INSTITUTE OF ACTUARIES OF INDIA

EXAMINATIONS

29th October 2007

Subject SA4 – Pensions and Other Employee Benefits

Time allowed: Three Hours (09:45* – 13.00 Hours)

INSTRUCTIONS TO THE CANDIDATE

1. ***Do not write your name anywhere on the answer sheet/s. You have to write only your Candidate Number on every answer sheet/s.***
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 have then three hours to complete the paper.***
3. ***Mark allocations are shown in brackets.***
4. ***You must not start writing your answers in the answer papers until instructed to do so by the Supervisor.***
5. ***Attempt all questions, beginning your answer to each question on a separate sheet.***
6. ***Fasten your answer sheets together in the numerical order of the questions.***
7. ***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.***
8. ***In addition to this paper you should have available Actuarial Tables and your own calculator.***

Professional Conduct:

"It is brought to your notice that in accordance with provisions contained in the Professional Conduct Standards, if any candidate is found copying or involved in any other form of malpractice, during or in connection with the examination, disciplinary action will be taken against the candidate which may include expulsion or suspension from the membership of IAI."

Candidates are advised that a reasonable standard of handwriting legibility is expected by the examiners and that candidates may be penalized if undue effort is required by the examiners to interpret scripts.

AT THE END OF THE EXAMINATION
Hand in BOTH your answer script and this question paper to the supervisor separately.

Q. 1) You are an actuary of the ABC Ltd. Company. The company provides all types of retirement benefits generally available to employees in India. Last year the company closed its defined benefit superannuation scheme providing $1/60^{th}$ of final salary for new entrants and a new defined contribution scheme was introduced. New senior management staff, however, have the option to join either of the schemes.

Mr. X has joined as a Chief Finance Officer (CFO) of the company recently. He has been appointed as one of the trustees of both the gratuity and superannuation schemes of the company. He would want to develop understanding on number of issues on the subject in his capacity as Trustee and also as CFO to enable him to respond to issues raised by Unions.

a) You have just completed your yearly valuation of various employee benefit schemes of the company and have sent your draft reports to the company. Mr. X has called you to discuss on your reports and amongst others some of the issues raised are;

i) In one of your reports there is a mention of "more realistic assumptions". He wants to know the advantages and disadvantages of "less realistic assumptions" as against the "more realistic assumptions". (2)

ii) He finds that the assumption made for withdrawals under superannuation scheme is different from that made under gratuity scheme. He wants to know the reasons for it. (2)

iii) Under the superannuation scheme you have changed the valuation method from Projected Unit method to Attained Age method. Some of the assumptions are also changed. A large deficit has arisen due to these changes. Mr. X wants to know what these methods are and the reasons for change of method and the assumptions. (8)

Prepare a reply for Mr. X addressing the above points raised by him.

b) Mr. X was a member of the superannuation scheme of his earlier employer. He wants to transfer his pension rights to the scheme of his new company. He has, however, heard that there have been a lot of complaints about lower value being paid on subsequent transfer.

The scheme of ABC Ltd. Company offers a choice of benefits to the members transferring their benefits into the scheme. Members have a choice between "added years", "a fixed pension" or "a unit-linked money purchase account".

Set out points that you would make explaining how such problems occur, what action might be required to remedy the problem and any complications the actions may result in. (15)

c) The employee trade unions have objected to the introduction of new defined contribution scheme where the company contributes 10% to the individual accounts of the employees. In addition to it, around 1% is the insurance premium for death in service benefits.

The company had earlier sought an advice from you for a defined benefit scheme providing a benefit of 1% of final salary for each year of service for which it was advised by you that a contribution rate of 11% would be suitable.

Company management offered to the trade unions the above defined benefit scheme in place of defined contribution scheme. Following two suggestions have come from the unions:

- One of the unions has suggested for a hybrid arrangement where the benefit would provide not only 1% benefit but also a guarantee that the value of the benefits payable would be equal to or greater than 10% of salary, accumulated with interest at 8%.
- Another union has suggested 11% contribution to be made to the individual accounts of the employees. The employees can then take life cover individually if they wished.

i) Mr. X wants to know how different employees might benefit from different schemes offered. (8)

ii) Mr. X says that the company should agree to the first suggestion of the union as there should not be any additional cost to the company in agreeing to the hybrid scheme. His argument is based on the fact that interest assumption used by you for determining the cost of 1% scheme was 8% p.a. **Comment** on it. (8)

iii) **Comment** on the second suggestion of the union (7)

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Q. 2) A UK based multinational reporting on IAS 19 for its different companies in different jurisdictions for group reporting is negotiating with an Indian Company for purchase. The UK Company has Pension benefits typically in vogue in UK as for as benefits structure is concerned in all its companies (subject to variations required to comply with local laws). The Indian Company has funded Gratuity scheme as per Payment of Gratuity act 1972 and an approved superannuation scheme of Defined Benefit type. It has never had actuarial valuation either for funding or for reporting in the financial statements. You have been appointed as Actuary by both the companies to facilitate understanding on this sale/purchase transaction. A number of issues requiring clarity and commonality of understanding have been raised and the following are some of such issues. In this background of your role, answer the following:

a) **Describe** differentiating aspects of AS 15 (rev.2005): Employee Benefits with that of IAS 19 (as amended in December 2004): Employee Benefits. (15)

b) **Describe** the Objectives of AS 15 (rev.2005) and **list** what it requires an enterprise to recognize as well as the type of benefits to which its scope extends. (4)

c) **List** in brief the way in which Insured Benefits are required to be treated under AS 15 (rev.2005): Employee Benefits (3)

d) **List** the segments in which the current pension benefits in India can be categorised and outline the current regulatory framework in respect of these segments. (4)

e) While **explaining** the basic objectives of the Pension cost accounting standards, **describe** the method of accounting for pension cost prior to evolvement of accounting standards and also **state** the current general aims of most pensions-related accounting standards, **stating** the fundamental accounting concepts to which such accounting standards should be consistent with and also **describe** what problems might be caused if amount of contributions that a company actually paid in to the scheme was reported as the “cost” of the benefits in the company’s accounts? (9)

f) Within the context of this Sale and purchase transaction, respond to the following queries raised;

i. What are the key stages in the sale and purchase process generally followed? (3)

ii. Why might the Trustees of the seller’s scheme require actuarial advice that is different from that given to the seller? (3)

g) After some negotiations the selling company and the buying company agree that the transfer value will be past service reserve and what the basis might be. However, the Indian company has a problem: its scheme is in deficit and the scheme Trustees refuse to pay more than 85% of the past service liability on the agreed basis in respect of the transferring employees. The Indian and UK schemes have very different benefit structures and decision is to maintain the UK scheme benefit structure as for as possible. In this background, answer the following;

i. Does this mean that the transferring members will lose 15% of their accrued benefits? (2)

ii. Suggest reasons as to why transferring members may be unhappy with the “new” pension arrangements even when a mirror scheme is provided. (3)

iii. Describe reasons as to why the UK Company may not want to have the new type of pension benefits accruing to some employees? (1½)

iv. If it is agreed between the two companies that the mirror scheme option is applied to past service only and that credit is given for past service on the formula of "added years" for past service. Such service credits could be (a) year for year, (b) broad brush approach ie, say k years awarded for each completed year, (c) individually calculated. **Comment** briefly on the advantages and disadvantages of these three methods. (2½)

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