



45+ Years of service.

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Who we are



We advise on designing & restructuring employees benefit schemes, management of trust funds, payroll management & arranging valuation of employee benefit schemes since 1972.

The company also provides for valuation & calculation of liability for warranty schemes, reward points & determination of liability as per India AS 22 & AS 29.

45⁺

Years of Experience

India's leading
actuaries company



Global Experience

Reputed actuaries with Global
execution capabilities

4000⁺

Clients Served

4000+ Public & Private
Sector Clients Served

Who we are – Our History



- The Company was started by Late Sh. Uma Charan in 1972. He was the senior most Actuary at that time in India. He worked with LIC of India, Insurance Companies, PSU's etc.
- In last 44 years, we have arranged for various services to Government, Semi-Government, MNCs & Private Establishments.
- We have a proven global record with overseas client coming from Sri Lanka, Nepal, Dubai, Thailand, Singapore, The African Continents & several other countries.



We offer actuarial reports with globally accepted Statutory Compliances



Accounting Standard
15 (Revised)



IND- AS19



IAS 19(Revised 2011)
/IFRS



US GAAP -
ASC 715 & 710, 88, 132
(R) & 158

We cover wide range of sectors for actuarial advice



Trust Fund Management



*Employee Support for Life Insurance
& State Insurance Schemes*



*Liability Determination as per
AS- 22, AS-29 & IND AS -37*



Payroll Management

Our core specialization has been Employee Benefits and we cover entire scope of plans



Valuation of following employee benefits as per statutory requirements of Indian GAAP AS 15(R), IND AS-19, IAS-19(Revised 2011), IFRS, USGAAP-ASC 715 & 710, 88, 132(R) & 158



Gratuity Liability



Retirement Benefit
Medical Liability



Service Awards – Reward Points,
Fixed & Retirement Rewards



Deferred Employee
Incentive Scheme



Settlement Allowances on Retirement



Leave Encashment Liability
(Earned, Sick & Other Leaves)



Pension Funds Liability



Valuation of interest rate guarantee
for exempt provident fund schemes

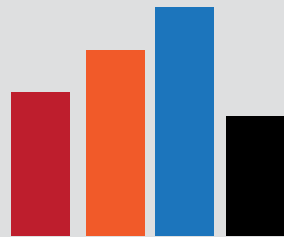
Corporate Snapshot



25
Supporting Staff



5000
Sq Ft Office area



ANALYTICAL & SAVVY
Programming Support with
Our Programming Team.



24X7
hours online support.

Our Clientele



4000+ More...

Our Team – India's Leading Actuaries



Mr. A.D. GUPTA

Fellow Member of Institute of Actuaries of India

Former Vice President of Institute of Actuaries of India and Divisional Manager of LIC of India. pension & Group Scheme Department, Mr. Gupta has been practicing actuary since 1994 and is flawless at carrying out employee benefit evaluation and imparting advises on structuring employee benefits scheme.

Mr. K.K. WADHWA

Fellow Member of Institute of Actuaries of India & Associate Member of Institute & Faculty of Actuaries (U.K.)

Having spent 38 years of his life working for the highly revered LIC of India, Mr. K.K.Wadhwa is currently consulting on practices actuary in the space of employee benefits & valuation of Warranties & Guarantee. With a professional experience that includes both national and International Industry giants, Mr. Wadhwa now acts as a member of the profit committee for two life Insurance establishments.

Mr. K.K. DHARNI

Fellow Member of Institute of Actuaries of India & Associate Member of Institute & Faculty of Actuaries (U.K.)

With names such as Aviva Life Insurance, LIC of India, and Sahara India Life Insurance to slow on his decorated portfolio, Mr. Dharni comes with an extreme level of proficiency and expertise in the field which only comes with decades of working and practicing the trade. At present, he acts as a consulting actuary with postal life Insurance.

How we do it – Our Approach

Requirements for Actuarial Valuations

- Data Base of the Employees.
(Employee's ID, Date of Birth, Date of Joining, Salary, Leaves, Retirement Age etc.)
- Selection of Assumptions (To be decided by management/Actuary or in consultation with the Actuary)
(Discount Rate, Future Salary Growth, Attrition rate for Future as per past trend etc.)
- Basic Information of the Company.
(Name of the Company, Address, Policies for related valuations etc.)

