909	4596.692659	0.00373402	-69.72795776	49960.78589	34.01377516
2	b2	1.192626905	0.452235181	2.88E-05	-0.000642577	-0.090474241	-0.006879572	1447590.325	442441.5116	-6.39223376	-5066.180468	3276151.116	2454.761679
3	b3	1.823813057	-14868.836	4.00E-05	-0.000601823	-0.121436638	-0.008440812	192897.9673	56954.95478	0.046340583	-675.0936055	618313.6315	325.6627962
4	b4	6875.171411	-8801.99607	-0.846412714	-10.69184543	697.3759234	-63.91757761	15843802.08	2648878.255	-1375.7238	-55378.1786	27113780.07	20823.60997
5	b5	0.148186105	0.070612809	3.29E-06	-5.31E-05	793.4949665	1058.005985	42118.50373	10765.6464	0.008358411	-147.4036892	116995.6405	71.32487564
6	b6	-0.0318936	-0.01922675	-6.28E-07	3.93E-06	0.001829497	0.000111546	6770.940622	1194.828884	0.001179334	-23.69642081	13032.98341	11.51086758
7	b1b2	3.37321184	1.659356403	7.39E-05	-0.001110961	-0.22450696	-0.015599654	385846.4135	109476.2933	0.090453249	-1350.363558	1188868.057	651.6552333
8	b1b3	4.708706494	2.346410686	0.000102583	-0.001495644	-0.310936898	-0.02146775	924820.1114	263628.711	0.188034002	-3236.629596	2862363.811	1564.949502
9	b1b4	-0.0688783	-0.03306561	-1.52E-06	2.37E-05	0.004612976	0.000327583	-6147.450479	-2762.2707	-0.00162283	21.51451395	-12319.69064	-10.3677874
10	b1b5	27.48478417	13.71119793	0.000598153	-0.008685073	-1.812323452	-0.125172357	11593349.61	3529040.975	2.128182403	-40573.66624	25292904.56	19645.45142
11	b1b6	0.958099931	0.446876487	2.15E-05	-0.000358832	-0.065639404	-0.004682563	-265047.1224	10309.02514	-0.0346732	927.5932999	104241.4129	-450.563295
12	b2b3	12.91080862	5.994976652	0.000289986	-0.004905475	-0.88824565	-0.063342583	-3670467.581	172282.7419	-0.48131779	12845.64521	1761297.162	-6239.26654
13	b2b4	-5.8093662	-2.74360991	-0.000127519	0.001977448	0.385134225	0.02825021	602148.1721	196279.0584	0.059740927	-2387.533376	2129787.673	1162.764527
14	b2b5	-119361.67	350201.3613	-75.39348183	7990.516389	540012.4816	-9417.116168	-267508259	-45271834.8	23890.84811	916737.9023	-445129422.1	-339848.17
15	b2b6	0.001929276	0.001075895	3.46E-08	-1.79E-07	-9.96E-05	-5.97E-06	-402.7930538	-70.749115	36.019443	1.409664516	-800.8601572	-0.6846396

Table 7W: Values of b for inverse matrix for 49-60 Variables Vs. 16-30 Variables

Sr. No.		49	50	51	52	53	54	55	56	57	58	59	60
		b1b3b4b6	b1b3b5b6	b1b4b5b6	b2b3b4b5	b2b3b4b6	b2b3b5b6	b2b4b5b6	b3b4b5b6	b1b2b3b4b5	b1b2b3b4b6	b1b2b3b5b6	b1b2b4b5b6
16	b3b4	-0.0005426	-0.00026238	-1.20E-08	1.87E-07	3.65E-05	2.56E-06	197.3173388	-3.0417849	2.83E-05	-0.69055746	-27.71100806	0.335256975
17	b3b5	-14.0276524	-6.68845409	-0.000311639	0.005016337	-71878.49382	0.067020205	-3678013.261	-977130.714	-0.73940338	12872.08058	-10615294.59	-6227.49255
18	b3b6	-0.0009771	-0.00048035	30.03266385	3.22E-07	6.51E-05	4.52E-06	-143.1180599	-30.044118	-3.15E-05	0.500876202	-327.2356059	-0.2419532
19	b4b5	-0.00014479	-7.65E-05	-3.07E-09	3.80E-08	9.21E-06	6.16E-07	-119.234461	-23.7660291	-2.05E-05	0.417289031	-258.9331922	-0.20217458
20	b4b6	-21.615258	-10.3138481	-0.000480065	-2081.273806	-111003.1065	0.103193113	-5876554.484	-1520699.91	-1.41104435	25554.36725	-16561244.21	-12368.8109
21	b5b6	0.155843926	0.07539176	3.44E-06	-5.36E-05	-0.0010474579	-0.000733746	-42760.9686	882.000094	-0.00580802	149.6518122	8408.528135	-72.6882397
22	b1b2b3	-103.20281	-49.5268794	-0.002274318	0.035487882	6.910645623	0.491041828	-11050890.14	-4296931.81	-2.73916867	38675.28331	-19037627.81	-18656.0738
23	b1b2b4	-40.456372	-20.2574815	-0.000879424	0.012672042	2.663597472	0.183448264	-10397384.98	-2610492.88	-2.01568346	36388.12562	-28374851.35	-17605.1478
24	b1b2b5	-0.0038861	-0.00188278	-8.57E-08	1.33E-06	0.000260999	1.83E-05	180.0959395	-22.535546	-2.61E-06	-0.630283377	-238.4158864	0.309024403
25	b1b2b6	0.423126897	0.211819368	9.20E-06	-0.000132616	-0.027861383	-0.001919188	81034.19079	27425.50277	0.016468321	-283.5985897	297373.4008	137.1154877
26	b1b3b4	-0.2289574	-0.1250899	-4.77E-06	5.26E-05	0.014223306	0.000931286	-155519.3825	-52845.9036	-0.03850325	793.8645084	-574759.8666	-384.668081
27	b1b3b5	-40.740590	-20.3849513	-0.000885882	0.012787136	2.683432255	0.184890482	-7564472.274	-2605138.79	-1.54686531	26473.68682	-28244025.98	-12798.5181
28	b1b3b6	25.77136326	12.27939044	0.000568602	-0.008953469	-1.727532826	-0.123621169	4330932.179	1235672.212	0.95260822	-15157.13584	4038249.625	7324.551216
29	b1b4b5	47.53998004	23.47525694	0.001039989	-0.015492484	-3.156697586	-0.218939405	4112141.323	1899893.727	1.046181754	-14391.45518	20563913.58	6934.882562
30	b1b4b6	-569716.05	16.30858451	0.000723782	-0.010812963	-2.19733796	-0.152486106	4524487.68	1226772.458	1.006717687	-15834.53994	13326850.68	7647.184615

