APPENDIX 1

Calculation of Trend Value of EPS of EBL by Least Square Method

Years (t)	EPS (Y)	t-2060/61 (X)	XY	X^2	Trend Value (Yc)
2060/61	32.89	-2	-65.78	4	**28.92**
2061/62	29.90	-1	-29.90	1	**36.18**
2062/63	45.58	0	0	0	**43.44**
2063/64	49.40	1	49.40	1	**50.70**
2064/65	59.44	2	118.88	4	**57.96**
n = 5	$\sum Y = 217.21$	$\sum X = 0$	$\sum XY = 72.60$	$\sum X^2 = 10$	

Let the trend line be given by the equation,
$Yc = a + bX$……………….. Equation 1
Its normal equations are,
$\sum Y = na + b \sum X$ …………………Equation 2
$\sum XY = a \sum X + b \sum X^2$ …………...Equation 3

Putting the respective value in equation 2, we have
$217.21 = 5a + b(0)$
Or, $5a = 217.21$
Or, $a = 43.44$

Again, putting the respective value in equation 3, we have
$72.60 = a(0) + 10b$
Or, $10b = 72.60$
Or, $b = 7.26$

Now, substituting the value of **a** and **b** in equation 1, we have
$Yc = a + bX$
Or, $Yc = 43.44 + 7.26X$

Estimated Trend Values of EPS of EBL in the Future Years

Year:	2065/66	2066/67	2067/68	2068/69	2069/70
Yc:	65.22	72.48	79.74	87.00	94.26

APPENDIX 2

Calculation of Trend Value of EPS of HBL by Least Square Method

Years (t)	EPS (Y)	t-2060/61 (X)	XY	X^2	Trend Value (Yc)
2060/61	60.26	-2	-120.52	4	**53.90**
2061/62	49.45	-1	-49.45	1	**53.54**
2062/63	49.05	0	0	0	**53.18**
2063/64	47.91	1	47.91	1	**52.82**
2064/65	59.24	2	118.48	4	**52.46**
n = 5	**$\sum Y = 265.91$**	**$\sum X=0$**	**$\sum XY = -3.58$**	**$\sum X^2=10$**	

Let the trend line be given by the equation,
Yc = a + bX………………. Equation 1
Its normal equations are,
$\sum Y$ = na + b $\sum X$ …………………….Equation 2
$\sum XY$ = a $\sum X$ + b $\sum X^2$ …………..Equation 3

Putting the respective value in equation 2, we have
265.91 = 5a + b(0)
Or, 5a = 265.91
Or, a = 53.18

Again, putting the respective value in equation 3, we have
-3.58 = a (0) + 10b
Or, 10b = -3.58
Or, b = -0.36

Now, substituting the value of **a** and **b** in equation 1, we have
Yc = a + bX
Or, Yc = 53.18 – 0.36X

Estimated Trend Values of EPS of HBL in the Future Years

Year:	2065/66	2066/67	2067/68	2068/69	2069/70
Yc:	52.10	51.74	51.38	51.02	50.66

APPENDIX 3

Calculation of Trend Value of EPS of NABIL by Least Square Method

Years (t)	EPS (Y)	t- 2060/61 (X)	XY	X^2	Trend Value (Yc)
2060/61	55.25	-2	-110.50	4	**59.68**
2061/62	84.66	-1	-84.66	1	**76.59**
2062/63	92.61	0	0	0	**93.50**
2063/64	105.79	1	105.79	1	**110.41**
2064/65	129.21	2	258.42	4	**127.32**
n = 5	**$\sum Y = 467.52$**	**$\sum X=0$**	**$\sum XY = 169.05$**	**$\sum X^2=10$**	

Let the trend line be given by the equation,
Yc = a + bX……………….. Equation 1
Its normal equations are,
$\sum Y = na + b \sum X$ …………………..Equation 2
$\sum XY = a \sum X + b \sum X^2$ …………...Equation 3

Putting the respective value in equation 2, we have
467.52 = 5a + b (0)
Or, 5a = 467.52
Or, a = 93.50

Again, putting the respective value in equation 3, we have
169.05 = a(0) + 10b
Or, 10b = 169.05
Or, b = 16.91

Now, substituting the value of **a** and **b** in equation 1, we have
Yc = a + bX
Or, Yc = 93.50 + 16.91X

Estimated Trend Values of EPS of NABIL in the Future Years

Year:	2065/66	2066/67	2067/68	2068/69	2069/70
Yc:	144.23	159.62	178.05	194.96	211.87

APPENDIX 4

Calculation of Trend Value of Net Profit of EBL by Least Square Method

Years (t)	Net Profit (Y)	t-2060/61 (X)	XY	X^2	Trend Value (Yc)
2060/61	85.30	-2	-170.60	4	**70.11**
2061/62	94.18	-1	-94.18	1	**107.91**
2062/63	143.57	0	0	0	**145.71**
2063/64	168.21	1	168.21	1	**183.51**
2064/65	237.29	2	474.58	4	**221.31**
n = 5	**∑Y = 728.55**	**∑X=0**	**∑XY = 378.01**	**∑X²=10**	

Let the trend line be given by the equation,
Yc = a + bX………………. Equation 1
Its normal equations are,
$\sum Y = na + b \sum X$ …………………Equation 2
$\sum XY = a \sum X + b \sum X^2$ …………..Equation 3

