

Institute of Actuaries of India

Subject SA 4: Pension and Other Employee Benefits

November 2012 Examinations

INDICATIVE SOLUTIONS

Question 1:

Part I:

Management presentation suggested flow:

a):

Background: A large Pharmaceutical company that is providing certain benefits. The Gratuity benefit is a Defined Benefit and the pension benefit is a hybrid benefit. The company is looking to reduce the cost of accruing liability (0.5)

Key investigations to be performed:

Phase I:

The following investigations need to be conducted to evaluate the design options under the two benefits; (max up to 3.0)

1. What is the mandatory minimum, company philosophy for providing benefits, market practice, competitor practice and employee needs (0.5)
2. What are the different design options that can be provided for the Gratuity and Pension benefits? What are the criteria that can be tweaked in the design options? (1)
 - a. Gratuity - vesting criteria, accrual rate, ceiling etc..
 - b. Pension – eligibility, vesting criteria, pension ceiling etc..
3. Assumptions to be used for the valuation for illustrating the financial impact information. The understanding of past experience in the company and future estimated trends from Company HR, in this regard (0.5)
4. Employee Data to be used, the demography of the population and confirmation of actuary's understanding of the plan provisions (reconfirm every parameter of the plan provisions like eligibility, accrual, ceiling etc..) (0.5)
5. Any union or employee agreements or employee communication that makes provision of certain benefits binding on the employer (0.5)
6. The latest asset balance under the DC Pension scheme and certificate from the fund manager (0.5)
7. What are the current liabilities and expenses being provisioned under AS15 (revised) for the plans and also any funding valuations that have been performed (0.5)

Phase II

The following investigations need to be conducted to finalise the plan design (0.5)

1. winner loser analysis for the different plan design (0.25)
2. cost benefit analysis for the different plan design (0.25)

Phase III

The following investigations need to be conducted to help company implement the chosen plan design (max up to 0.75)

1. Copies of the Trusts Deed and rules and any Deeds of variations (0.25)
2. Check who from the Company or Trustee has the power to make changes to the Scheme Trust rules
3. Current jurisdiction of Income tax for filing of any deed of variation (0.25)
4. Preferred communication channels and philosophy to finalise the communication strategy (0.25)

b): Risks inherent in the current plans (5)

Gratuity: (max up to 1) [outline as below]

1. Attrition risk that more people vest than anticipated – However this risk is lower depending on the demographic as the average service is already well past 5 years (0.5)
2. Salary increase risk – costs are more than anticipated as salary increase more than expected (0.25)
3. Expense risk – the cost associated with administration of the Gratuity scheme can increase in the future creating a cost implication (0.25)
4. Ageing demography – the current population has a past service of 10.30 years and hence a risk of enhanced accrual of benefit as per the scheme provisions and higher liability (0.5)

Pension: (4) [outline as below – 0.5 marks for every point with explanation, 0.25 marks for only the point without the explanation]

1. Investment risk comprising of risk of lower returns, default risk on capital and interest and reinvestment risk – Given that the DB underpin is measured against the DC accumulation in the scheme, poor investment performance in an inherent risk in the scheme that can lead to cost overruns
2. Longevity risk – the cost of purchasing pension from the insurance company would be dependent on the life expectancy and prevailing conditions at the time of purchase. This is a significant risk to the plan cost
3. Expense risk – the cost associated with administration of the pension scheme can increase in the future creating a cost implication
4. Benefit not appreciated by members due to erosion of minimum pension benefit – The pension amount is defined as the lower of 30% of last drawn pay or INR 30,000 whichever is less. There is a risk of the benefit undervalued by employees given that an absolute ceiling has been defined and inflation can erode the value of the benefit
5. Cash flow requirements at an inappropriate time/ illiquid assets – given that the DB underpin is paid directly by the company, there is a risk of cash payment required at inopportune times to honor the DB underpin
6. Reputational risk – may arise due to employee dissatisfaction of the level of benefit
7. Lack of vesting criteria for the Defined benefit underpin – The DB underpin is applicable to employees irrespective of the service as at retirement. This would mean that employees with

lesser service at the time of retirement would become eligible for the DB underpin due to the lower DC accumulated value creating a significant risk and inequitable benefit distribution

8. Lack of an eligibility criteria for transfers into the company DC scheme with the DB underpin – Also for transfers into the scheme, lack of an eligibility criteria in terms of minimum period of contributions or minimum scheme membership again create a risk of cost increases and inequitable benefit distribution

c): The redesign options (provide at least four redesign options for the Gratuity and at least two redesign options for Superannuation scheme) (5)

Gratuity (3) [provide marks for any other reasonable alternative]

1. The simplest of all is to offer benefits as per Act to the new employees and continue the higher benefits for existing employees (0.5)
2. Alternatively the benefit to the existing employees could be continued only for a certain group (for instance certain grade and above, certain service and above, employees who joined before a certain period etc..) (1)
3. The benefit could continue but the vesting criteria for the additional benefit could be enhanced for new employees (for instance 15 years or 20 years) (1)
4. The accrued benefit is preserved for existing employees and all employees switch over to the benefit as per Act (0.5)

Pension (2) [provide marks for any other reasonable alternative]

1. Remove DB underpin and only DC for new employees and continue current benefit for existing employees
2. Freeze benefit for existing employees based on accrued benefit and only DC benefit for all employees
3. Cash out accrued benefit for existing employees and only DC benefit for all employees

d): Key considerations for the redesign to be borne in mind (4)

- Phase I: Design considerations: (0.5 marks for every valid answer)
 - Cost
 - Sustainability
 - Employee buy-in
 - Legal compliance
 - Tax implication
 - Market benchmarking
 - Winner loser analysis for design features proposed