Table 7X: Values of b for inverse matrix for 49-60 Variables Vs. 31-45 Variables

Sr. No.		49	50	51	52	53	54	55	56	57	58	59	60
		b1b3b4b6	b1b3b5b6	b1b4b5b6	b2b3b4b5	b2b3b4b6	b2b3b5b6	b2b4b5b6	b3b4b5b6	b1b2b3b4b5	b1b2b3b4b6	b1b2b3b5b6	b1b2b4b5b6
31	b1b5b6	0.021280851	0.010033701	4.74E-07	-7.77E-06	-0.0014486	-0.0001029	-9196.26501	184.5998899	-0.01632197	347.0359197	-573.3228049	-168.256869
32	b2b3b4	-45559.66647	26768.33607	-87.7615308	-30.898951	94721.09536	-1676.0150	-224647372.	-24660984.7	-561943.522	782782.0471	-196259663.1	-407350.212
33	b2b3b5	582.348423	-660.129274	-0.06403784	-0.85249545	49.91155355	-5.252899	-19213652.9	-6175608.15	-108.8112	72759.48551	-50200340.42	-35794.7282
34	b2b3b6	0.330918718	0.15413434	7.30E-06	-0.0001160	-0.02207286	-0.0016321	-90076.215	-27700.2040	-0.0127202	335.548151	-238772.9097	-162.974943
35	b2b4b5	157.0787887	72.64235254	0.003472254	-0.0558157	-10.5039411	-0.7803598	-44581688.5	-13653177.2	-6.32007737	166102.7593	-117480662.2	-80670.264
36	b2b4b6	-19.77764215	-10.0332631	-0.0004271	0.005942611	1.290507932	0.08837104	-8050864.87	-2458537.66	-1.46873803	28175.90607	-17318547.82	-13642.1834
37	b2b5b6	671932.1397	-4140456.41	-1198.4925	-81814.338	-228618.63	-44417.1328	-4116290983	-84794843.0	-11464887.2	14538763.2	-1095321694	-8436484.09
38	b3b4b5	299438.3183	148.146066	0.007197301	-0.1224437	1362.942823	1845.089761	-98039434.3	3880558.438	-13.0679377	343111.5693	39278584.82	-166630.691
39	b3b4b6	-40346.7672	95212.36013	41.30900129	964.8349933	-13869.905	2246.102326	104599922.8	7554375.383	270513.8628	-367521.1695	7852351.554	229708.8939
40	b3b5b6	-7.917062986	-3.88621846	-0.00017366	0.002622929	0.527614107	0.036698038	-922305.2	-261455.457	-0.21578573	3227.831609	-2839303.743	-1557.79661
41	b4b5b6	34853.41298	-278659.646	-277.57259	9670.438888	927585.8565	-24651.113	-263426825.	-17969327.7	-2622369.89	886652.9382	-41099800.75	-392354.407
42	b1b2b3b4	3184715.116	-4083481.82	-392.70052	-4961.08142	323516.137	-29658.779	7245877728	1220422177	-638369.016	-25367616.67	13330813567	9502878.306
43	b1b2b3b5	-277.1172869	-23.1482326	-0.0081613	0.289066643	26.89618718	2.450535024	-178152755.	-56704411.0	-41.3177939	6234863	-615043361.5	-301850.242
44	b1b2b3b6	-3824630.418	8872047.123	1129.099632	63840.37924	1459423.261	67723.75218	-6889188321	-1469947855	7201737.553	24018125.52	-15787932424	-11017743
45	b1b2b4b5	-8302308.004	8364690.634	469.0318707	-117113.55	-6665937.1	106247.959	-43229547368	-6340546643	-12086412.3	151551024.5	-70156726985	-75493363.5

Table 7 Y: Values of b for inverse matrix for 49-60 Variables Vs. 46-55 Variables

Sr. No.		49	50	51	52	53	54	55	56	57	58	59	60
		b1b3b4b6	b1b3b5b6	b1b4b5b6	b2b3b4b5	b2b3b4b6	b2b3b5b6	b2b4b5b6	b3b4b5b6	b1b2b3b4b5	b1b2b3b4b6	b1b2b3b5b6	b1b2b4b5b6
46	b1b2b4b6	2322.019866	-2340.98744	-0.1312611	-66.067258	-3406.1889	-29.724033	11816345.24	1702095.204	3381.795566	-41191.44729	18845829.74	20536.16779
47	b1b2b5b6	16813548.67	-23750428.6	240.5837211	88106.36574	4212326.377	-122063.125	55879446736	8074132588	20604180.61	-195763645.2	89102688877	98558333.75
48	b1b3b4b5	650119.7247	4891405.869	-80.437124	-1015.0938	66355.62129	-6063.5397	1252153510	179469828	-133423.467	-4375466.214	2100448584	1550578.443
49	b1b3b4b6	-21.526052	-12.4165904	-0.000409	0.001887504	1.146132049	0.083682699	2363766.35	-1293424.24	570.579924	-8272.507403	38615447.58	5809418.456
50	b1b3b5b6	-169.35514	-87.2788171	-0.00363187	0.048410103	10.94309235	0.742834076	-22484317	-4204588.94	-4.72464755	78689.34597	-45863204.15	-38003.3051
51	b1b4b5b6	-0.0132268	-0.00625533	-2.96E-07	4.89E-06	0.000905909	6.36E-05	2965.328772	-295.79775	0.000369762	-10.37784639	-3109.159743	5.043032487
52	b2b3b4b5	-8344.1750	10700.54209	1.029022516	12.99945983	-847.77298	77.71270558	-18181577.6	-2944130.75	1672.87783	63544.47314	-32511764.16	-23482.3151
53	b2b3b4b6	-445012.535	570721.0087	54.88311009	693.3151	-45217.2	4144.684039	-974699301.	-156684888.	89221.8223	3406590.149	-1730477499	-1260908.02
54	b2b3b5b6	-0.2586936	-0.17212635	-5.19E-06	3.14E-05	0.015701918	0.000696035	85962.89807	-29200.452	0.015927907	-300.8466321	-312142.9574	146.0042018
55	b2b4b5b6	-731616.11	7910228.655	5914.320513	145717.7567	-1640836.7	306614.2101	25075394079	2042212777	42209733.19	-87929969.51	21603404978	45854637.57

Table 7 Z: Values of b for inverse matrix for 49-60 Variables Vs. 56-63Variables

Sr. No.		49	50	51	52	53	54	55	56	57	58	59	60
		b1b3b4b6	b1b3b5b6	b1b4b5b6	b2b3b4b5	b2b3b4b6	b2b3b5b6	b2b4b5b6	b3b4b5b6	b1b2b3b4b5	b1b2b3b4b6	b1b2b3b5b6	b1b2b4b5b6
56	b3b4b5b6	-1574784.592	3654345.647	467.9586618	26322.04195	598143.8823	28042.97658	-2939962011	-656590196.7	11915429.82	10287308.57	-7180141049	-4725239.47
57	b1b2b3b4b5	550.9436192	-5.6881449	0.000690746	0.033038653	0.896064126	0.151267543	37216607.73	10617706.36	13.22406033	-130248.2253	19127000.5	63160.67404
58	b1b2b3b4b6	22558.80215	-53328.0547	-23.16466835	-541.1278603	7774.199325	-1259.3167	-43852058.75	10015.9486	-151731.946	154282.8472	3020610.709	-103640.545
59	b1b2b3b5b6	-17031554.19	39492377.34	5106.741962	284976.4368	6416199.618	305708.0173	-31418033992	-6804552674	32592670.95	109543046.9	-74383321241	-50188925.8
60	b1b2b4b5b6	5794483.554	25859.9328	11.230549	262.3131154	-3770.89941	610.2896385	3932712.252	-5079667.71	73555.08016	-14157.24448	-56537243.35	20811.91584
61	b1b3b4b5b6	56.78630462	26.18568259	0.001264041	-0.020936347	-3.8475013	-0.2819908	112017822.7	31378354.7	-3009.0492	-392032.5644	61953881.82	-30642776.3
62	b2b3b4b5b6	22.85724913	10.351913	0.00051855	-0.009147111	-1.5928176	-0.1148552	-46619073.65	-13301026.78	-7.51471637	163154.3059	-23935303.59	-79116.0387
63	b1b2b3b4b5b6	33927571.6	-78666940	-10074.738	-566720.6102	-12879408.3	-603858.23	61997308450	13268371061	-64276467.7	-216155514.8	1.45E+11	99132570.11

Table 7AB: Values of b for inverse matrix for 61-63 Variables Vs.1-24 Variables

Sr. No.		61	62	63	Sr. No.		61	62	63
		b1b3b4b5b6	b2b3b4b5b6	b1b2b3b4b5b6			b1b3b4b5b6	b2b3b4b5b6	b1b2b3b4b5b6
1	b1	0.1915488	-0.0004851	-99489.777	13	b2b4	4.3099971	0.0684062	-4245161.6
2	b2	-0.9610783	-0.0258217	-6522132.2	14	b2b5	-31433.82	-30106.65	893153811
3	b3	-1.3340477	-0.0180376	-1232691	15	b2b6	-0.0020611	2.26E-06	1593.2074
4	b4	1804.0607	1733.0913	-54381169	16	b3b4	0.0003999	5.84E-06	59.593897
5	b5	-0.1098751	-0.0016996	-233119.91	17	b3b5	10.398322	0.1604745	21154568
6	b6	0.0209724	-6.03E-05	-25922.737	18	b3b6	0.0007148	9.67E-06	651.52594
7	b1b2	-2.4665985	-0.0332354	-2369848	19	b4b5	0.0001024	8.56E-07	515.38477
8	b1b3	-3.4231831	-0.0431459	-5705686.4	20	b4b6	16.017849	0.2464678	32971004
9	b1b4	0.0508583	0.0007594	59680.353	21	b5b6	-0.1147995	-0.0016723	-17722.863
10	b1b5	-19.969168	-0.2496974	-50345035	22	b1b2b3	76.210494	1.1391524	92882041
11	b1b6	-0.7166343	-0.0120302	-214098.37	23	b1b2b4	29.346716	0.3601862	56534848
12	b2b3	-9.6767012	-0.1651096	-3600365.9	24	b1b2b5	0.0028609	4.14E-05	480.7913