Assumptions we work on

Financial Assumptions



Discount Rate



Future Salary Increase



Expected Return on Planned assets for Future

Demographic Assumptions



Turnover / Attrition



Retirement Age



Mortality Table

Selection of Assumptions (1/2)

- **Discount Rate**

The discount rate is generally based upon the market yields available on government bonds at the accounting date relevant to currency of benefit payments for a term that matches the liabilities.

- **Salary growth rate**

is company's long term best estimate as to salary increases & take account of inflation, seniority, promotion, business plan, HR Policy and other relevant factors on long term basis as provided in relevant accounting standard. These valuation assumptions are received as input from you.

- **Attrition rates**

are company's best estimate of employee turnover in future determined considering factors such as nature of business & Industry, retention policy, demand & supply in employment market, standing of the company, business plan, HR policy etc as provided in the relevant accounting standard. Attrition rates are given below have been received as input from the company.

Selection of Assumptions (2/2)

- Retirement Age
To be provided by the company.
- Mortality Table –
As per the guidelines of Institute of Actuaries of India. (Indian Assured Lives Mortality 2006-08 Table).

Methodology & Terminology used in our valuation reports



We are using Projected Unit Credit (PUC) Method to assess the plan's liabilities to exit employees for retirement, death in service and withdrawals (Resignation / Termination).

Under the Projected Unit Credit (PUC) Method, a projected accrued benefit is calculated at the beginning of the period and again at the end of the period for each benefit that will accrue for all active members of the plan. The projected accrued benefit is based on the plan accrual formula and upon service as of the beginning or end of period, but using member's final compensation projected to the age at which the employee is assumed to leave active service. The plan liability is the actuarial present value of the projected accrued benefits as on the date of valuation.

Under PUC Method calculation, we used all the assumptions (Financial Assumption & Demographic Assumptions)

Case Example: Gratuity Calculation (1/2)

The first stage in the process is to determine what Employee final salary will be:

Age at the time of Entry = 24

Age at Valuation Date = 28

Retirement Age = 60

Salary Increment: 5.5%

*Projected Final salary = Current Salary * (1+5.5%)⁶⁰⁻²⁸ = 17875 * (1.055)³² = 99157*

*The next stage is to determine the projected retirement benefit/ gratuity amount =
Projected Final Salary * 15/26 * No. of years of service*

The proportion of projected benefit accrued up to age 28, is –

No. of years since date of entry to valuation date = 28-24 = 4 years

Case Example: Gratuity Calculation (2/2)

Proportion of projected gratuity benefit accrued up to age 28 = Projected Final Salary*15/26*
No. of years since date of entry = 99157 * 4*15/26 = 2,28,824/-

All the benefit amounts calculated above (proportion of projected benefit and unit benefit) are applicable as at the date of Employees retirement from service. In order to determine their values (i.e. Actuarial Liability and Normal Cost, respectively) the benefit amounts need to be discounted for interest (time-value of money) and mortality.

In this example we assumed that there are no other pre-retirement terminations or decrements. However, in an actual actuarial valuation exercise, we have used other decrements such as terminations, early retirements, disability, etc.

Final Gratuity Liability = Proportion of projected gratuity benefit accrued*((100- Discount Rate)/100) 60-28=228824*(0.91) 60-28=11189.00

Pension Calculations

The Pensioners Data is divided into Four Parts

1. On Roll Employee

All eligible on Roll employee will be covered in this. Their Present Salary will be projected till the retirement age and then only their pension and commuted pension is calculated based on the pension rules. Based on their pension the future liability is derived using Discount rate, Pension increase and mortality table of IALM (Indian Assured Lives Mortality). At present the Life expectancy is around 19.5 years at the age of 60. We assume that all on roll employee will have their spouse so we provisioned the liability for another 5 years for spouse. The restoration of commuted pension as per the rule of the organization is taken care while doing this valuation.