Putting the respective value in equation 2, we have
728.55 = 5a + b (0)
Or, 5a = 728.55
Or, a = 145.71

Again, putting the respective value in equation 3, we have
378.01 = a(0) + 10b
Or, 10b = 378.01
Or, b = 37.80

Now, substituting the value of **a** and **b** in equation 1, we have
Yc = a + bX
Or, Yc = 145.71 + 37.80X

Estimated Trend Values of Net Profit of EBL in the Future Years

Year:	2065/66	2066/67	2067/68	2068/69	2069/70
Yc:	259.11	296.61	334.71	372.51	410.31

APPENDIX 5

Calculation of Trend Value of Net Profit of HBL by Least Square Method

Years (t)	Net Profit (Y)	t-2060/61 (X)	XY	X^2	Trend Value (Yc)
2060/61	235.02	-2	-470.01	4	**186.99**
2061/62	212.13	-1	-212.13	1	**241.09**
2062/63	263.05	0	0	0	**295.19**
2063/64	308.28	1	308.28	1	**349.29**
2064/65	457.46	2	914.92	4	**403.39**
n = 5	**∑Y = 1475.94**	**∑X=0**	**∑XY = 541.03**	**∑X²=10**	

Let the trend line be given by the equation,
Yc = a + bX………………. Equation 1
Its normal equations are,
∑Y = na + b ∑X …………………….Equation 2
∑XY = a ∑X + b ∑X² …………...Equation 3

Putting the respective value in equation 2, we have
1475.94 = 5a + b (0)
Or, 5a = 1475.94
Or, a = 295.19

Again, putting the respective value in equation 3, we have
541.03 = a(0) + 10b
Or, 10b = 541.03
Or, b = 54.10

Now, substituting the value of **a** and **b** in equation 1, we have
Yc = a + bX
Or, Yc = 295.19 + 54.10X

Estimated Trend Values of Net Profit of HBL in the Future Years

Year:	2065/66	2066/67	2067/68	2068/69	2069/70
Yc:	457.49	511.59	565.69	619.79	673.89

APPENDIX 6

Calculation of Trend Value of Net Profit of NABIL by Least Square Method

Years (t)	Net Profit (Y)	t-2061/62 (X)	XY	X^2	Trend Value (Yc)
2060/61	271.64	-2	-269.64	4	**238.75**
2061/62	416.24	-1	-416.24	1	**349.23**
2062/63	455.31	0	0	0	**459.71**
2063/64	520.11	1	520.11	1	**570.19**
2064/65	635.26	2	1270.52	4	**680.67**
n = 5	**$\sum Y = 2298.56$**	**$\sum X=0$**	**$\sum XY = 1104.75$**	**$\sum X^2=10$**	

Let the trend line be given by the equation,
$Yc = a + bX$……………… Equation 1
Its normal equations are,
$\sum Y = na + b \sum X$ …………………Equation 2
$\sum XY = a \sum X + b \sum X^2$ …………..Equation 3

Putting the respective value in equation 2, we have
$2298.56 = 5a + b (0)$
Or, $5a = 2298.56$
Or, $a = 459.71$

Again, putting the respective value in equation 3, we have
$1104.75 = a(0) + 10b$
Or, $10b = 1104.75$
Or, $b = 110.48$

Now, substituting the value of **a** and **b** in equation 1, we have
$Yc = a + bX$
Or, $Yc = 459.71 + 110.48X$

Estimated Trend Values of Net Profit of NABIL in the Future Years

Year:	2065/66	2066/67	2067/68	2068/69	2069/70
Yc:	791.15	901.63	1012.11	1122.59	1233.07

Correlation Co-efficient between Total Deposit (X) and Cash & Bank Balance (Y) of Everest Bank Limited (EBL)

Years	X	Y	X^2	Y^2	XY
2060/61	5466.61	592.70	29883824.89	351293.29	3240059.75
2061/62	6694.96	1139.57	44822489.40	1298619.79	7629375.57
2062/63	8063.90	631.80	65026483.21	399171.24	5094772.02
2063/64	10097.69	1049.99	101963343.30	1102479.01	10602473.52
2064/65	13802.44	1552.97	190507350.06	2411715.82	21434775.25
N = 5	**44125.60**	**4967.03**	**432203490.86**	**5563279.15**	**48001456.11**

We have,

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2}\ \sqrt{N\sum Y^2 - (\sum Y)^2}}$$

APPENDIX 8

Correlation Co-efficient between Total Deposit (X) and Cash & Bank Balance (Y) of Himalayan Bank Limited (HBL)

Years	X	Y	X^2	Y^2	XY
2060/61	18,619.38	1264.67	346681311.58	1599390.21	23547371.31
2061/62	21007.38	1979.21	441310014.46	3917272.23	41578016.57
2062/63	22010.33	2001.18	484454626.71	4004721.39	44046632.19
2063/64	24814.01	2014.47	615735092.28	4058089.38	49987078.73
2064/65	26490.85	1717.35	701765133.72	2949291.02	45494061.25
N = 5	**112941.95**	**8976.88**	**2589946178.75**	**16528764.23**	**204653160.05**

We have,

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2}\ \sqrt{N\sum Y^2 - (\sum Y)^2}}$$

APPENDIX 9

Correlation Co-efficient between Total Deposit (X) and Cash & Bank Balance (Y) of NABIL Bank Limited (NABIL)