Table 7AC: Values of b for inverse matrix for 61-63 Variables Vs.25-48 Variables

Sr. No.		61	62	63	Sr. No.		61	62	63
		b1b3b4b5b6	b2b3b4b5b6	b1b2b3b4b5b6			b1b3b4b5b6	b2b3b4b5b6	b1b2b3b4b5b6
25	b1b2b6	-0.3069649	-0.0037723	-593082.25	37	b2b5b6	925398.5	14367940	1.901E+09
26	b1b3b4	0.159154	0.0009114	1144802.8	38	b3b4b5	-240.16664	-4.1413495	-80632932
27	b1b3b5	29.562608	0.3642955	56332753	39	b3b4b6	-24991.25	-339025.69	-7500735.1
28	b1b3b6	-19.082469	-0.2929428	-26744395	40	b3b5b6	5.7947478	0.0788887	5659744.8
29	b1b4b5	-34.703347	-0.458742	-41044809	41	b4b5b6	172114.35	3286167.1	66443696
30	b1b4b6	-24.151357	-0.3212316	-26560899	42	b1b2b3b4	867206.28	804176.07	-2.673E+10
31	b1b5b6	-0.0158452	-0.0002558	-938.7516	43	b1b2b3b5	276.62602	14.632697	1.226E+09
32	b2b3b4	43372.219	704228.93	382892623	44	b1b2b3b6	-2650687.7	-9031298.3	3.165E+10
33	b2b3b5	101.11622	132.45422	99928639	45	b1b2b4b5	324120.05	15129545	1.39E+11
34	b2b3b6	-0.2468866	-0.0041276	475534.71	46	b1b2b4b6	-89.932321	-4233.3406	-37403870
35	b2b4b5	-117.51612	-2.0131667	233966061	47	b1b2b5b6	8638810.9	-25791279	-1.77E+11
36	b2b4b6	14.258944	0.1619936	34469928	48	b1b3b4b5	178897	164652.42	-4.003E+09

Table 7AD: Values of b for inverse matrix for 61-63 Variables Vs.49-63 Variables

Sr. No.		61	62	63	Sr. No.		61	62	63
		b1b3b4b5b6	b2b3b4b5b6	b1b2b3b4b5b6			b1b3b4b5b6	b2b3b4b5b6	b1b2b3b4b5b6
49	b1b3b4b6	14.342867	0.0030934	-77182811	57	b1b2b3b4b5	-3015.2048	-8.7990041	-37472148
50	b1b3b5b6	121.20221	1.247764	91264516	58	b1b2b3b4b6	14006.471	190163.45	-10327220
51	b1b4b5b6	0.0098449	0.0001577	6281.3908	59	b1b2b3b5b6	-11785363	-40872333	1.49E+11
52	b2b3b4b5	-2272.9342	-2107.208	65232993	60	b1b2b4b5b6	-30839590	-92189.143	114791726
53	b2b3b4b6	-121242.29	-112387.58	3.472E+09	61	b1b3b4b5b6	-42.521896	-0.7322545	-121559322
54	b2b3b5b6	0.1621555	-0.0019833	626132.4	62	b2b3b4b5b6	-17.304103	-0.3211616	46891421
55	b2b4b5b6	-2445835.1	-52893560	-4.212E+10	63	b1b2b3b4b5b6	23488888	80605358	-2.91E+11
56	b3b4b5b6	-1091906.2	-14933052	1.439E+10					

The laboratory (experimental) strengths are represented in table 6.67

Table 8: Laboratory compressive strength

S/N	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12
Ylab (= Yp-N/m^2)	29.89	31.56	33.33	25.78	28.44	27.44	24.22	26.22	26.44	18.44	22.67	25

The table 6.68 is formed by utilizing the values of Bi from table 6.65 and laboratory compressive strength shown in table 6.67; [F (B).B] is calculated as follows

Table 9: Values of $\sum B_i F(B_i)$

$\sum B_1F(B)=25.77$	$\sum B_2B_4F(B)=12.27$	$\sum B_1B_2B_6F(B)=0.60$	$\sum B_2B_5B_6F(B)=0.85$	$\sum B_1B_3B_4B_6F(B)=0.26$
$\sum B_2F(B)=44.18$	$\sum B_2B_5F(B)=4.49$	$\sum B_1B_3B_4F(B)=1.58$	$\sum B_3B_4B_5F(B)=1.94$	$\sum B_1B_3B_5B_6F(B)=0.102$
$\sum B_3F(B)=68.89$	$\sum B_2B_6F(B)=7.63$	$\sum B_1B_3B_5F(B)=0.54$	$\sum B_3B_4B_6F(B)=3.3$	$\sum B_1B_4B_5B_6F(B)=0.132$
$\sum B_4F(B)=87.562$	$\sum B_3B_4F(B)=19.03$	$\sum B_1B_3B_6F(B)=0.94$	$\sum B_3B_5B_6F(B)=1.41$	$\sum B_2B_3B_4B_5F(B)=0.25$
$\sum B_5F(B)=35.11$	$\sum B_3B_5F(B)=7.25$	$\sum B_1B_4B_5F(B)=0.703$	$\sum B_4B_5B_6F(B)=1.83$	$\sum B_2B_3B_4B_6F(B)=0.449$
$\sum B_6F(B)=57.90$	$\sum B_3B_6F(B)=12.17$	$\sum B_1B_4B_6F(B)=1.2$	$\sum B_1B_2B_3B_4F(B)=0.23$	$\sum B_2B_3B_5B_6F(B)=0.176$
$\sum B_1B_2F(B)=3.7$	$\sum B_4B_5F(B)=9.37$	$\sum B_1B_5B_6F(B)=0.49$	$\sum B_1B_2B_3B_5F(B)=0.073$	$\sum B_2B_4B_5B_6F(B)=0.228$
$\sum B_1B_3F(B)=5.65$	$\sum B_4B_6F(B)=15.62$	$\sum B_2B_3B_4F(B)=2.72$	$\sum B_1B_2B_3B_6F(B)=0.132$	$\sum B_3B_4B_5B_6F(B)=0.37$
$\sum B_1B_4F(B)=7.13$	$\sum B_5B_6F(B)=6.94$	$\sum B_2B_3B_5F(B)=0.94$	$\sum B_1B_2B_4B_5F(B)=0.094$	$\sum B_1B_2B_3B_4B_5F(B)=0.02$
$\sum B_1B_5F(B)=2.61$	$\sum B_1B_2B_3F(B)=0.082$	$\sum B_2B_3B_6F(B)=1.63$	$\sum B_1B_2B_4B_6F(B)=0.167$	$\sum B_1B_2B_3B_4B_6F(B)=0.036$
$\sum B_1B_6F(B)=4.44$	$\sum B_1B_2B_4F(B)=1.03$	$\sum B_2B_4B_5F(B)=1.21$	$\sum B_1B_2B_5B_6F(B)=0.063$	$\sum B_1B_2B_3B_5B_6F(B)=0.013$
$\sum B_2B_5F(B)=9.71$	$\sum B_1B_2B_5F(B)=0.34$	$\sum B_2B_4B_6F(B)=2.08$	$\sum B1B3B4B5F(B)=0.148$	$\sum B_1B_2B_4B_5B_6F(B)=0.017$
$\sum B_1B_3B_4B_5B_6F(B)=0.027$				
$\sum B_2B_3B_4B_5B_6F(B)=0.0471$				
$\sum B_1B_2B_3B_4B_5B_6F(B)=0.0035$				

Putting [F (B).B] and $[AA]^{-1}$, in equation 13, the coefficients $[x_i]$ of the model as shown in table 10

