# INSTITUTE OF ACTUARIES OF INDIA

# EXAMINATIONS

## 3rd November, 2015
## 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 is 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.*
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)** **i)** What are the different ways in which a sponsor of a Defined benefit scheme consider cost of the scheme? (2)

**ii)** List and explain some relevant accounting concepts for reporting pension costs? (5)

**iii)** Provide an example for two of these accounting concepts? (3)

**iv)** An engineering multinational has recently bought a business unit of the Indian arm of a global technology company as part of a global acquisition. The acquirer is setting up operations in India. The employees from the business unit will transfer into the new legal entity and are entitled to continuity of service as per the terms of the transaction. The financial controller of the new entity would like to understand the day one accounting impact for the Gratuity and long service award benefits due to such transferring employees. Gratuity is as per Act provisions with no ceiling on benefit payable however. The long service award provides for fixed cash pay-out on completion of every five year service milestones.

As an actuary to the new entity, prepare a management report setting out the relevant aspects for the purpose of day one accounting impact, asset transferable for Gratuity liability and projected expense under Indian GAAP as well as US GAAP. Also provide a summary of the differences between AS15 (revised) and IAS19 (revised) 2011 and illustrate the differences as applicable for the day one accounting liability and projected expense with suitable explanation. (30)

**v)** The company would also like to evaluate the impact of continuing the Gratuity benefit as is post the close date. Explain the relevant factors that will contribute to the liability accrual if the benefit were to continue as is. (3)

**vi)** Also explain the accounting implication of capping future accruals as per Act provisions under AS15 (revised) and IAS19 respectively with suitable commentary. (7)

**[50]**

**Q. 2)** A medium size Indian Construction Company established a contributory defined benefit pension scheme for its employees 10 years ago. The objective of the pension scheme is to encourage long term association with the company. Following are some of the features of the scheme:

- The Normal Pension Age is 60

- Early retirement is allowed on or after the age 50, late retirement beyond age 60 is also permitted, though for both early & late retirements employer's prior approval is required. Members leaving the service prior to age 50 do not get any benefit

- The pension payable on retirement varies between 30 - 40% of the Pensionable Pay depending on the actual age at retirement. On late retirement, the Normal Pension at age 60 is actuarially increased

- Retiring members are allowed to commute a portion of the pension as per scheme rules

- On death of the Pensioner 50% of the pensioner's pension is payable to the spouse, if he/she is still alive

- Members contribute 3% of pensionable pay to the Scheme

- The Pension Scheme is established under Part "B" of Fourth schedule of Income Tax Act, 1961.

- The commutation factors applicable for the retiring members are given as per the following table. The factors have not been revised since inception.

| **Commutation Factors** | |
|---|---|
| **Age** | **Commuted Value for Re.1/-per annum (pa) pension** |
| 55 | 9.38 |
| 56 | 9.14 |
| 57 | 8.88 |
| 58 | 8.62 |
| 59 | 8.37 |
| 60 | 8.10 |
| >=61 | 7.85 |

**i)** State the provisions of the Income Tax Act, 1961 that deal with the "Commutation of Pension" and specify the limits set by these provisions. (2)

**ii)** Discuss the factors to be considered while setting the commutation factors for a Superannuation Scheme. (10)

Following the changes in the economic environment many defined benefit pension arrangements have been under stress. Though the financial position of the Superannuation scheme of the employer has been reasonably good and the scheme is fully funded with small surplus, the Company Management decided to cause an investigation into the performance of the Scheme and understand the causes contributing to the movements in funding position over the last 5 years. It was decided to utilise the services of an Independent Actuary for this purpose. The Valuation Results of the Scheme, the members' profile as at 31.03.2010 & 31.03.2015 are given below:

| **Valuation Results:** | | |
|---|---|---|
| **Liabilities:** | **31.03.2010** | **31.03.2015** |
| Active members | 98.00 | 138.00 |
| Pensioners | 2.00 | 44.00 |
| Total liabilities | 100.00 | 182.00 |
| Total assets of the fund | 110.00 | 190.00 |
| **Surplus** | **10.00** | **8.00** |
| | | |
| **Profile of members:** | | |
| | | |
| **Active members** | **Number** | **Number** |
| Between ages 25 -30 | 500 | 300 |
| Between ages 30-50 | 450 | 600 |
| Between ages 50-60 | 50 | 125 |
| **Pensioners** | 25 | 75 |
| | 1025 | 1100 |
| | | |
| **Investment performance:** | | |
| Active members' fund | 10% | 9.70% |
| Pensioners' fund | 8.75% | 8.70% |
| **Valuation Basis:** | | |
| Discount rate- active members | 9.50% | 9.45% |
| Discount rate- pensioners | 8.00% | 8.00% |
| Salary escalation | 6.00% | 6.00% |
| Pre-retirement decrements | ignored | Ignored |
| Mortality of pensioners | IALM(2006-2008) rated down by 2 years | IALM(2006-08) rated down by 4 years |

**iii)** **a)** State the professional guidelines to be adhered to by a Consultant Actuary while taking up an assignment for the first time. (4)

**b)** Describe the data and other requirements to be called by the Consultant Actuary from the Employer/Trustees for performing the investigation. (10)

The Consultant Actuary has given his report into the financial condition of the scheme. His report covered the risks likely to be faced by the Scheme in future and the actions that may be taken by the Company to manage the Scheme. The Management of the Company decided to increase the Commutation Factors for members retiring from the year 2016 onwards. The proposed Commutation Factors are given below:

| **Proposed Commutation Factors** | |
|---|---|
| **Age** | **Commuted Value for Re.1/- pa pension** |
| 55 | 10.31 |
| 56 | 10.05 |
| 57 | 9.77 |
| 58 | 9.48 |
| 59 | 9.21 |
| 60 | 8.91 |
| >=61 | 8.63 |

**iv)** **a)** Why the company may be offering increased commutation factors to the members retiring from 2016 onwards? (4)

**b)** Discuss how different categories of members will view the proposal and what will be its impact on the funding position of the scheme? (5)

**c)** List the ways other than increasing commutation factors for utilising the surplus of the scheme (5)

One of the Pensioners of the Scheme who has been receiving the pension for last 5 years, has made a request to the Trustees to allow him to commute the entire pension. The reason placed by him for making this request is that the pension offered by the scheme is not attractive as compared to the Pension Product launched recently by the Government for senior citizens. The Pension Product is administered through one of the life insurance companies and provides attractive annuity rates for a given purchase price. It has other attractive features such as various types of pension to choose from, including the Return of Capital on death of the member, facility to surrender the annuity etc. He wants to utilise the commuted value to purchase the pension offered by the Government.

**v)** **a)** Discuss the points to be covered in the reply to be given by the Trustees to the Pensioner. (5)

Another pensioner who has retired few months back and has no family has developed serious illness (Cancer). He has requested to surrender the entire pension for a lump sum which will be utilised by him to meet his medical expenses.

**b)** Discuss the additional points to be covered while considering the request of this pensioner. (5)

For both the above cases you may assume that the member has already commuted the maximum pension as specified in the Scheme Rules.

**[50]**

***********************