INSTITUTE OF ACTUARIES OF INDIA

EXAMINATIONS

17th May 2010

Subject SA4 – Pension and Other Employee Benefits

Time allowed: Three hours (9.45* - 13.00 Hours)

Total Marks: 100

INSTRUCTIONS TO THE CANDIDATES

1. Please read the instructions on the front page of answer booklet and instructions to examinees sent along with hall ticket carefully and follow without exception

2. * You have 15 minutes at the start of the examination in which to read the questions. You are strongly encouraged to use this time for reading only, but notes may be made. You then have three hours to complete the paper.

3. You must not start writing your answers in the answer sheet until instructed to do so by the supervisor

4. The answers are expected to be India Specific application for the syllabus and corresponding core reading. However, substantially the core reading material is still taken from material supplied by Actuarial Education Company which are meant for UK Fellowship examination. The core reading also contains some material which is India Specific, mostly the IRDA regulation. In view of this, it should be noted that focal point of answers is expected to be India Specific application. However if application specific to any other country is quoted in the answer the same should answer the question with reference to Indian environment.

5. Attempt all questions, beginning your answer to each question on a separate sheet.

6. Mark allocations are shown in brackets.

AT THE END OF THE EXAMINATION

Please return your answer book and this question paper to the supervisor separately.

Q. 1) A central government public sector undertaking (CPSU) (Company A) employing over 41,000 employees is considering to establish a Pension Plan for its employees. The Government of India has for the first time permitted CPSUs to contribute to a Pension Plan for its employees with effect from 1.1.2007 with the following conditions :-

- Ceiling of 30% of Basic Pay plus Dearness Allowance towards 4 elements of superannuation benefits – Contributory Provident Fund, Gratuity, Medical & Pension
- Pension scheme should be a Defined Contribution (DC) scheme and not a Defined Benefit (DB) scheme
- Pension benefit payable only to those superannuating from the company
- Minimum 15 years' service on superannuation is a must in case of pension scheme
- Enterprises to develop their own self sustaining schemes
- Create own trust & manage funds or operate through an insurance company
- Approval of Administrative Ministry
- Approval of Income Tax authorities

The CPSU Company A currently has following employee benefit schemes requiring contributions as %age of pay bill (Basic Pay plus DA) as indicated :
Provident Fund = 12% Gratuity = 4.74% approximately
Medical Benefit= 6% approx. (average of last 2 years and increasing one)
Balance of about 7.26% is available for contribution to pension plan..

Company A has proposed a Pension Plan for your review, assessment of company liability and guidance on various points connected with the proposed scheme, as under :-

- Pension will be provided to those superannuating on or after 1.1.2007 on completing minimum of 15 years' service.
- Accrual rate - A lump sum corpus on retirement equivalent to 7 days' final salary (Basic + DA) for each completed year of service. Lump sum corpus will be used for purchase of annuity for the retired employees from an insurance company.
- In case of 'Death while in Service Pension for the Nominee' – Accrual rate same as for those superannuating at normal retirement age based on pensionable salary as on the date of death. Accrual shall be for the expected service till normal retirement age subject to a maximum of 30 years.
- On leaving service before normal retirement age: No pension or transfer value

a) **(i)** In what respects does the above proposed scheme differ from a normal final salary pension scheme? (4)

(ii) Your working suggests contribution rate of 6.6% of salary bill and contribution for a new entrant at age 25 works out to 1.95% of pensionable salary. List out the circumstances or conditions in which above proposed contribution rate will lead to excess/under provisioning in the fund. Comment on continued viability of the scheme. (5)

(iii) Is the proposed scheme fair and equitable to all employees? If not, explain with reasons. (2)

(iv) The Chief Finance Officer (CFO) of the Company is of the view that the cost of the proposed scheme should be around 2 to 3% of the salary bill. As per him far greater benefits can be paid within 7.26% contribution. Comment on how the CFO would have estimated the cost of the scheme as 2 to 3% and explain with reasons, why your estimated contribution may be 6.6%. (6)

(v) What provisions need to be incorporated in the benefit plan so that under no circumstances employer contribution exceeds 30% of the pensionable salary bill in any year? (2)

(vi) What review process should be put in place to ensure ceiling of 30% of pensionable salary is not breached? (2)

(vii) What possible issues can be raised by Administrative Machinery for approval of the proposed pension plan? (1)