Table 10: Coefficient of Model

AA INVERSE × ∑B1 F(B) = x

x_1= 0.0928	x_2= 0.12347	x_3= -0.18583	x_4= -13.4048	x_5= -0.01109	x_6= 0.00955	x_{12}= -0.3457	x_{13}= -0.53469	x_{14}= 0.00481
x_{15}= -3.10899	x_{16}= -0.05252	x_{23}= 0.68937	x_{24}= 0.1842	x_{25}= 1877.98	x_{26}= -0.00055	x_{34}= 4.75E-05	x_{35}= 1.057153	x_{36}= 0.000099
x_{45}= 2.40E-05	x_{46}= 1.643218	x_{56}= -0.01374	x_{123}= 7.128595	x_{124}= 4.763646	x_{125}= 0.000348	x_{126}= -0.04971	x_{134}= 0.045062	x_{135}= 4.769351
x_{136}= -1.50978763	x_{145}= -5.02513	x_{146}= -3.46252	x_{156}= -0.00136	x_{234}= 6754.377	x_{235}= 10.43622	x_{236}= -0.00606	x_{245}= -1.63699	x_{246}= 2.53588
x_{256}= 146585.67	x_{345}= -16.2957	x_{346}= -3405.16	x_{356}= 0.796477	x_{456}= 9726.755	x_{1234}= -6347.3	x_{1235}= -189.684	x_{1236}= -67978.9	x_{1245}= 265439
x_{1246}= -74.1936	x_{1256}= -384278	x_{1345}= -1056.77	x_{1346}= 24.39334	x_{1356}= 24.39334	x_{1456}=- 0.001012	x_{2345}=- 16.35083	x_{2346}= 869.8859	x_{2356}= 605040.8
x_{2456}= -557135.29	x_{3456}= -28248.7	x_{12345}= 0.52006	x_{12346}= 1910.54	x_{12356}= -309064	x_{12456}= -910.191	x_{13456}= -1.07179	x_{23456}= -0.77011	x_{123456}= 605040.8

$Y1=0.0928B_1+ 0.12347B_2-0.18583B_3-13.4048B_4-0.01109B_5+0.00955B_6-0.3457B_1B_2-0.53469B_1B_3+0.00481B_1B_4-3.10899B_1B_5-0.05252B_1B_6+0.68937B_2B_3+0.1842B_2B_4+1877.98B_2B_5-0.00055B_2B_6+4.75E-05B_3B_4+1.057153B_3B_5+0.000099B_3B_6+2.40E-05B_4B_5+1.643218B_4B_6-0.01374B_5B_6+7.128595B_1B_2B_3+4.763646B_1B_2B_4+0.000348B_1B_2B_5-0.04971B_1B_2B_6+0.045062B_1B_3B_4+4.769351B_1B_3B_5--1.50979B_1B_3B_6-5.02513B_1B_4B_5-3.46252B_1B_4B_6-0.00136B_1B_5B_6+6754.377B_2B_3B_4+10.43622B_2B_3B_5-0.00606B_2B_3B_6-1.63699B_2B_4B_5+2.53588B_2B_4B_6+146585.7B_2B_5B_6-16.2957B_3B_4B_5-3405.16B_3B_4B_6+0.796477B_3B_5B_6+9726.755B_4B_5B_6-6347.3B1B_2B_3B_4-189.684B_1B_2B_3B_5-67978.9B_1B_2B_3B_6+265439B_1B_2B_4B_5-74.1936B_1B_2B_4B_6-384278B_1B_2B_5B_6-1056.77B_1B_3B_4B_5+24.39334B_1B_3B_4B_6+24.39334B_1B_3B_5B_6-0.001012B_1B_4B_5B_6-16.35083B_2B_3B_4B_5+869.8859B_2B_3B_4B_6+605040.8B_2B_3B_5B_6—557135B_2B_4B_5B_6-28248.7B_3B_4B_5B_6+0.520066B_1B_2B_3B_4B_5+1910.54B_1B_2B_3B_4B_6—309064B_1B_2B_3B_5B_6-910.191B_1B_2B_4B_5B_6-1.07179B_1B_3B_4B_5B_6-0.77011B_2B_3B_4B_5B_6+605040.8B_1B_2B_3B_4B_5B_6$

Recalling the coefficients x_i, the mix ratios of table 7, the compressive strength predicted by model calculated as shown in table 8, along with their laboratory equivalent used in model formulation for 12 trial concrete mixes , and using the relationship $x_i \times [AA] = Y_{Model}$,table 11A and 11B is formulated as below

Table 11 A: Calculation of predicted values of model **for** first 1-55 Variables

	x_i	E_1	E_2	E_3	E_4	E_5	E_6	E_7	E_8	E_9	E_{10}	E_{11}	E_{12}
1	0.0928	0.079	0.094	0.110	0.117	0.061	0.074	0.086	0.092	0.046	0.056	0.066	0.070
2	0.1235	0.175	0.172	0.169	0.167	0.136	0.134	0.132	0.132	0.103	0.102	0.101	0.101
3	-0.1858	0.253	0.249	0.245	0.242	0.197	0.195	0.192	0.191	0.201	0.199	0.197	0.201
4	-13.404	0.305	0.300	0.295	0.293	0.265	0.262	0.258	0.257	0.263	0.260	0.258	0.251
5	-0.0111	0.058	0.057	0.056	0.055	0.136	0.134	0.132	0.132	0.155	0.153	0.152	0.151
6	0.0096	0.131	0.129	0.126	0.125	0.204	0.201	0.199	0.197	0.232	0.230	0.227	0.226
7	-0.3457	0.014	0.016	0.018	0.020	0.008	0.010	0.011	0.012	0.005	0.006	0.007	0.007
8	-0.5347	0.020	0.023	0.027	0.028	0.012	0.014	0.017	0.018	0.009	0.011	0.013	0.014
9	0.0048	0.024	0.028	0.032	0.034	0.016	0.019	0.022	0.024	0.012	0.015	0.017	0.018
10	-3.109	0.005	0.005	0.006	0.006	0.008	0.010	0.011	0.012	0.007	0.009	0.010	0.011
11	-0.0525	0.010	0.012	0.014	0.015	0.012	0.015	0.017	0.018	0.011	0.013	0.015	0.016
12	-0.6894	0.044	0.043	0.041	0.041	0.027	0.026	0.025	0.025	0.021	0.020	0.020	0.020
13	0.1843	0.053	0.051	0.050	0.049	0.036	0.035	0.034	0.034	0.027	0.027	0.026	0.025
14	1877.98	0.010	0.010	0.009	0.009	0.019	0.018	0.018	0.017	0.016	0.016	0.015	0.015
15	-0.0006	0.023	0.022	0.021	0.021	0.028	0.027	0.026	0.026	0.024	0.023	0.023	0.023
16	4.7E-05	0.077	0.075	0.072	0.071	0.052	0.051	0.050	0.049	0.053	0.052	0.051	0.051
17	1.057	0.015	0.014	0.014	0.013	0.027	0.026	0.025	0.025	0.031	0.030	0.030	0.030
18	9.9E-05	0.033	0.032	0.031	0.030	0.040	0.039	0.038	0.038	0.047	0.046	0.045	0.045
19	2.4E-05	0.018	0.017	0.016	0.016	0.036	0.035	0.034	0.034	0.041	0.040	0.039	0.038
20	1.643	0.040	0.039	0.037	0.037	0.054	0.053	0.051	0.051	0.061	0.060	0.059	0.057
21	-0.014	0.008	0.007	0.007	0.007	0.028	0.027	0.026	0.026	0.036	0.035	0.034	0.034
22	7.129	0.003	0.004	0.005	0.005	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001
23	4.764	0.004	0.005	0.005	0.006	0.002	0.003	0.003	0.003	0.001	0.001	0.002	0.002
24	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.001
25	-0.050	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.002	0.002
26	0.045	0.006	0.007	0.008	0.008	0.003	0.004	0.004	0.005	0.002	0.003	0.003	0.004
27	4.769	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.002	0.002
28	-1.510	0.003	0.003	0.003	0.004	0.002	0.003	0.003	0.003	0.002	0.003	0.003	0.003
29	-5.025	0.001	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.002	0.002	0.003	0.003
30	-3.463	0.003	0.004	0.004	0.004	0.003	0.004	0.004	0.005	0.003	0.003	0.004	0.004
31	-0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
32	6754.3	0.013	0.013	0.012	0.012	0.007	0.007	0.007	0.006	0.005	0.005	0.005	0.005
33	10.43	0.0025	0.0024	0.0023	0.0022	0.0037	0.0035	0.0034	0.0033	0.0032	0.0031	0.0030	0.0030
34	-0.00605	0.0058	0.0055	0.0052	0.0051	0.0055	0.0053	0.0051	0.0050	0.0048	0.0047	0.0045	0.0046
35	-1.63	0.0031	0.0029	0.0028	0.0027	0.0049	0.0047	0.0045	0.0044	0.0042	0.0041	0.0039	0.0038
36	2.5358	0.0070	0.0066	0.0063	0.0061	0.0074	0.0071	0.0068	0.0067	0.0063	0.0061	0.0059	0.0057
37	146585	0.0013	0.0012	0.0012	0.0012	0.0038	0.0036	0.0035	0.0034	0.0037	0.0036	0.0035	0.0034
38	-16.295	0.0045	0.0042	0.0040	0.0039	0.0071	0.0068	0.0066	0.0064	0.0082	0.0079	0.0077	0.0076
39	-3405.15	0.0101	0.0096	0.0091	0.0089	0.0107	0.0103	0.0099	0.0097	0.0123	0.0119	0.0115	0.0114
40	0.7964	0.0019	0.0018	0.0017	0.0017	0.0055	0.0053	0.0051	0.0050	0.0072	0.0070	0.0068	0.0069
41	9726.755	0.0023	0.0022	0.0021	0.0020	0.0074	0.0071	0.0068	0.0067	0.0094	0.0091	0.0089	0.0086
42	-6347.3	0.0011	0.0012	0.0013	0.0014	0.0004	0.0005	0.0006	0.0006	0.0003	0.0003	0.0003	0.0004
43	-189.68	0.0002	0.0002	0.0003	0.0003	0.0002	0.0003	0.0003	0.0003	0.0001	0.0002	0.0002	0.0002
44	-67978	0.0005	0.0005	0.0006	0.0006	0.0003	0.0004	0.0004	0.0005	0.0002	0.0003	0.0003	0.0003
45	265439	0.0002	0.0003	0.0003	0.0003	0.0003	0.0003	0.0004	0.0004	0.0002	0.0002	0.0003	0.0003
46	-74.19	0.0005	0.0006	0.0007	0.0007	0.0005	0.0005	0.0006	0.0006	0.0003	0.0003	0.0004	0.0004
47	-38427	0.0001	0.0001	0.0001	0.0001	0.0002	0.0003	0.0003	0.0003	0.0002	0.0002	0.0002	0.0002
48	-1056.7	0.0004	0.0004	0.0004	0.0005	0.0004	0.0005	0.0006	0.0006	0.0004	0.0004	0.0005	0.0005
49	2.751	0.0008	0.0009	0.0010	0.0010	0.0007	0.0008	0.0008	0.0009	0.0006	0.0007	0.0008	0.0008
50	24.393	0.0002	0.0002	0.0002	0.0002	0.0003	0.0004	0.0004	0.0005	0.0003	0.0004	0.0004	0.0005
51	0.00101	0.0002	0.0002	0.0002	0.0002	0.0005	0.0005	0.0006	0.0006	0.0004	0.0005	0.0006	0.0006
52	16.35	0.0008	0.0007	0.0007	0.0007	0.0010	0.0009	0.0009	0.0008	0.0008	0.0008	0.0008	0.0008
53	869.88	0.0018	0.0016	0.0015	0.0015	0.0015	0.0014	0.0013	0.0013	0.0013	0.0012	0.0012	0.0011
54	0.148	0.0003	0.0003	0.0003	0.0003	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
55	-557135	0.0004	0.0004	0.0004	0.0003	0.0010	0.0010	0.0009	0.0009	0.0010	0.0009	0.0009	0.0009