Years	X	Y	X^2	Y^2	XY
2060/61	15506.43	1051.82	240449371.34	1106325.31	16309973.20
2061/62	13447.66	1144.77	180839559.48	1310498.35	15394477.74
2062/63	14119.03	970.49	199347008.14	941850.84	13702377.43
2063/64	14586.61	559.38	212769191.29	312905.99	8159457.90
2064/65	19347.40	630.24	374321886.76	397202.46	12193595.38
N = 5	77007.13	4356.70	1207727019.01	4068782.95	65759791.65

We have,

APPENDIX 10

Correlation Co-efficient between Total Deposit (X) and Net Profit (Y) of Everest Bank Limited (EBL)

Years	X	Y	X^2	Y^2	XY
2060/61	5466.61	85.30	29883824.89	7276.09	466301.83
2061/62	6694.96	94.18	44822489.40	8869.87	630531.33
2062/63	8063.90	143.57	65026483.21	20612.34	1157734.12
2063/64	10097.69	168.21	101963343.30	28294.60	1698532.43
2064/65	13802.44	237.29	190507350.06	56306.54	3275180.99
N = 5	**44125.60**	**728.55**	**432203490.86**	**121,359.44**	**7228280.70**

We have,

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2}\ \sqrt{N\sum Y^2 - (\sum Y)^2}}$$

APPENDIX 11

Correlation Co-efficient between Total Deposit (X) and Net Profit (Y) of Himalayan Bank Limited (HBL)

Years	X	Y	X^2	Y^2	XY
2060/61	18,619.38	235.02	346681311.58	55234.40	4375926.69
2061/62	21007.38	212.13	441310014.46	44999.14	4456295.52
2062/63	22010.33	263.05	484454626.71	69195.30	5789817.31
2063/64	24814.01	308.28	615735092.28	95036.56	7649663.08
2064/65	26490.85	457.46	701765133.72	209269.65	12118504.24
N = 5	112941.95	1475.94	2589946178.75	473735.05	34390206.84

We have,

APPENDIX 12

Correlation Co-efficient between Total Deposit (X) and Net Profit (Y) of NABIL Bank Limited (NABIL)

Years	X	Y	X^2	Y^2	XY
2060/61	15506.43	271.64	240449371.34	73788.29	4212166.65
2061/62	13447.66	416.24	180839559.48	173255.74	5597453.99
2062/63	14119.03	455.31	199347008.14	207307.20	6428535.55
2063/64	14586.61	520.11	212769191.29	270514.41	7586641.73
2064/65	19347.40	635.26	374321886.76	403555.27	12290629.32
N = 5	77007.13	2298.56	1207727017.01	1128420.91	36115427.24

We have,

APPENDIX 13

Regression Equation of Cash and Bank Balance (Y) on Total Deposit (X) of EBL

Let the regression equation of Y on X be,

$Y = a + bX$ …………………Equation 1

Where,

Y is dependent variable, a and b are constant, and X is independent variable.

Then, two normal equations estimating a and b are,

$\sum Y = na + b \sum X$ …………….Equation 2

$\sum XY = a \sum X + b \sum X^2$ ………….Equation 3

$\sum X$	$\sum X^2$	$\sum Y$	$\sum XY$	N
44125.60	432203490.86	4967.03	48001456..11	5

Source: Appendix 7

Putting the respective value in equation 2 and 3, we have

$4967.03 = 5a + 44125.60b$ …………..Equation 4

$48100145.11 = 44125.6a + 432203490.86b$ ………….Equation 5

Multiplying equation 4 by 8825.12 and equation 5 by 1 then subtracting equation 5 from equation 4, we have

$43834635.79 = 44125.6a + 389413715.07b$

$48001456.11 = 44125.6a + 432203490.86b$

-　　　　　-　　　　　-

$4166820.32 = 42789775.79b$

Or, $b = 0.0974$

Putting the value of b in equation 4, we have

$4967.03 = 5a + 44125.6 (0.0974)$

Or, $a = 133.84$

Now, substituting the value of **a** and **b** in equation 1, we have

$Y = 133.84 + 0.0974X$

This is the estimated regression equation of Cash and Bank Balance (Y) on Total Deposit (X) of EBL.

APPENDIX 14

Regression Equation of Cash and Bank Balance (Y) on Total Deposit (X) of HBL

Let the regression equation of Y on X be,

$Y = a + bX$ …………………Equation 1

Where,

Y is dependent variable, a and b are constant, and X is independent variable.

Then, two normal equations estimating a and b are,

$\sum Y = na + b \sum X$ ………………Equation 2

$\sum XY = a \sum X + b \sum X^2$ …………Equation 3

$\sum X$	$\sum X^2$	$\sum Y$	$\sum XY$	N
112941.95	2589946178.75	8976.88	204653160.05	5

Source: Appendix 8

Putting the respective value in equation 2 and 3, we have

$8976.88 = 5a + 112941.95b$ …………..Equation 4

$204653160.05 = 112941.95a + 2589946178.75b$ ………….Equation 5

Multiplying equation 4 by 22588.39 and equation 5 by 1 then subtracting equation 5 from equation 4, we have

$202773266.42 = 112941.95a + 2551176813.96b$

$204653160.05 = 112941.95a + 2589946178.75b$

-	-	-

$1879893.63 = 38769364.79b$

Or, $b = 0.0485$

Putting the value of b in equation 4, we have

$8976.88 = 5a + 112941.95 (0.0485)$

Or, $a = 699.84$

Now, substituting the value of **a** and **b** in equation 1, we have

$Y = 699.84 + 0.0485X$

This is the estimated regression equation of Cash and Bank Balance (Y) on Total Deposit (X) of HBL.