(viii) If Administrative Ministry of the Government don't admit the proposed scheme as defined contribution (DC) plan, what changes can you suggest in the structure of the plan to make it compliant as DC plan? Will the modified plan raise any issues of interests of different stakeholders and also of different groups of employees? If so, list out those issues. (5)

(ix) HR manager of the company has asked you whether the company, on the basis of the proposed scheme, can get exemption from Employees Pension Scheme (EPS), 1995. Specify the conditions for exemption from EPS and state with reasons why the company on proposed scheme basis may not get exemption from EPS. (5)

b) The CFO of the company has further approached you to explain:

i) Why are there differences in the recognition of actuarial gain/loss in P&L account as per Indian GAAP AS 15(R) and International GAAP IAS19? What causes actuarial gain/loss to arise? List out points you shall cover in your response? (4)

ii) What financial implications will be for the company of proposed amendment to Gratuity Act to increase in Ceiling of maximum gratuity from Rs 3,50 lacs to Rs 10 lacs. (2)

c) Company A also has international operations and requires to compile accounts both as per AS15 (R) and IAS19. For earned leave encashment liability, it does not maintain any fund. Calculate, for IAS19 reporting requirement, minimum actuarial gain/loss to be recognised in the year's P&L account and Net cumulative unrecognized gain/loss as on 31.12.2009 based on the following information available from the working of liability:

	Figures in thousands	
Present Value of Obligations (PBO) as on 31.12.2008	7504346	
PBO as on 31.12.2009	8573763	
Average expected remaining working life	18 years	
Actuarial gain for the year	30270	
Net cumulative unrecognised actuarial loss as on 31.12.2008	1747066	(2)

d) Above Company A is in negotiation to take over a UK based Company B having a well established final salary pension scheme. Company A, the potential purchaser has no previous experience of running a final salary pension scheme. It is only considering to provide defined contribution pension arrangements for its employees in India. Company A has asked you to advise on

i) The different risks that it will be taking with the final salary pension scheme when compared with the defined contribution pension arrangements. (5)

ii) Options available to reduce the risks associated with the final salary pension scheme. (5)

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Q. 2) A private XYZ company started operations in India about 7 years ago. It provides gratuity benefit to its employees as per the Payment of Gratuity Act, 1972 (the Act Gratuity) for which it manages an approved self-managed gratuity fund. The gratuity is part of Cost to Company (CTC) of the employees and 4 21/26% of the salary of every employee in each financial year is paid into the scheme on 31st March every year.

(i) With reference to the actuarial control cycle, outline how you would advise the trustees on managing the risks in operating the scheme. (10)

(ii) Presently substantial part of the fund is invested in bank deposits. Recently a life insurance company has approached the trustees to adopt their Group Gratuity Plan. The Plan offers a number of funds with different proportion of equity investment.

a) Discuss the issues the trustees should consider while setting the scheme's investment policy. (10)

b) Describe how the results of an asset-liability modeling (ALM) exercise can assist the trustees in reviewing the investment strategy. (8)

(iii) The employees who leave the company currently before putting in five years service don't get gratuity. Some of the employees have complained to the HR manager that since gratuity is a part of their CTC, they should get at least the refund of the amount deducted from their salary towards gratuity on leaving. The

HR manager promised them to consider it in the next Central Management Committee (CMC) meeting of the company.

The HR manager then put up a note in the next CMC meeting suggesting changes in the gratuity scheme of the company. The note proposed that the company may thereafter pay higher of the Act Gratuity and the refund of contributions of the member without interest on exit of the employee. The note was discussed in the meeting and the Chief Investment Officer (CIO) was of the view that as per his calculations the Act Gratuity will always be less than the accumulated fund of the member and therefore it would be more appropriate for the company to pay accumulated fund of each member on his/ her exit.

The Chief Finance officer (CFO) wanted to know the financial impact of the change, particularly whether the cost of the scheme will still be covered within the contribution presently made into the scheme.

You are a Pension Actuary advising the company on accounting aspects of employee benefits under AS-15. The last valuation made by you as at 31st March 2009 discloses that the gratuity scheme is over funded to the extent of 23%. The HR manager has approached you to give advice on the following aspects of the Gratuity Scheme:

(a) Comments on CIO's views (7)

(b) Factors affecting the funding level of the scheme (5)

(c) Whether introduction of the proposed underpin is fair to the employees and the company (5)

(d) Estimation of the cost of the underpin (3)

(e) Change in the funding and investment strategy of the scheme due to introduction of the proposed underpin (2)

Outline the points you would make in your reply.

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