Mortality Rates for Specimen ages

AGE	MORTALITY RATE	AGE	MORTALITY RATE	AGE	MORTALITY RATE
15	0.000614	45	0.002874	75	0.039637
20	0.000888	50	0.004946	80	0.060558
25	0.000984	55	0.007888	85	0.091982
30	0.001056	60	0.011534	90	0.138895
35	0.001282	65	0.017009	95	0.208585
40	0.001803	70	0.025855	100	0.311628

Pension Calculations

The Pensioners Data is divided into Four Parts

Retired Couple Employee

This category we take all retired employee whose spouse is alive.

Based on present pension and age there liability is derived using Discount rate, Pension increase and mortality table of IALM. Like on roll employee we provisioned the liability for another 5 years for spouse. The restoration of commuted pension as per the rule of the organization is taken care while doing this valuation.

Retired Single Employee

In this category we take all retired employee whose spouse is not alive. Based on present pension and age there liability is derived using Discount rate, Pension increase and mortality table of IALM. The restoration of commuted pension as per the rule of the organization is taken care while doing this valuation.

Pension Calculations

The Pensioners Data is divided into Four Parts

Family Pensioners & Enhance Pensioners

In this category spouse of all expired employee is covered. Based on present Family pension and age there liability is derived using Discount rate, Pension increase and mortality table of IALM. In case of Enhance pensioners there pension is taken as full till the enhanced period and after that it is calculated on normal family pension.

Summary:

- 1. On Roll Employee*
- 2. Retired Couple Employee*
- 3. Retired Single Employee*
- 4. Family Pensioners/Enhance Pensioners.*

Balance Sheet Related Items

We will provide some balance sheet related items as:

- Present value obligation including Assets and liability
- Actuarial Gain/Loss recognized
- Amount recognized in balance sheet and related analysis.
- Expense recognized in the statement of profit and loss.
- Reconciliation statement of expense in the statement of profit and loss.
- Movement of liability recognized in balance sheet.
- Best estimate of expense for next year annual reporting period.
- Bifurcation of Current & Non Current Liability

Submission of Reports

A Three Step process to Submit Report

STEP 1

Within 24 hrs of confirmation of the complete data and assumptions as soft copy of the Actuarial Certificates will be shared on the email.

STEP 2

Soft copy discussion with the management and auditors resolve all the quarry.

STEP 3

After confirmation from client side a hard copy of the Actuarial Certificates will be shared on client address.



APPENDIX

Gratuity Sample Data

S.No.	Employee Code	Name of Employee	Date of Joining (DD/MM/YYYY)	Date of Birth (DD/MM/YYYY)	Salary Eligible for Gratuity (Monthly)	Name of Unit/Cost Center (if Applicable)
1	100191	BAL KRISHAN	03/10/86	29/03/62	19855	
2	100280	PARAMJIT PUREWAL	24/11/86	13/09/65	44640	
3	100311	CHIRANJEEV ARORA	02/09/86	09/04/63	50030	
4	100907	SUMAN LATA	02/09/86	12/08/58	45950	
5	101025	VARINDER BANGAR	05/09/86	28/02/62	44640	
6	101077	NACHHATAR SINGH SAROYA	04/09/86	13/05/62	45950	
7	101396	RITA RANI	01/09/86	25/09/62	45950	
8	101404	POONAM PASSI	01/09/86	11/07/64	45950	
9	104325	USHA RANI BHAGAT	01/09/86	05/09/62	45950	
10	105158	RAM TALWANDI	29/08/86	20/05/63	36780	
11	105201	SUKHDEV MEHTA	05/09/86	31/03/61	44640	
12	105260	LEKH RAJ	03/09/86	01/04/63	45950	
13	106710	BALDEV SABHARWAL	28/10/86	01/12/63	51490	