APPENDIX 15

Regression Equation of Cash and Bank Balance (Y) on Total Deposit (X) of NABIL

Let the regression equation of Y on X be,

$Y = a + bX$ …………………Equation 1

Where,

Y is dependent variable, a and b are constant, and X is independent variable.

Then, two normal equations estimating a and b are,

$\sum Y = na + b \sum X$ ……………..Equation 2

$\sum XY = a \sum X + b \sum X^2$ …………Equation 3

$\sum X$	$\sum X^2$	$\sum Y$	$\sum XY$	N
77007.13	1207727017.01	4356.7	65759791.65	5

Source: Appendix 9

Putting the respective value in equation 2 and 3, we have

$4356.7 = 5a + 77007.13b$ …………..Equation 4

$65759791.65 = 77007.13a + 1207727017.01b$ …………Equation 5

Multiplying equation 4 by 15401.43 and equation 5 by 1 then subtracting equation 5 from equation 4, we have

$67099410.08 = 77077.13a + 1186019922.19b$

$65759791.65 = 77077.13a + 1207727017.01b$

-	-	-

$1339618.43 = -21707094.82b$

Or, $b = -0.0618$

Putting the value of b in equation 4, we have

$4967.03 = 5a + 770077.13 (-0.0618)$

Or, $a = 1823.15$

Now, substituting the value of **a** and **b** in equation 1, we have

$Y = 1823.15 - 1.0618X$

This is the estimated regression equation of Cash and Bank Balance (Y) on Total Deposit (X) of NABIL.

APPENDIX 16

Regression Equation of Net Profit (Y) on Total Deposit (X) of EBL

Let the regression equation of Y on X be,

Y = a + bX ………………….Equation 1

Where,

Y is dependent variable, a and b are constant, and X is independent variable.

Then, two normal equations estimating a and b are,

$\sum Y = na + b \sum X$ ……………..Equation 2

$\sum XY = a \sum X + b \sum X^2$ ………….Equation 3

$\sum X$	$\sum X^2$	$\sum Y$	$\sum XY$	N
44125.60	432203490.86	728.55	7228280.70	5

Source: Appendix 10

Putting the respective value in equation 2 and 3, we have

728.55 = 5a + 44125.60b …………..Equation 4

7228280.7 = 44125a + 4322.3490.86b ………….Equation 5

Multiplying equation 4 by 8825.12 and equation 5 by 1 then subtracting equation 5 from equation 4, we have

6429541.18 = 44125.6a + 389413715.07b

7228280.70 = 44125.6a + 432203490.86b

-	-	-

798739.53 = 42789775.73b

Or, b = 0.0187

Putting the value of b in equation 4, we have

728.55 = 5a + 44125.6 (0.0187)

Or, a = -19.32

Now, substituting the value of **a** and **b** in equation 1, we have

Y = -19.32 – 0.0187X

This is the estimated regression equation of Net Profit (Y) on Total Deposit (X) of EBL.

APPENDIX 17

Regression Equation of Net Profit (Y) on Total Deposit (X) of HBL

Let the regression equation of Y on X be,

Y = a + bX …………………Equation 1

Where,

Y is dependent variable, a and b are constant, and X is independent variable.

Then, two normal equations estimating a and b are,

$\sum Y$ = na + b $\sum X$ ……………..Equation 2

$\sum XY$ = a $\sum X$ + b $\sum X^2$ …………Equation 3

$\sum X$	$\sum X^2$	$\sum Y$	$\sum XY$	N
112941.95	2589946178.75	1475.94	34390206.84	5

Source: Appendix 11

Putting the respective value in equation 2 and 3, we have

1475.94 = 5a + 112941.95b …………..Equation 4

34390206.84 = 112941.95a + 2589946178.75b …………..Equation 5

Multiplying equation 4 by 22588.39 and equation 5 by 1 then subtracting equation 5 from equation 4, we have

33339108.34 = 112941.95a + 2551176813.96b

34390206.84 = 112941.95a + 2589946178.75b

-                              -   -
_____

1051098.50 = 38769364.79b

Or, b = 0.0272

Putting the value of b in equation 4, we have

1475.94 = 5a + 112941.95 (0.0272)

Or, a = -319.22

Now, substituting the value of **a** and **b** in equation 1, we have

Y = -319.22 – 0.0272X

This is the estimated regression equation of Net Profit (Y) on Total Deposit (X) of HBL.

APPENDIX 18

Regression Equation of Net Profit (Y) on Total Deposit (X) of NABIL

Let the regression equation of Y on X be,
Y = a + bX ………………….Equation 1
Where,
Y is dependent variable, a and b are constant, and X is independent variable.