Table 11 B: Calculation of predicted values of model **for** 56-63

	x_i	E_1	E_2	E_3	E_4	E_5	E_6	E_7	E_8	E_9	E_{10}	E_{11}	E_{12}
56	-28248.7	0.00058	0.00054	0.00051	0.00049	0.00145	0.00138	0.00131	0.00127	0.00190	0.00182	0.00175	0.00172
57	0.52	0.00006	0.00007	0.00007	0.00008	0.00006	0.00007	0.00008	0.00008	0.00004	0.00005	0.00005	0.00005
58	1910.5	0.00014	0.00016	0.00017	0.00017	0.00009	0.00010	0.00011	0.00012	0.00006	0.00007	0.00008	0.00008
59	-309063	0.00003	0.00003	0.00003	0.00003	0.00005	0.00005	0.00006	0.00006	0.00003	0.00004	0.00005	0.00005
60	-910.19	0.00003	0.00004	0.00004	0.00004	0.00006	0.00007	0.00008	0.00008	0.00005	0.00005	0.00006	0.00006
61	-1.071	0.00005	0.00005	0.00006	0.00006	0.00009	0.00010	0.00011	0.00012	0.00009	0.00010	0.00012	0.00012
62	-0.77	0.00010	0.00009	0.00009	0.00008	0.00020	0.00019	0.00017	0.00017	0.00020	0.00019	0.00018	0.00017
63	605040.7	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00002	0.00002	0.00001	0.00001	0.00001	0.00001
Predicted Strength		**31.17**	**30.43**	**29.67**	**29.29**	**28.35**	**27.02**	**25.77**	**25.18**	**24.57**	**22.47**	**20.52**	**24.98**

Recalling the coefficients x_i, the mix ratios of table 10, the compressive strength predicted by model calculated as shown in table 11, along with their laboratory equivalent used in model formulation for 9 control concrete mixes , and using the relationship $x_i \times [AA]=Y_{Model}$, table 12A and 12B is formulated as below .

Table 12 A: Calculation of predicted values of model for control specimens for 1-34 Variables

	x_i	E_1	E_2	E_3	E_4	E_5	E_6	E_7	E_8	E_9
1	0.0928	0.098	0.087	0.102	0.077	0.068	0.080	0.062	0.054	0.064
2	0.1235	0.171	0.173	0.170	0.134	0.135	0.133	0.107	0.108	0.107
3	-0.1858	0.248	0.251	0.247	0.194	0.196	0.193	0.155	0.157	0.155
4	-13.404	0.299	0.303	0.298	0.261	0.264	0.260	0.273	0.276	0.273
5	-0.0111	0.056	0.057	0.056	0.134	0.135	0.133	0.161	0.162	0.160
6	0.0096	0.128	0.130	0.128	0.201	0.203	0.200	0.241	0.243	0.241
7	-0.3457	0.017	0.015	0.017	0.010	0.009	0.011	0.007	0.006	0.007
8	-0.5347	0.024	0.022	0.025	0.015	0.013	0.015	0.010	0.008	0.010
9	0.0048	0.029	0.026	0.030	0.020	0.018	0.021	0.017	0.015	0.018
10	-3.109	0.006	0.005	0.006	0.010	0.009	0.011	0.010	0.009	0.010
11	-0.0525	0.013	0.011	0.013	0.015	0.014	0.016	0.015	0.013	0.015
12	-0.6894	0.042	0.043	0.042	0.026	0.026	0.026	0.017	0.017	0.017
13	0.1843	0.051	0.052	0.051	0.035	0.036	0.035	0.029	0.030	0.029
14	1877.98	0.010	0.010	0.010	0.018	0.018	0.018	0.017	0.018	0.017
15	-0.0006	0.022	0.022	0.022	0.027	0.027	0.027	0.026	0.026	0.026
16	4.7E-05	0.074	0.076	0.073	0.051	0.052	0.050	0.043	0.043	0.042
17	1.057	0.014	0.014	0.014	0.026	0.026	0.026	0.025	0.025	0.025
18	9.9E-05	0.032	0.033	0.031	0.039	0.040	0.039	0.038	0.038	0.037
19	2.4E-05	0.017	0.017	0.017	0.035	0.036	0.035	0.044	0.045	0.044
20	1.643	0.038	0.039	0.038	0.052	0.053	0.052	0.066	0.067	0.066
21	-0.014	0.007	0.007	0.007	0.027	0.027	0.027	0.039	0.039	0.039
22	7.129	0.004	0.004	0.004	0.002	0.002	0.002	0.001	0.001	0.001
23	4.764	0.005	0.005	0.005	0.003	0.002	0.003	0.002	0.002	0.002
24	0.0001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
25	-0.050	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.002
26	0.045	0.007	0.007	0.007	0.004	0.003	0.004	0.003	0.002	0.003
27	4.769	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.001	0.002
28	-1.510	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002
29	-5.025	0.002	0.001	0.002	0.003	0.002	0.003	0.003	0.002	0.003
30	-3.463	0.004	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004
31	-0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002
32	6754.3	0.013	0.013	0.012	0.007	0.007	0.007	0.005	0.005	0.005
33	10.43	0.002	0.002	0.002	0.003	0.004	0.003	0.003	0.003	0.003
34	-0.00605	0.005	0.006	0.005	0.005	0.005	0.005	0.004	0.004	0.004