Leave Sample Data

EMP Code	Name of Employee	Date of Joining (DD/MM/YYYY)	Date of Birth (DD/MM/YYYY)	Salary Eligible for leave Encashment (Monthly)	Salary Eligible for leave Availment (Monthly)	Opening Leave Balance in Days (As on last Valuation)	Leave During the period	Leave Availed During the period	Leave Encashed During the period	Leave Lapsed During the period	Name of Unit (if Applicable)	Name if Unit
IPL00002	SHIV KUMAR MANJI	05/10/01	07/04/63	34,500	91,107	45	15.00	11.00	0.00	0.00	49.00	Haridwar plant
IPL00094	SURENDRA KUMAR	05/04/13	04/07/83	40,000	1,09,759	27	15.00	12.00	0.00	0.00	30.00	Haridwar plant
IPL00112	MOHAD KAYYUM	27/06/15	15/10/77	23,500	61,893	11	15.00	13.00	0.00	0.00	13.00	Haridwar plant
IPL00021	YOGESH KUMAR	01/04/08	07/11/62	18,600	54,528	48	15.00	13.00	0.00	0.00	50.00	Haridwar plant
IPL00026	GOKUL SINGH	16/07/08	26/12/79	17,200	55,925	47	15.00	12.00	0.00	0.00	50.00	Haridwar plant
IPL00030	VINOD RAZDAN	11/09/08	21/01/72	11,000	31,843	28	15.00	8.00	0.00	0.00	35.00	Haridwar plant
IPL00038	TINKU PRASAD	17/03/08	03/03/97	11,000	33,763	50	15.00	0.00	0.00	15.00	50.00	Haridwar plant
IPL00015	ANIL KUMAR	28/04/06	01/08/72	10,800	31,360	15	15.00	5.00	0.00	0.00	25.00	Haridwar plant

Medical Onroll Data

S.No.	Employee Code	Name of Employee	Date of Joining (DD/MM/YYYY/	Date of Birth (DD/MM/YYYY)	Name if Unit/Cost Center (if Applicable)
1	100191	BAL KRISHAN	03/10/86	29/03/62	
2	100280	PARAMJIT PUREWAL	24/11/86	13/09/65	
3	100311	CHIRANJEEV ARORA	02/09/86	09/04/63	
4	100907	SUMAN LATA	02/09/86	12/08/58	
5	101025	VARINDER BANGAR	05/09/86	28/02/62	
6	101077	NACHHATAR SINGH SAROYA	04/09/86	13/05/62	
7	101396	RITA RANI	01/09/86	25/09/62	
8	101404	POONAM PASSI	01/09/86	11/07/64	
9	104325	USHA RANI BHAGAT	01/09/86	05/09/62	
10	105158	RAM TALWANDI	29/08/86	20/05/63	

Medical Retiree Couple sample data

S.No.	Employee Code	Name of Employee	Date of Joining (DD/MM/YYYY/	Date of Birth (DD/MM/YYYY)	Date of Retirement (DD/MM/YYYY)	Date of Birth of spouse (DD/MM/YYYY)
1	46	ANASUYA SARMA	20/06/66	06/02/35	28/02/95	06/11/40
2	98	A.K.UPPAL	10/03/58	19/04/39	30/04/99	17/01/45
3	112	BRIJ MOHAN MITTAL	01/10/61	15/01/41	31/01/01	16/10/46
4	141	BANSI LAL	02/01/58	12/11/35	30/11/95	Death Case
5	158	BHARAT BEHL	01/12/71	05/01/53	31/01/13	06/10/58
6	171	CHANDER MOHAN LAMBA	05/03/71	18/11/49	30/11/09	19/08/55
7	187	C.GOPINATHAN PILLAI	12/08/71	18/04/46	30/04/06	17/01/52
8	193	C.M.VERMA	08/09/71	01/07/45	15/01/01	01/04/51
9	210	CHANDER SHARMA	01/12/71	24/07/51	31/07/11	Death Case
10	224	DAMYANTI KHURANA	05/12/71	11/07/51	15/01/01	11/03/53
11	253	D.D. GROVER	09/08/69	7/07/51	15/01/01	06/01/01
12	282	GOPENDER KUMAR JAIN	14/11/69	01/01/41	31/12/00	02/10/46
13	299	G.S.SHARMA	01/08/60	17/01/37	31/01/98	Death Case