Then, two normal equations estimating a and b are,
$\sum Y = na + b \sum X$ ……………..Equation 2
$\sum XY = a \sum X + b \sum X^2$ …………Equation 3

$\sum X$	$\sum X^2$	$\sum Y$	$\sum XY$	N
77007.13	1207727017.01	2298.56	36115427.24	5

Source: Appendix 12

Putting the respective value in equation 2 and 3, we have
2298.56 = 5a + 77007.13b …………..Equation 4
36115427.24 = 77007.13a + 1207727017.01b …………Equation 5

Multiplying equation 4 by 15401.43 and equation 5 by 1 then subtracting equation 5 from equation 4, we have
35401110.94 = 77077.13a + 1186019922.19b
36115427.24 = 77077.13a + 1207727017.01b

-          -   -
_____
714316.30 = 21707094.82b
Or, b = 0.0329

Putting the value of b in equation 4, we have
2298.56 = 5a + 770077.13 (0.0329)
Or, a = -46.99

Now, substituting the value of **a** and **b** in equation 1, we have
Y = -46.99 – 0.0329X
This is the estimated regression equation of Net Profit (Y) on Total Deposit (X) of NABIL.

APPENDIX 19

T-test of Correlation Co-efficient between Total Deposit and Cash and Bank Balance of Everest Bank Limited (EBL)

Step 1 Null Hypothesis H_0: P = 0

There is no significance difference between correlations in the population.

Step 2 Alternative Hypothesis H_1: P ≠ 0

There is significance difference between correlation in the population.

Step 3 Test Statistics under H_0

$$t_{cal} = \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2}$$

$$= \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

$$= \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

$$= \frac{r\sqrt{}}{\sqrt{}} \times \sqrt{}$$

$$= \sqrt{} \times \sqrt{}$$

$$= ?.??$$

Step 4 Critical Values under H_1

The tabulated value of t for d.f. = 5.2 = 3 at 5% level of significance due to two tailed test is given by,

t_{tab} = 3.182

Step 5 Decision

Since, $t_{cal} < t_{tab}$ thus, H_0 is accepted, which means that the variables in the population are uncorrelated i.e. r is insignificant of correlation in the population.

APPENDIX 20

T-test of Correlation Co-efficient between Total Deposit and Cash and Bank Balance of Himalayan Bank Limited (HBL)

Step 1 Null Hypothesis H_0: $P = 0$
There is no significance difference between correlations in the population.

Step 2 Alternative Hypothesis H_1: $P \neq 0$
There is significance difference between correlations in the population.

Step 3 Test Statistics under H_0

$$t_{cal} = \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2}$$

$$= \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2}$$

$$= \frac{r}{\sqrt{r}} \times \sqrt{?}$$

$$= \frac{r}{\sqrt{r}} \times ?$$

$$= ? \times ?$$

$$= ?$$

Step 4 Critical Values under H_1
The tabulated value of t for d.f. = 5.2 = 3 at 5% level of significance due to two tailed test is given by,

$t_{tab} = 3.182$

Step 5 Decision
Since, $t_{cal} < t_{tab}$ thus, H_0 is accepted, which means that the variables in the population are uncorrelated i.e. r is insignificant of correlation in the population.

APPENDIX 21

T-test of Correlation Co-efficient between Total Deposit and Cash and Bank Balance of NABIL Bank Limited (NABIL)

Step 1 Null Hypothesis H_0: P = 0

There is no significance difference between correlations in the population.

Step 2 Alternative Hypothesis H_1: P ≠ 0

There is significance difference between correlations in the population.

Step 3 Test Statistics under H_0

$$t_{cal} = \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2}$$

$$= \frac{0.???}{\sqrt{1-0.??^2}} \times \sqrt{n-2}$$

$$= \frac{0.???}{0.???} \times \sqrt{?}$$

$$= \frac{0.???}{0.???} \times 2.???$$

$$= 0.???? \times 2.???$$

$$= 0.????$$

Step 4 Critical Values under H_1

The tabulated value of t for d.f. = 5.2 = 3 at 5% level of significance due to two tailed test is given by,

t_{tab} = 3.182

Step 5 Decision

Since, $t_{cal} < t_{tab}$ thus, H_0 is accepted, which means that the variables in the population are uncorrelated i.e. r is insignificant of correlation in the population.

APPENDIX 22

T-test of Correlation Co-efficient between Total Deposit and Net Profit of Everest Bank Limited (EBL)

Step 1 Null Hypothesis H_0: $P = 0$

There is no significance difference between correlations in the population.

Step 2 Alternative Hypothesis H_1: $P \neq 0$

There is significance difference between correlations in the population.

Step 3 Test Statistics under H_0

$$t_{cal} = \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2}$$

$$= \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2}$$

$$= \frac{r}{\sqrt{?}} \times \sqrt{?}$$

$$= \frac{r}{\sqrt{?}} \times \sqrt{?}$$

$$= ? \times ?$$

$$= ?$$

Step 4 Critical Values under H_1

The tabulated value of t for d.f. = 5.2 = 3 at 5% level of significance due to two tailed test is given by,

$t_{tab} = 3.182$

Step 5 Decision

Since, $t_{cal} < t_{tab}$ thus, H_0 is accepted, which means that the variables in the population are correlated i.e. r is significant of correlation in the population.

APPENDIX 23

T-test of Correlation Co-efficient between Total Deposit and Net Profit of Himalayan Bank Limited (HBL)

Step 1 Null Hypothesis H_0: P = 0

There is no significance difference between correlations in the population.

Step 2 Alternative Hypothesis H_1: P $\neq$ 0

There is significance difference between correlations in the population.