Table 12 B: Calculation of predicted values of model for control specimens for 35-63 Variables

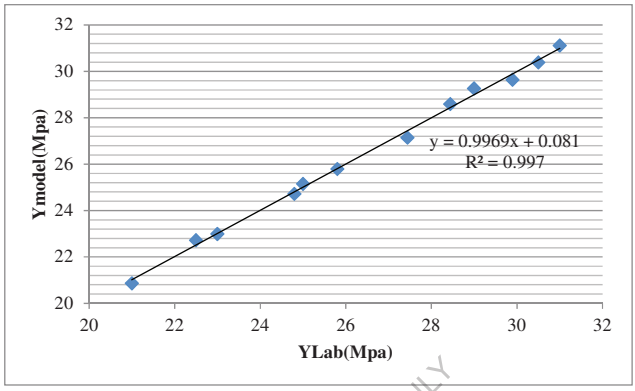
	x_i	E_1	E_2	E_3	E_4	E_5	E_6	E_7	E_8	E_9
35	-1.63	0.00288	0.00299	0.00284	0.00467	0.00481	0.00462	0.00472	0.00483	0.00468
36	2.5358	0.00654	0.00680	0.00646	0.00700	0.00722	0.00693	0.00708	0.00725	0.00702
37	146585	0.00123	0.00128	0.00122	0.00359	0.00370	0.00356	0.00416	0.00426	0.00413
38	-16.295	0.00417	0.00434	0.00412	0.00677	0.00698	0.00670	0.00684	0.00701	0.00679
39	-3405.15	0.00948	0.00986	0.00936	0.01015	0.01047	0.01005	0.01026	0.01051	0.01018
40	0.7964	0.00179	0.00186	0.00177	0.00521	0.00537	0.00516	0.00604	0.00618	0.00599
41	9726.755	0.00216	0.00224	0.00213	0.00700	0.00722	0.00693	0.01061	0.01087	0.01053
42	-6347.3	0.00124	0.00114	0.00127	0.00052	0.00047	0.00054	0.00028	0.00025	0.00029
43	-189.68	0.00023	0.00021	0.00024	0.00027	0.00024	0.00027	0.00017	0.00015	0.00017
44	-67978	0.00053	0.00049	0.00055	0.00040	0.00036	0.00041	0.00025	0.00022	0.00026
45	265439	0.00028	0.00026	0.00029	0.00036	0.00033	0.00037	0.00029	0.00026	0.00030
46	-74.19	0.00064	0.00059	0.00066	0.00054	0.00049	0.00055	0.00044	0.00039	0.00045
47	-38427	0.00012	0.00011	0.00012	0.00028	0.00025	0.00028	0.00026	0.00023	0.00026
48	-1056.7	0.00041	0.00038	0.00042	0.00052	0.00047	0.00054	0.00042	0.00038	0.00044
49	2.751	0.00093	0.00085	0.00096	0.00078	0.00071	0.00080	0.00063	0.00057	0.00065
50	24.393	0.00018	0.00016	0.00018	0.00040	0.00036	0.00041	0.00037	0.00033	0.00038
51	0.00101	0.00021	0.00019	0.00022	0.00054	0.00049	0.00055	0.00065	0.00059	0.00068
52	16.35	0.00071	0.00075	0.00070	0.00091	0.00094	0.00089	0.00073	0.00076	0.00073
53	869.88	0.00162	0.00171	0.00159	0.00136	0.00141	0.00134	0.00110	0.00114	0.00109
54	0.148	0.00031	0.00032	0.00030	0.00070	0.00073	0.00069	0.00065	0.00067	0.00064
55	-557135	0.00037	0.00039	0.00036	0.00094	0.00098	0.00092	0.00114	0.00118	0.00113
56	-28248.7	0.00053	0.00056	0.00053	0.00136	0.00141	0.00134	0.00165	0.00170	0.00163
57	0.52	0.00007	0.00006	0.00007	0.00007	0.00006	0.00007	0.00005	0.00004	0.00005
58	1910.5	0.00016	0.00015	0.00016	0.00010	0.00010	0.00011	0.00007	0.00006	0.00007
59	-309063	0.00003	0.00003	0.00003	0.00005	0.00005	0.00005	0.00004	0.00004	0.00004
60	-910.19	0.00004	0.00003	0.00004	0.00007	0.00007	0.00007	0.00007	0.00006	0.00007
61	-1.071	0.00005	0.00005	0.00005	0.00010	0.00010	0.00011	0.00010	0.00009	0.00010
62	-0.77	0.00009	0.00010	0.00009	0.00018	0.00019	0.00018	0.00018	0.00018	0.00017
63	605040.7	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
Predicted Strength		**30.24**	**30.80**	**30.05**	**26.70**	**27.67**	**26.38**	**11.94**	**12.24**	**11.85**

The laboratory strength values obtained from actual experiments and model predicted strength values for trial and control concrete specimens is shown in table 13 Fisher F- test is adapted on the compressive strength from the model using the nine control specimen strength values.

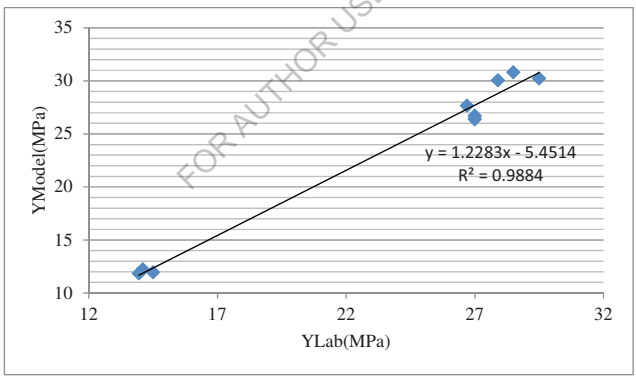
Table 13: Compressive Strength from Laboratory and Model

Model formulation mixes												
S/N	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12
Y_{lab} (= Yp-N/m^2)	29.89	31.56	33.33	25.78	28.44	27.44	24.22	26.22	26.44	18.44	22.67	25
Y_{Model}(N/m^2)	31.17	30.42	29.67	29.29	28.35	27.01	25.77	25.179	24.57	22.474	20.51	24.9
Control Mixes												
S/N	C1	C2	C3	C4	C5	C6	C7	C8	C9			
Ylab (= Yp-N/m^2)	29.5	28.5	27.9	27	26.7	27	14.5	14.1	13.95			
YModel(N/m^2)	30.23	30.8	30.05	26.69	27.67	26.38	11.94	12.23	11.84			

The relationship of lab strength vs. model strength for model formulation mixes is shown in figure 1 and figure 2 indicates the variation of lab strength and predicted model strength for control mixes.



Graph 1: Representation of Lab Strength Vs Model Strength for Model formulation mixes



Graph 2: Representation of Lab Strength Vs Model Strength for Control Mixes

Table 14: Fisher F- tests on the compressive strength from the model using the nine control specimens.

