INSTITUTE OF ACTUARIES OF INDIA

EXAMINATIONS

27th May, 2014

Subject SA4 – Pensions and Other Employee Benefits

Time allowed: Three hours (14.45* - 18.00 Hrs)

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 you are required 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 applications or work carried out from within India, mostly the APS/GNs issued by ASI/IAI, Accounting Standards by ICAI, Indian Tax and other relevant documents and funding or accounting standards issued by other bodies outside India. In view of this, it should be noted that focal point of answers is expected to be India Specific application for work generally carried out of India. However if application specific to any other country is quoted in the answer, the same you should answer the question with reference to Indian environment.***
5. ***Attempt all questions in order of sequence.***
6. ***Begin answer to each question on a separate sheet, however answer to sub-questions can be on the same sheet.***
7. ***Mark allocations are shown in brackets; (nn) and [nn] for sub-questions and for each question respectively.***
8. ***Please check if you have received complete Question Paper and no page is missing. If so then kindly get new set of Question Paper from the Supervisor.***

AT THE END OF THE EXAMINATION
Please return your answer booklet and this question paper to the supervisor separately. You are not allowed to carry the question paper in any form with you.

Q. 1) **Background:** A Company provides as a component of employee benefits package, Post-retirement medical benefits to its employees starting immediately after retirement (by all causes). The benefit in the nature of hospitalization cover to the member and the spouse (existing at the date of retirement), is available during the life time of the member only. The benefit with a maximum cap of INR 500,000/- per annum, is insured and the Company pays an annual premium to the insurance company. There are no ex-gratia payments over and above what is provided under the Insurance Policy.

You are the scheme Actuary advising the Employer (the company) and the Company is keen to understand the potential costs of continuing to provide this benefit on the

a) Balance sheet and

b) Profit and Loss account.

You have been requested to prepare for the management a report as on 31st March 2014 providing inter-alia a projection of the estimated liability and accounting expense for the next five years. Your report addressed to the CEO of the Company should be inclusive of all that the Board of the Company should be looking for including at the least the following aspects;

i) Executive Summary that includes the expectations of the Board as you would like the Board to expect. (5)

ii) Data required as on 31 March 2014 and the projection for the next five years (5)

iii) Data checks you would perform on the data provided with examples (5)

iv) Assumptions needed for the calculation of numbers for the Balance Sheet and the Profit & Loss Account as on 31st March 2014 and the projection for the subsequent five years (5)

v) Key assumptions to which the benefit liability will be sensitive to. (5)

vi) The data required for the review of the medical cost inflation which is due for review, the review process and key considerations for the recommended basis. (10)

vii) Totality of the report**:** The draft report should contain at least the above points but not necessarily in the sequence mentioned above which should be your choice including other points that you propose to cover. (5)

[40]

Q. 2) **Background:** A new generation software company in India proposes to provide employee benefits which are different in certain aspects from its competitors **to attract talent**. The benefits are designed in such a way that they are linked to the potential period of service until normal retirement of 60 years of age rather than the actual period of service up to the date of exit from employment. In addition, the proposal for lump sum death in-service benefit is which is not linked to the period of service. You are Benefits Consultant to the Company and are expected to provide expert advice to the company that includes, but is not limited to actuarial aspects.

You have been asked to prepare a report for the Board of the Company which is expected to include at the least content in respect of the following;

i) Choices available to the company for financing the benefits. (3)

ii) The criteria normally used for choosing the financing method. (3)

iii) The different funding methods that could be applied for the benefits where such benefits are either linked to potential service or independent of service. (5)

iv) The taxation aspects that will impact the company's profit and loss. (5)

v) The taxation aspects that will impact the employee including those aspects that are normally not available in other employee benefits programmes elsewhere. (4)

Notes:

a) The sequence in which the above points and any other that you may want to deal with in the report is your choice and the appropriateness of such a choice will impact the marks to be awarded.

b) The answer has to be in the form of a report giving a cohesive view for the Board to consider and specific answers to each point will not suffice**.**

[20]

Q. 3) **Background:** You have performed the last two annual accounting valuation of a pension scheme under AS 15 (revised, 2005) for an established manufacturing company. The scheme provides for a final salary pension at retirement or early death based on the potential service to retirement. The scheme does not provide any benefit for those who leave the company before retirement. Retirement is defined as attainment of age 60 years or Permanent Total Disability (by all causes) whichever is earlier. The scheme is funded through a deposit administration type of scheme with an insurer. The fund is credited with declared interest every year and the fair value of assets is set as the balance in the fund as at the particular date.

You are Scheme Actuary of the Company and previous five actuarial reports have been carried out by you.

The Finance Director has noticed the following about the two valuations:

a) There is a significant actuarial gain on the liability side, but no or little actuarial gain on the asset side in the current valuation.

b) The funding status has drastically changed from underfunded in the previous valuation to almost fully funded in the current valuation (with little contribution from the employer).

c) The expense has reduced in the current valuation by more than 25% as compared to the previous valuation.

The Finance Director has further observed the following:

a) The discount rate used in the two valuations were 8% pa and 9% pa respectively

b) The actual salary increase is about 1% in the last year compared to the assumption of about 6% pa

c) There were about 10% of the employees who left the service during the year whereas the leaving service assumption has been set at 2% pa

Issues:

i) The Finance Director has approached you to explain the possible reasons for the actuarial gain, variation in the funding status and the expense. The Finance Director has also questioned the suitability of the assumptions used for the valuations as compared to the actual experience.

Please draft a suitable reply to the Finance Director covering at the least the following aspects:

a) Reasons for the actuarial gain, variation in the funding status and the expense. (10)

b) Suitability of the assumptions used and the points to be kept in mind before choosing the assumption for AS 15 (revised, 2005). (12)

ii) The trustees are concerned about the security of the members' benefits with such volatility in the funding status in the books of the company. They are also concerned about the future events relating to the scheme and the changes that might happen to the scheme as a result. They wish to create suitable safeguards in this regard and have approached you to address these concerns. An investment consultant has approached the trustees with a proposal to invest the assets in an unit linked managed fund so as to have a better asset liability matching. Keeping the concerns, roles and responsibilities of the Trustees, formulate response to the following;

a) Discuss the points you would cover in the proposal to the trustees with regard to the 'suitable safeguards'. (8)

b) Compare the current and the proposed investment approaches and suggest which one approach would suit the scheme considering the security of members' benefits. (10)

[40]

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