Step 3 Test Statistics under H_0

$$t_{cal} = \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2}$$

$$= \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2}$$

$$= \frac{r}{\sqrt{r}} \times \sqrt{}$$

$$= \frac{r}{r} \times ?$$

$$= ? \times ?$$

$$= ?$$

Step 4 Critical Values under H_1

The tabulated value of t for d.f. = 5.2 = 3 at 5% level of significance due to two tailed test is given by,

t_{tab} = 3.182

Step 5 Decision

Since, $t_{cal} < t_{tab}$ thus, H_0 is accepted, which means that the variables in the population are uncorrelated i.e. r is insignificant of correlation in the population.

APPENDIX 24

T-test of Correlation Co-efficient between Total Deposit and Net Profit of NABIL Bank Limited (NABIL)

Step 1 Null Hypothesis H_0: P = 0

There is no significance difference between correlations in the population.

Step 2 Alternative Hypothesis H_1: P $\neq$ 0

There is significance difference between correlations in the population.

Step 3 Test Statistics under H_0

$$t_{cal} = \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2}$$

$$= \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2}$$

$$= \frac{r}{\sqrt{}} \times \sqrt{}$$

$$= \frac{}{} = $$

$$= \times = $$

$$= $$

Step 4 Critical Values under H_1

The tabulated value of t for d.f. = 5.2 = 3 at 5% level of significance due to two tailed test is given by,

t_{tab} = 3.182

Step 5 Decision

Since, $t_{cal} < t_{tab}$ thus, H_0 is accepted, which means that the variables in the population are uncorrelated i.e. r is insignificant of correlation in the population.

APPENDIX 25

One-way ANOVA Test of EPS of EBL, HBL and NABIL

Year	EBL (X_1)	HBL (X_2)	NABIL (X_3)	X_1^2	X_2^2	X_3^2
2060/61	32.89	60.26	55.25	1081.75	3631.27	3052.56
2061/62	29.90	49.45	84.66	894.01	2445.30	7167.32
2062/63	45.58	49.05	92.61	2077.54	2405.90	8576.61
2063/64	49.40	47.91	105.79	2440.36	2295.37	11191.52
2064/65	59.44	59.24	129.21	3533.11	3509.38	16695.22
N = 15	217.21	265.91	467.52	10026.77	14287.22	46683.23

Total = $\sum X_1 + \sum X_2 + \sum X_3$

$= 217.21 + 265.91 + 467.52$

$= 950.64$

Correlation Factor (CF) = $\dfrac{\square\square\square\square}{\square}$ $\square$ $\dfrac{\square\square\square}{\square\square}$ $\square$ $\square\square\square\square$

Sum Square due to Total (SST) $= \sum X_1^2 + \sum X_2^2 + \sum X_3^2 - CF$

$= 10026.77 + 14287.22 + 46683.23 - 63.38$

$= 70933.84$

$\square\square\square$ $\square\square\square\square\square\square$ $\square\square\square$ $\square\square$ $\square\square\square\square\square$ $\square$ $?\square\square\square?$ $\square$ $\dfrac{?\ \square?}{\square}$ $\square$ $\dfrac{?\ \square\ ?}{\square}$ $\square$ $\dfrac{?\ \square\ ?}{\square}$ $\square$ $\square\square$

$\dfrac{?\square\square\square?}{\square}$ $\square$ $\dfrac{?\square\square\square?}{\square}$ $\square$ $\dfrac{?\square\square\square?}{\square}$ $\square$ $\square\square\square$

$= 9436.04 + 14141.63 + 43714.99 - 63.38$

$= 67229.28$

Sum Square due to Error (SSE)   = SST – SSC

$= 70933.84 - 67229.28$

$= 3704.56$

APPENDIX 26

Step 1 Null Hypothesis (H_0): $\mu_1 = \mu_2 = \mu_3$
There is no Significance difference between 3 EPS.

Step 2 Alternative Hypothesis (H_0): $\mu_1 \neq \mu_2 \neq \mu_3$
There is significance difference between 3 EPS.

Step 3 Test Statistics under H_0

Source of Variation	Sum Square	d.f.	Mean Sum Square	F Ratio
Due to Column	SSC = 67229.28	C-1 = 3-1 = 2	MSC = 33614.64	F_{cal} = 108.89
Due to Error	SSE = 3704.56	N-C = 15-3 = 12	MSE = 308.71	

Calculations

Step 4 Critical Value under H_1
The tabulated value of F for degree of freedom (d.f.) 2, 12 at 5% level of significance is given by,

$\mathbf{F_{tab} = 3.89}$

Step 5 Decision
Since, $F_{cal} > F_{tab}$, thus H_1 is accepted, which means there is significance difference between 3 EPS.