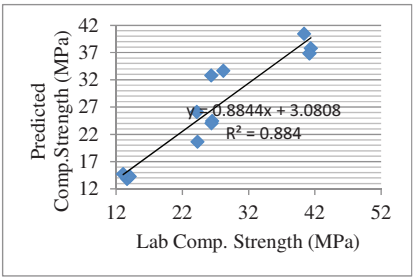
S/N	**C_1**	**C_2**	**C_3**	**C_4**	**C_5**	**C_6**	**C_7**	**C_8**	**C_9**	**Total**		
Y_{Lab} (= Yp-N/mm²)	29.5	28.5	27.9	27	26.7	27	14.5	14.10	13.95	209.15	23.23	Mean(ÿP) =∑Y_P / N
Y_{Model} (N/mm²)	30.23	30.80	30.05	26.69	27.67	26.38	11.943	12.23	11.84	207.87	22.71	Mean(ÿM) =∑Y_M /N
Y_P - Ÿp	6.26	5.261	4.66	3.76	3.46	3.76	-8.739	-9.139	-9.289			
Y_M - ÿM	-16.45	-17.45	7.33	3.98	4.96	3.67	-10.770	-10.47	-10.86			
(Y_P - Ÿp)²	0.60	27.67	21.7	14.14	11.97	14.14	76.368	83.51	86.28	336.45	42.05	SP_1=∑(Y_M - Ÿ$_M$)²/(N-1)
(Y_M - ÿ$_M$)²	26.07	304.58	53.8	15.88	24.61	13.47	115.9	109.72	118.07	782.25	97.78	SP_2=∑(Y_P - Ÿp)²/(N-1)
Mean(ÿP)= ∑Y_P / N		23.23										
Mean(ÿM)= ∑Y_M /N		22.71										
SP_1=∑(Y_P - Ÿp)2/(N-1)		42.05										
SP_2=∑(Y_M - Ÿ$_M$)²/(N-1)		97.78										
S_1^2/S_2^2= 42.05/97.78 = 0.43												
From statistic tables	pα=0.05(8,8)			F=3.44		1/F= 0.2906						
Thus, the condition	(1/f) <S_1^2/S_2^2 < F											
	0.2906<0.43 <3.44											
1/f <S_1^2/S_2^2<F has been satisfied. Therefore, the difference between lab result and model result is not significant												

Table 15: S and Z Values for twelve concrete specimens

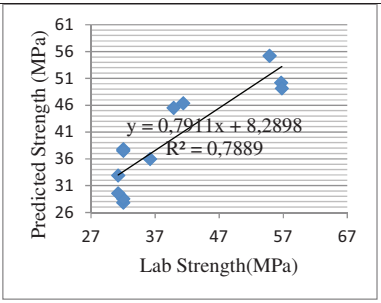
Water (S_1)	0.45	0.55	0.65	0.7	0.45	0.55	0.65	0.7	0.45	0.55	0.65	0.7
(Cement)S_2	1	1	1	1	1	1	1	1	1	1	1	1
(F.A.)S_3	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.95	1.95	1.95	2
(C.A)S_4	1.75	1.75	1.75	1.75	1.95	1.95	1.95	1.95	2.55	2.55	2.55	2.5
(r)S_5	0.33	0.33	0.33	0.33	1	1	1	1	1.5	1.5	1.5	1.5
(t) S_6	0.75	0.75	0.75	0.75	1.5	1.5	1.5	1.5	2.25	2.25	2.25	2.25
(Total) S	5.73	5.83	5.93	5.98	7.35	7.45	7.55	7.6	9.7	9.8	9.9	9.95
Z_1	0.0785	0.0943	0.1096	0.1171	0.0612	0.0738	0.0861	0.0921	0.0464	0.0561	0.0657	0.0704
Z_2	0.1745	0.1715	0.1686	0.1672	0.1361	0.1342	0.1325	0.1316	0.1031	0.1020	0.1010	0.1005
Z_3	0.2531	0.2487	0.2445	0.2425	0.1973	0.1946	0.1921	0.1908	0.2010	0.1990	0.1970	0.2010
Z_4	0.3054	0.3002	0.2951	0.2926	0.2653	0.2617	0.2583	0.2566	0.2629	0.2602	0.2576	0.2513
Z_5	0.0576	0.0566	0.0556	0.0552	0.1361	0.1342	0.1325	0.1316	0.1546	0.1531	0.1515	0.1508
Z_6	0.1309	0.1286	0.1265	0.1254	0.2041	0.2013	0.1987	0.1974	0.2320	0.2296	0.2273	0.2261

Table 16: Lab and predicted strengths for different curing conditions

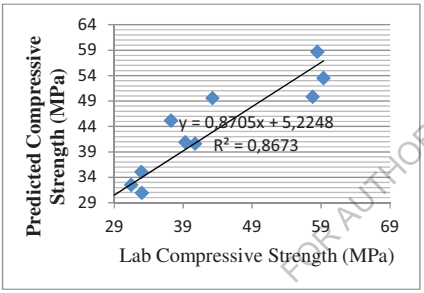
Obs No.	$W_{00}A_{28}$		$W_{21}A_{07}$		$W_{14}A_{14}$		$W_{07}A_{21}$		$W_{28}A_{00}$	
	Lab Tensile Strength (MPa)	Predicted Tensile Strength (Mpa)	Lab Tensile Strength (MPa)	Predicted Tensile Strength (Mpa)	Lab Tensile Strength (MPa)	Predicted Tensile Strength (Mpa)	Lab Tensile Strength (MPa)	Predicted Tensile Strength (Mpa)	Lab Tensile Strength (MPa)	Predicted Tensile Strength (Mpa)
1	2.29	2.15	2.11	1.93	2.44	2.37	2.56	2.24	2.2	2.33
2	2.8	3.04	2.68	2.94	2.58	2.85	2.56	3.05	3.13	2.96
3	3.81	3.8	3.62	3.82	3.91	3.46	3.55	3.76	3.69	3.5
4	4.24	4.15	4.49	4.22	3.56	3.82	4.45	4.07	3.51	3.74
5	2.31	2.16	1.97	1.83	1.87	1.88	2.57	2.3	1.7	1.59
6	2.67	2.99	2.61	2.86	2.39	2.34	2.57	3.04	2.18	2.27
7	3.8	3.73	3.63	3.79	2.82	2.91	3.48	3.71	2.56	2.87
8	4.18	4.07	4.49	4.22	3.31	3.25	4.45	4.01	3.45	3.15
9	2.72	2.39	1.98	1.87	2.17	1.98	2.45	2.24	1.6	1.61
10	2.32	2.94	2.64	2.8	2.23	2.6	2.45	2.75	2.03	2
11	3.75	3.45	3.72	3.66	3.46	3.27	3.32	3.21	2.34	2.35
12	4.09	4.1	4.53	4.54	2.44	2.37	4.39	4.41	3.35	3.35
Obs No	$W_{00}A_{28}$		$W_{21}A_{07}$		$W_{14}A_{14}$		$W_{07}A_{21}$		$W_{28}A_{00}$	
	Lab Mod. of elasticity (GPa)	Predictd Mod. of elasticiy (GPa)	Lab Mod. of elasticiy (GPa)	Predicted Mod. of elasticity (GPa)	Lab Mod. of elasticity (GPa)	Predicted Mod. of elasticity (GPa)	Lab Mod. of elasticity (GPa)	Predicted Mod. of elasticity (GPa)	Lab Mod. of elasticity (GPa)	Predicted Mod. of elasticity (GPa)
1	19.35	19.67	23.18	22.86	27.42	27.59	22.36	22	24.46	24.67
2	23.77	22.83	26.25	26.38	30.09	28.99	25.67	25.88	26.44	26.38
3	24.33	25.55	28.05	29.41	27.75	30.14	27.99	29.22	28.8	27.79
4	27.35	26.75	31.94	30.77	32.1	30.64	31.82	30.71	27.52	28.39
5	19.53	19.82	22.11	21.95	23.38	22.37	22.41	22.17	20.92	20.49
6	23.79	22.8	25.9	25.87	24.29	25.62	25.77	25.81	22.58	22.85
7	24.09	25.45	28.08	29.36	26.47	28.51	27.56	29.05	23.27	24.94
8	27.33	26.67	32.07	30.97	32.21	29.83	31.84	30.53	27.39	25.89
9	19.06	19.76	22.46	22.49	22.65	21.94	21.92	22.19	20.35	20.46
10	23.25	21.87	25.99	25.77	23.29	24.43	25.56	24.81	21.69	21.41
11	23.11	23.8	28.61	28.78	27.18	26.7	26.76	27.2	22.11	22.27
12	27.35	27.34	32.13	32.16	32.02	32.08	31.66	31.69	26.66	26.67
Obs No	$W_{00}A_{28}$		$W_{21}A_{07}$		$W_{14}A_{14}$		$W_{07}A_{21}$		$W_{28}A_{00}$	
	Lab Comp. Strength (MPa)	Predictd Comp. Strength (MPa)	Lab Comp. Strength (MPa	Predicted Comp. Strength (MPa)	Lab Comp. Strength (MPa	Predicted Comp. Strength (MPa)	Lab Comp. Strength (MPa	Predicted Comp. Strength (MPa)	Lab Comp. Strength (MPa	Predicted Comp. Strength (MPa)
1	13.67	13.85	20.04	18.64	33.01	30.91	32.02	27.8	20.19	23.65
2	26.49	24.44	26.55	26.65	39.3	40.89	32.02	37.76	37.25	30.09
3	28.18	33.65	26.38	33.7	43.23	49.58	41.39	46.35	32.63	35.58
4	41.39	37.79	42.94	36.91	59.35	53.5	56.67	50.18	37.25	38.01
5	14.07	14.3	15.89	14.53	25.97	23.78	32.02	28.53	42.05	37.17
6	26.39	24.05	23.15	25.51	32.93	35.04	32.02	37.47	37.25	45
7	26.38	32.81	33.78	35.41	37.23	45.17	39.89	45.47	57	54.95
8	41.19	36.85	42.64	39.99	57.75	49.84	56.77	49.15	61.58	58.76
9	13.07	14.73	13.45	12.82	24.79	23.68	31.22	29.55	16.04	14.84
10	24.29	20.66	23.47	23.98	31.45	32.49	31.22	32.88	17.8	19.91
11	24.18	26.13	34.28	34.29	40.73	40.62	36.19	35.94	25.53	24.55
12	13.67	13.85	45.54	45.68	58.45	58.68	54.87	55.19	31.04	31.12



