Problem 8   **BBA Professional 2012**

Calculate the net NSP and NAP for 5 years term policy from the following information:

Age	No. of insured persons	No. of death	Present Value of tk.l@4%
31	9480	125	.952
32	9,355	126	.907
33	9,229	128	.864
34	9,101	130	.823
35	8,971	136	.784

*** Policy value tk. 10,000

Solution:

Calculation the Net Single Premium & Net Annual Premium for 5 years term policy

Year	Age	No. of insured person risk	No. of death	Amount of claim	PV of Tk. 1 (a), 4%	PV of death claim/4%
1	31	9480	125	10,000	.952	11,90.000
2	32	9355	126	10,000	.907	11.42.820
3	33	9229	128	10,000	.864	1 1,05.920
4	34	9101	130	10.000	.823	10.69.900
5	35	8971	136	10.000	.784	10.66,240
					Total PV of death claim = Tk. 55,74,880	

We know that,

$$\text{Net Single Premium} = \frac{\text{Total PV of Claim}}{\text{Total number of insured persons}} = \frac{55,74,880}{9480} = \text{TK. } 588.07$$

Calculate the NAP for the 5 years term policy

Year	Age	No. of insured person	Premium collected @ Tk. 1	PV of Tk. 1 @ 4%	PV of death claim
1	31	9480	9480	1.00	9480
2	32	9355	9355	.952	8905.96
3	33	9229	9229	.907	8370.70
4	34	3101	3101	.864	7863.26
5	35	8971	8971	.823	7383.13
	Total PV of Premium collected @ Tk. 1 policy holder				Tk.42,003.053

We know that,