Note: Here, C denotes Number of Sampled Columns i.e. 3 (EBL, HBL and NABIL)

APPENDIX 27

One-way ANOVA Test of Current Ratio of EBL, HBL and NABIL

Year	EBL (X_1)	HBL (X_2)	NABIL (X_3)	X_1^2	X_2^2	X_3^2
2060/61	1.19	3.45	3.14	1.42	11.90	9.86
2061/62	1.85	4.61	3.01	3.42	21.25	9.06
2062/63	1.24	4.19	2.60	1.54	17.56	6.76
2063/64	3.64	5.57	2.20	13.25	31.02	4.84
2064/65	2.01	4.64	3.11	4.04	21.53	9.67
N = 15	**9.93**	**22.46**	**14.06**	**23.67**	**103.26**	**40.19**

Total $= \sum X_1 + \sum X_2 + \sum X_3$

$\quad\quad = 9.93 + 22.46 + 14.06$

$\quad\quad = 46.45$

Correlation Factor (CF) $= \dfrac{\square\square\square\square\ \square}{\square}\ \square\ \dfrac{\square\ \square\square}{\square\square}\ \square\quad\square\square$

Sum Square due to Total (SST) $\quad = \sum X_1^2 + \sum X_2^2 + \sum X_3^2 - CF$

$\quad\quad\quad = 23.67 + 103.26 + 40.19 - 3.10$

$\quad\quad\quad = 164.02$

$\square\square\square\ \ \square\square\square\square\square\square\ \square\square\square\ \square\square\ \square\square\square\square\square\ \square\ ?\square\square\square?\ \square\quad \dfrac{?\ \ \square?}{\square}\ \square\ \dfrac{?\ \ \square\ ?}{\square}\ \square\ \dfrac{?\ \ \square\ ?}{\square}\ \square\ \square\square$

$\dfrac{?\ \ \square\square?}{\ }\ \square\ \dfrac{?\square\square\square?}{\ }\ \square\ \dfrac{?\square\square\square?}{\ }\ \square\quad\square\square$

$\quad\quad\quad = 19.72 + 100.89 + 39.54 - 3.10$

$\quad\quad\quad = 157.05$

Sum Square due to Error (SSE) $\quad = SST - SSC$

$\quad\quad\quad = 164.02 - 157.05$

$\quad\quad\quad = 6.97$

APPENDIX 28

Step 1 Null Hypothesis (H_0): $\mu_1 = \mu_2 = \mu_3$
There is no Significance difference between 3 Current Ratio.

Step 2 Alternative Hypothesis (H_0): $\mu_1 \neq \mu_2 \neq \mu_3$
There is significance difference between 3 Current Ratio.

Step 3 Test Statistics under H_0

Source of Variation	Sum Square	d.f.	Mean Sum Square	F Ratio
Due to Column	SSC = 157.05	C-1 = 3-1 = 2	MSC = 78.53	F_{cal} = 135.40
Due to Error	SSE = 6.97	N-C = 15-3 = 12	MSE = 0.58	

Calculations

$$\square \ \square\square \ \square \ \frac{\square\square\square}{\square \ \square} \ \square \ \frac{\square\square\square\square}{} \ \square \ \square\square\square$$

$$\square \ \square\square \ \square \ \frac{\square\square\square}{\square \ \square \ \square} \ \square \ \frac{\square\square}{\square\square} \ \square \ \square\square$$

$$\square_{\square\square\square} \ \square \ \frac{\square \ \square\square}{\square \ \square\square} \ \square \ \frac{\square\square\square}{\square\square} \ \square \ \square\square\square\square$$

Step 4 Critical Value under H_1
The tabulated value of F for degree of freedom (d.f.) 2, 12 at 5% level of significance is given by,

F_{tab} = 3.89

Step 5 Decision
Since, $F_{cal} > F_{tab}$, thus H_1 is accepted, which means there is significance difference between 3 EPS.

Note: Here, C denotes Number of Sampled Columns i.e. 3 (EBL, HBL and NABIL)

APPENDIX 29
Everest Bank Limited

Particulars	2060/61	2061/62	2062/63	2063/64	2064/65
Share Capital	……….	455000000	455000000	518000000	518000000
Reserve and Surplus	………..	157824701	225318543	314617365	444808301
Debenture and Bonds	81800000	…………..	…………...	300000000	300000000
Other Liabilities	571600000	722320310	842323194	457590572	763558645
Cash in Hand	………..	136658509	128757118	192590297	259347645
Bank Balance	………..	1002910267	503047813	857398911	1293619849
Money at Call and Short Notice	86100000	………….	187445000	570000000	66960000
Other Assets	286800000	240612048	251165999	206285178	178007850
Total Assets	6607180000	8052209125	9608570861	11732516418	15959284687
Interest Income	…………...	520173468	657249073	719297855	903411137
Commission and Discount	…………...	61503871	74331079	78130046	96839264
Exchange Gain	…………...	32207956	27793563	27077784	14397970
Net Profit	85300000	94180428	143566683	168214611	237290936
Total Deposit	5466610000	6694963060	8063902086	10097690989	13802444988
Current Deposit	500000000	562394744	719755865	1025025340	1145794695
Interest on Debenture	………….	……….	………….	3734630	18000000
MPS	405	445	680	870	1379
Preference Dividend	………..	……….	………….	12600000	12600000
No. of Share	2593186	3150000	3150000	3150000	3780000