Medical Retiree Spouse sample data

S.No.	Employee Code	Name of Employee	Date of Joining (DD/MM/YYYY)	Date of Birth (DD/MM/YYYY)	Date of Retirement (DD/MM/YYYY)	Date of Birth of spouse (DD/MM/YYYY)
1	46	ANASUYA SARMA	20/06/66	06/02/35	28/02/95	06/11/40
2	98	A.K.UPPAL	10/03/58	19/04/39	30/04/99	17/01/45
3	112	BRIJ MOHAN MITTAL	01/10/61	15/01/41	31/01/01	16/10/46
4	141	BANSI LAL	02/01/58	12/11/35	30/11/95	Death Case
5	158	BHARAT BEHL	01/12/71	05/01/53	31/01/13	06/10/58
6	171	CHANDER MOHAN LAMBA	05/03/71	18/11/49	30/11/09	19/08/55
7	187	C.GOPINATHAN PILLAI	12/08/71	18/04/46	30/04/06	17/01/52
8	193	C.M.VERMA	08/09/71	01/07/45	15/01/01	01/04/51
9	210	CHANDER SHARMA	01/12/71	24/07/51	31/07/11	Death Case
10	224	DAMYANTI KHURANA	05/12/71	11/07/51	15/01/01	11/03/53
11	253	D.D. GROVER	09/08/69	7/07/51	15/01/01	06/01/01
12	282	GOPENDER KUMAR JAIN	14/11/69	01/01/41	31/12/00	02/10/46
13	299	G.S.SHARMA	01/08/60	17/01/37	31/01/98	Death Case

Pension Onroll Sample Data

S.No.	Employee Code	Name of Employee	Date of Joining (DD/MM/YYYY)	Date of Birth (DD/MM/YYYY)	Basic Salary	DA	Total Salary for Pension
1	100191	BAL KRISHAN	03/10/86	29/03/62	8935	10920	19855
2	100280	PARAMJIT PUREWAL	24/11/86	13/09/65	20088	24552	44640
3	100311	CHIRANJEEV ARORA	02/09/86	09/04/63	22514	27517	50030
4	100907	SUMAN LATA	02/09/86	12/08/58	20678	25273	45950
5	101025	VARINDER BANGAR	05/09/86	28/02/62	20088	24552	44640
6	101077	NACHHATAR SINGH SAROYA	04/09/86	13/05/62	20678	25273	45950
7	101325	USHA RANI BHAGAT	01/09/86	05/09/62	20678	25273	45950
8	105158	RAM TALWANDI	29/08/86	20/07/64	16551	20229	36780
9	105201	SUKHDEV MEHTA	05/09/86	31/05/63	20088	24552	44640

Pension Calculations

S.No.	Employee Code	Name of Employee	Date of Joining (DD/MM/YYYY/	Date of Birth (DD/MM/YYYY)	Date of Retirement (DD/MM/YYYY)	Basic Pension	Commutated pension	DA	NET Pension
1	46	ANASUYA SARMA	20/06/66	06/02/35	28/02/95	9000	1230	9000	17670
2	98	A.K.UPPAL	10/03/58	19/04/39	30/04/99	9000		9000	18900
3	112	BRIJ MOHAN MITTAL	01/10/61	15/01/41	31/01/01	9000		9000	18900
4	141	BANSI LAL	02/01/58	12/11/35	30/11/95	9000		9000	18900
5	158	BHARAT BEHL	01/12/71	05/01/53	31/01/13	9000		9000	18900

Family Pensioners

S.No.	Employee Code	Name of Spouse	Date of Birth (DD/MM/YYYY/	Basic Family Pension	DA	Net Pension
1	1092	LATE SURINDER MOHAN	10/08/40	4840	5324	10164
2	10417	LATE TEK RAM	09/11/54	4840	5324	10164
3	6008	LATE W.M.DEVESHWAR	12/07/42	4840	5324	10164
4	52951	LATE BASANT SABHARWAL	13/09/52	4840	5324	10164
5	32487	LATE SANTOSH KUMAR SHARMA	29/06/63	4840	5324	10164
6	4038	LATE ARJUN DEV KHURANA	24/03/41	4840	5324	10164
7	92227	LATE SATISH SHARMA	10/08/69	4840	5324	10164
8	109535	LATE ZAILA	16/01/45	4840	5324	10164
9	79529	LATE ANITA BANSAL	30/03/69	4840	5324	10164
10	8148	LATE SUDERSHAN KAPOOR	09/09/49	4840	5324	10164



45+ Years of service.

Thanks

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