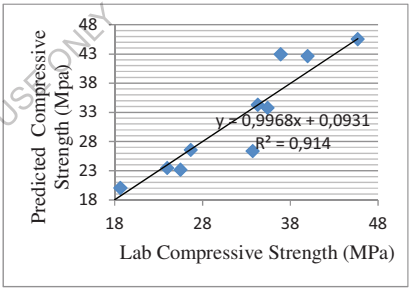
Graph 3: Representation of lab compressive strength Vs predicted compressive strength for curing condition $W_{00}A_{28}$



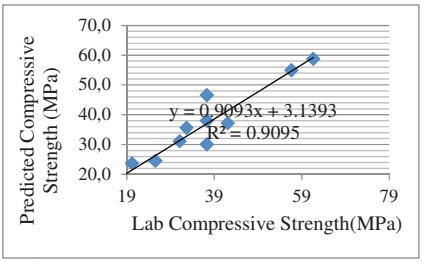
Graph 4: Representation of lab compressive strength Vs predicted compressive strength for curing condition $W_{07}A_{21}$



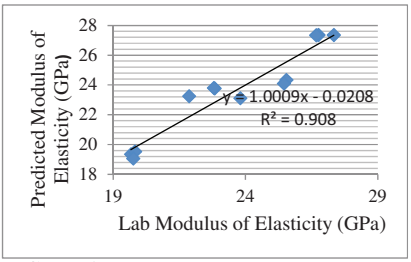
Graph 5: Representation of lab compressive strength Vs predicted compressive strength for curing condition $W_{14}A_{14}$



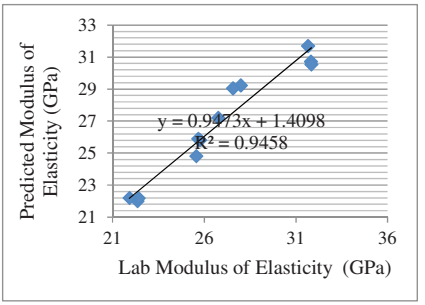
Graph 6: Representation of lab compressive strength Vs predicted compressive strength for curing condition $W_{21}A_{07}$



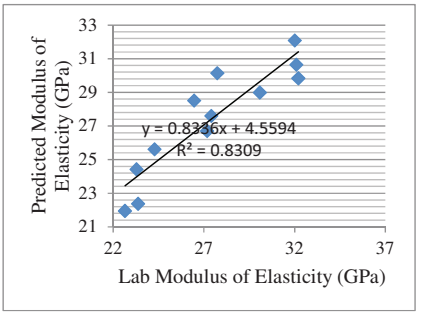
Graph 7: Representation of lab compressive strength Vs predicted compressive strength for curing condition $W_{28}A_{00}$



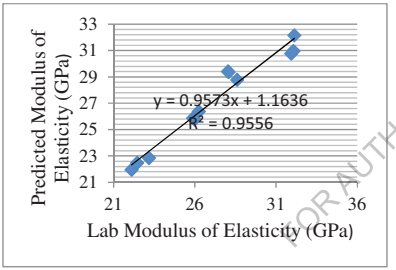
Graph 8: Representation of lab modulus of elasticity Vs predicted modulus of elasticity for curing condition $W_{00}A_{28}$



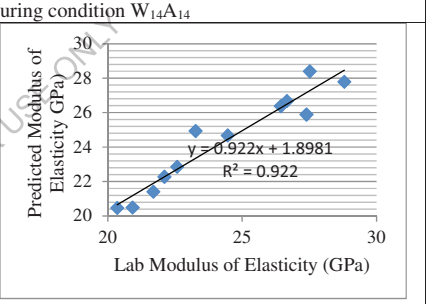
Graph 9: Representation of lab modulus of elasticity Vs predicted modulus of elasticity for curing condition $W_{07}A_{21}$



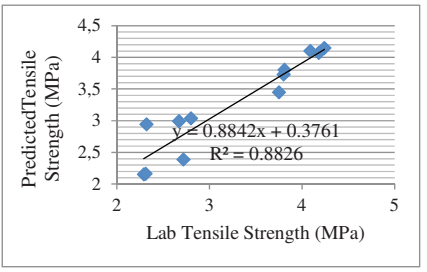
Graph 10: Representation of lab modulus of elasticity Vs predicted modulus of elasticity for curing condition $W_{14}A_{14}$

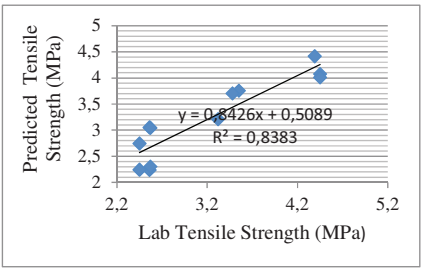


Graph 11: Representation of lab modulus of elasticity Vs predicted modulus of elasticity for curing condition $W_{21}A_{07}$

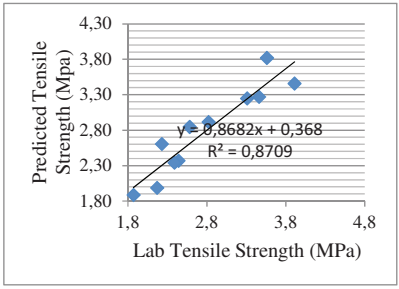


Graph 12: Representation of lab modulus of elasticity Vs predicted modulus of elasticity for curing condition $W_{28}A_{00}$

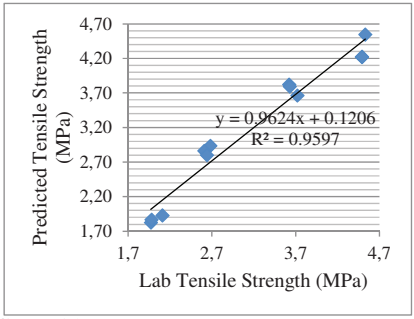




Graph 13: Representation of lab tensile strength Vs predicted tensile strength for curing condition $W_{00}A_{28}$

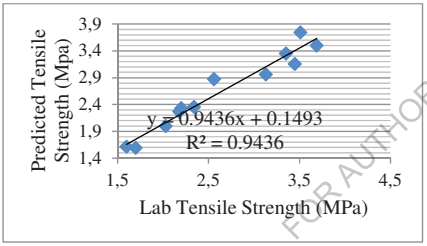


Graph 14: Representation of lab tensile strength Vs predicted tensile strength for curing condition $W_{07}A_{21}$



Graph 15: Representation of lab tensile strength Vs predicted tensile strength for curing condition $W_{14}A_{14}$

Graph 16: Representation of lab tensile strength Vs predicted tensile strength for curing condition $W_{21}A_{07}$



Graph 17: Representation of lab tensile strength Vs predicted tensile strength for curing condition $W_{28}A_{00}$

Conclusion:

1. Compressive strength for cubes of concrete is a function of the constituents of concrete and the other two parameters blend ratio and time lag.
2. From fisher test it is concluded that the application of model is satisfactory. Ibearugbulem's Regression Model can be used to optimize mixes at 95% confidence level by Fisher f-test.
3. Osadebe's regression model is succefully utilized for prediction of compressive strength of concrete.
4. The difference in Lab values and predicted values is due to and some human errors during the conduct of the laboratory experiment.

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