APPENDIX 30
Himalayan Bank Limited

Particulars	2060/61	2061/62	2062/63	2063/64	2064/65
Share Capital	390000000	429000000	536250000	643500000	772200000
Reserve and Surplus	468114868	634132203	787916357	898246461	993975616
Loan and Borrowings	534013018	645839709	659005881	506048286	504624897
Other Liabilities	605354764	592144522	704138106	404581281	386750763
Cash in Hand	462776725	397189317	274235328	286529934	305428144
Bank Balance	801895073	1582019679	1726948893	1727941023	1411924192
Money at Call and Short Notice	352350000	150100000	368900000	441080900	1005280000
Other Assets	665737871	818759818	848326093	643609788	517992113
Total Assets	20672433854	23355223128	24762024991	27418157873	29460389672
Interest Income	1148998491	1201233722	1245895020	1446468083	1626473819
Commission and Discount	101704124	102560741	123928995	132815882	165447872
Exchange Gain	104601011	109599294	122419406	137300987	198130134
Net Profit	235023510	212128485	263053495	308275171	457457696
Total Deposit	18619375077	31007379489	22010332984	24814011984	26490851640
Current Deposit	2634369951	3540851170	4145447916	5045160928	5028150556
Interest on Debenture	1131659	30919870	30600000	3060000	30600000
MPS	1000	836	840	920	1100
No. of Share	3900000	4290000	5362500	6435000	7722000

APPENDIX 31

NABIL Bank Limited

Particulars	2060/61	2061/62	2062/63	2063/64	2064/65
Share Capital	491654400	491654400	491654400	491654400	491654400
Reserve and Surplus	65473894	822533056	990027903	1165983905	1383340017
Loan and Borrowings	41417298060	961461153	229660000	17062680	173201710
Other Liabilities	491344964	730371768	741612933	340786604	352079858
Cash in Hand	318158820	187777015	683600321	146352555	237818512
Bank Balance	733661029	956990468	918733400	413028059	392420076
Money at Call and Short Notice	31368000	670204297	912199084	868428307	1734901943
Other Assets	671016247	708610519	492199084	413339570	544668139
Total Assets	17629252392	16562624992	16745486638	17064082093	22329971078
Interest Income	1120184120	1017872280	1001616901	1068746769	1309998500
Commission and Discount	114336964	144405701	138574406	12876550	138293913
Exchange Gain	154219398	144075171	157324299	184878868	185483662
Net Profit	271638612	416235811	455311222	520114085	1635262349
Total Deposit	15506428215	13447661064	14119032115	14586608707	19347399440
Current Deposit	2703818737	3034002537	2688966557	2799184977	2910589772
MPS	700	740	1000	1505	2240
No. of Share	4916544	4916544	4916544	4916544	4916544

BIBLIOGRAPHY

Books:

Bhandari, D.R. (2003). *Banking and Insurance: Principles & Practice.* Kathmandu: Aayush Publications.

Clark, J. (1999). *International Dictionary of Banking and Finance*. New York: Glenlake Publishing Co Ltd and AMACOM American Management Association.

Maisel, S.J. (1982). *Risk and Capital Adequacy in Commercial Banks.* Chicago: The University of Chicago Press.

Pandey, I. M. (1995). *Financial Management*. New Delhi: Vikash Publishing House Pvt. Ltd.

Patheja, A. (1994). *Financial Management of Commercial Banks*. Delhi: South Asia Publications.

Rosenburg, J. M., (1982). *Dictionary of banking and finance*. New York: John Wiley & Sons.

Shekhar, K.C. & Shekhar, L. (1998). *Banking theory and practice* (Rev. ed.). New Delhi: Vikash Publishing House Pvt. Ltd.

Shrestha M.S. (2009) *Fundamental of Banking*. Kathmandu: Buddha Academic Enterprises Pvt. Ltd.

Verma, H.L. & Malhotra, A.K. (1993). *Funds Management in Commercial Banks*. New Delhi: Deep & Deep Publications.

Wolf, H.K. & Pant, P.R. (2007) *Social Science Research and Thesis Writing*. Kathmandu: Buddha Academic Enterprises Pvt. Ltd.

Thesis:

Dhungana, Reema,(2006) *Liquidity Position of Commercial Banks of Nepal With reference to BOK, HBL, Standard Chartered Bank (SCB), Nepal Bank Limited (NBL), NIB and EBL,* Master Degree Thesis, Shanker Dev Campus, Kathmandu.

Gumanju, Chutra Bahadur,(2004) *A Comparative Study of Financial Performance Analysis of HBL and NIB*, Master Degree Thesis, Nepal Commerce Campus, Kathmandu.

Paudel, Ramesh,(2006) *Liquidity Management of Commercial Banks in Nepal*, Master Degree Thesis, Central Department, Kathmandu, 2006

Poudel, Kishor,(2002) *A Study on Liquidity and Investment Position of Joint Venture Commercial Banks in Nepal*, Master Degree Thesis, Nepal Commerce Campus, Kathmandu.

Shrestha, Sarada,(2007) *Performance Measurement of Joint Venture Banks in Nepal with reference of EBL, SCB, Nepal State Bank of India (NSBI) and NABIL* , Master Degree Thesis, Public Youth Campus, Kathmandu.

Tamang, Makar Bahadur,(2008) *Financial Performance Analysis of Commercial Banks of Nepal with reference to NIB and NABIL*, Master Degree Thesis, Shanker Dev Campus, Kathmandu.

Reports:

Annual Report of EBL (FY 2060/61 - FY 2064/65)

Annual Report of HBL (FY 2060/61 - FY 2064/65)

Annual Report of NABIL (FY 2060/61 - FY 2064/65)

Websites:

www.ebl.com.np

www.hbl.com.np

www.nabilbank.com

www.mof.gov.np

www.cbs.gov.np