

# Actuarial Society of India

## EXAMINATIONS

15<sup>th</sup> May 2006

Subject SA4 – Pension and Other Employee Benefits

Time allowed: Three Hours (10.15\*am – 1.30 pm)

Total Marks 100

### *INSTRUCTIONS TO THE CANDIDATE*

- 1. Do not write your name anywhere on the answer scripts. You have to write only your Candidate Number on every answer script.*
- 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 ASI.”

**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.***

- Q1) The Government of India has been addressing issues relating to pension and social security provision for the population at large and also pension to Central Government and State Government employees who have been having a non-contributory unfunded defined benefits final salary scheme, benefits paid out of budget provisions. You have been engaged as Actuary to address number of issues including some as given herein under. You are required to formulate your view points with reasons for the same;**
- (i) In the background of rapid economic progress and the GDP of the country growing consistently for the last few years, the government has received a suggestion for the establishment of a primary tier of state pension provision. Presently, very small state provision funded by State exists for the destitute above age 60 on means tested basis. **State with reasons, the issues that you would consider in your report.** (10)
- (ii) A pension system under the proposed Pension Fund Regulatory & Development Authority (PFRDA) is under process which is voluntary in nature. The government wants to encourage private sector participation within this proposed pension regulatory system. Currently a number of tax incentives are already available on pension provision to the individuals and employers. You are required to advise on the new pension scheme, in particular, covering the following aims of the government:
- a) to encourage infrastructure investment within the country, and also in government bonds;
  - b) to minimize the loss of tax revenue under the new pension system by avoiding tax incentives to the higher paid;
  - c) to ensure that pension money is focused on providing benefits into the old age and
  - d) to give incentives to people who have physically crippled/mentally retarded dependants
- Set out the points that you would include in your report.** (8)
- (iii) The Government has decided that for the employees recruited after a particular date the government should fund on defined contribution basis to be regulated by PFRDA and the employees be allowed not only to choose the Fund Manager but also the Investment scheme.
- What are the advantages and disadvantages of such a proposal?** (6)
- (iv) Under the proposal as in (iii) above there is perception that the security of pension benefits of future government employees under the scheme will be diluted to a great extent. **Briefly describe the approaches that the government may take to maximize the security of benefits.** (6)
- (v) In the background of potential involvement of Actuaries in the Social Security Schemes and the need to strengthen professional aspects so as to provide higher level of confidence to the Government in Actuary's work, ASI has issued GN20 in respect of Actuarial Practice for Social Security Programmes (SSPs). **Describe the types of program and type of actuarial work it covers. Also outline the contents of an actuarial report to be provided by an actuary in respect of an SSP giving the details of the results and the analysis of such results it should cover.** (20)

- Q2) A Multi National Company based in the UK having a typical occupational pension scheme is proposing to purchase a division of a large Indian Company having a Defined Benefit type approved Superannuation and Funded Gratuity scheme. The Multinational has engaged a CFO to head the Indian operation to be acquired. The CFO does not have background of managing Defined Benefit funded schemes and is also not having prior experience of handling such issues in relation to Acquisition. You as an Actuary have been engaged to advise the CFO on number of issues including explaining some key concepts and terminology. Such issues are wide ranging but your response needs to be appropriate to the context of the CFO. Formulate your response to the following issues before you;**
- Q2.1) a. Best Estimate (1)  
b. Projected Accrued Benefits Funding Method (2)  
c. Defined Accrued Benefits Funding Method (2)  
d. Attained Age Funding Method (2)  
e. Current Unit Funding Method (2)  
f. Entry Age Funding Method (2)
- Q2.2) **The key considerations** that need to be taken in to account while designing an Employee Benefits Scheme including the objectives that the Employer may have for the same. (6)
- Q2.3) **Compare various aspects of DB and DC schemes** from the perspective of the Employer and the Employees. (6)
- Q2.4) **In the context of seeking financing of Employee Benefit Scheme risks through Insurance, answer the following;**  
a. While explaining the difference between Experience Rating and Profit Sharing describe the advantage and disadvantage of group life cover to the Employer. (5)  
b. Describe and discuss the issues that the Employer/Trustees should consider while deciding whether to insure or not an Employee Benefit Scheme. (8)
- Q2.5) In the context of deciding to have funds transferred from the existing DB Trust Funds to the new one, state the issues on which opinions might differ between the Seller and Purchaser companies. (4)
- Q2.6) For determining the transfer values from one to another fund, list and describe the factors that both the sides need to agree on. (4)
- Q2.7) List and describe the various issues and the manner in which these could be addressed to while apportioning share of DB schemes Trust Funds. (6)

**[50]**

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