- Communication requirements
- Management buy in
- Administrative requirements

If alternatively design features are provided as below, 0.25 marks for each option as below or any other reasonable option,

- Accrual rates
- Vesting criteria
- Eligibility conditions
- Salary averaging
- Contribution levels
- Maximum benefit caps
- Commutation benefits
- Withdrawal benefits
- Death/ disability benefits

e): Approach to considering the cost impact of changes (3) [provide marks for any other management information that is relevant]

A projection for the next ten years under the incumbent scheme and the proposed scheme designs of (1)

1. The actuarial liability (0.5)
2. The expected benefit payments (0.5)
3. Profit and loss expense (0.5)

Needs to be provided using the projected unit credit method (0.5)

f): Practical considerations for implementing any changes (max up to 3)

1. Some of the practical consideration for implementing the changes would be to consider
 - a. The implication of the proposed changes for the key stakeholders (1)
 - b. For the pension plan, trust documentation will need to be updated (0.5)

- c. The administrative implications for the proposed changes (any proposed change that requires a complex administrative set up is unlikely to pass through) – for instance a cash out with differing rules for the different employee grades (1)
- d. The view of the regulator on the change for the purpose of Income tax approval (1)
- e. Other considerations relating to tax implications, employee buy –in, rapport with union etc.. (1)

Part II:

a): The assumptions needed for the Gratuity and Pension plans respectively to do the liability projections that is required by the Company for the next ten years (5)

The assumptions that are required for the liability projections for the Gratuity plan are as below (2)

1. Discount rate – the rate at which the projected liability as on estimated date of decrement would be discounted (0.25)
2. Salary escalation rate – the rate at which the current salary is expected to increase in the future until the estimated date of decrement (0.25)
3. Attrition rate – the rate at which employees are assumed to leave the organization for the purpose of obtaining the benefit (0.25)
4. Mortality rate in service (0.25)
5. New entrant rate – rate at which new entrants would join the scheme in the future (0.25)
6. New entrant rate could be increasing population, decreasing or maintain existing population number (replace leavers) (0.25)
7. New entrant profile – the profile of the new entrant for the purpose of population projection in the future like salary and age (0.5)

The assumptions that are required for the liability projections for the Pension plan are as below (3)

1. Discount rate – the rate at which the projected liability as on estimated date of decrement would be discounted (0.25)
2. Salary escalation rate – the rate at which the current salary is expected to increase in the future until the estimated date of decrement (0.25)
3. Attrition rate – the rate at which employees are assumed to leave the organization for the purpose of obtaining the benefit [DC or DB as the case is] (0.25)
4. Retirement age – the age of retirement of the employees (0.25)
5. New entrant rate – rate at which new entrants would join the scheme in the future (0.25)
6. New entrant rate could be increasing population, decreasing or maintain existing population number (replace leavers) (0.25)
7. New entrant profile – the profile of the new entrant in the grades by promotion or transfer for which the DC benefit is applicable, for the purpose of population projection in the future (0.5)
8. The investment return on the DC accumulation (0.5)
9. The annuity rate applicable for the purchase of the applicable pension at the time of pay out (0.5)

b): Explain the basis and data that is required for setting of the assumptions (5)

1. The assumptions have to be set as per the provisions of GN11 titled "ACTUARIAL INVESTIGATIONS OF RETIREMENT BENEFIT SCHEMES" (0.5)
2. Given that the valuation of liability and projection is done for the purpose of management information, a best estimate basis and sensitivity on the key assumptions have to be used for the purpose of the calculations. (1)
3. The key assumptions for the purpose of sensitivity for the Gratuity plan would be salary escalation and discount rate. Given that there is a higher benefit accrual in later years, the sensitivity of the liability to attrition could also be demonstrated (1)
4. The key assumptions for the purpose of sensitivity for the Pension plan would be the DC accumulation rate, annuity rate and attrition as the DB underpin is applicable only on retirement (1)
5. The past experience of the Company for the past three to five years for salary escalation, attrition, new entrants and profile (0.5)
6. The input from HR on the future estimate for the above assumptions (0.5)
7. The variation in experience and future estimate as relevant for the Gratuity and pension schemes (0.5)

c): An approximate liability assessment of the Gratuity plan with 2 recommended set of assumptions, outlining where approximations have been made for the purposes of the quick estimates (5)

Base set of assumptions (1.5)

1. Discount rate: 8%
2. Salary escalation rate: 7% per annum
3. Attrition rate: 5%
4. New entrants: ignored for the purpose of the illustration
5. Mortality rate: LIC 1994-96 (ultimate)

Alternative set of assumptions (0.5)

1. Same as above with a salary escalation rate of 8% per annum

Marks awarded for either approach:

Assuming the latest accounting liability was X based on a particular employee data and set of assumptions (0.5)

Adjust the liability X for the movement in employee data and change in assumptions (adjust for salary changes and head count and change in assumptions). For instance if the salary escalation assumption used for the latest accounting assumption for 6% and discount rate was 8% and now only the salary

escalation assumption has changed to 7% then we would expect the approximate liability estimate to be; (1.5)

$$X * (1.06/1.08)^{fwl1} * (1.08/1.07)^{fwl2}$$

Where fwl1 is the average duration of the plan as at the latest valuation date and fwl2 is the average duration of the plan at the current valuation (0.5)

For the revised set of assumptions, replace 7% with 8% in the above calculations (0.5)

Or

Base set of assumptions and Alternative set of assumptions same as earlier solution

Approx liability estimate

$$\text{Current monthly salary} * 26/26 * (1.07/1.08)^{fwl1} \quad [0.5]$$

Assuming one month's accrual for every year of service as the average past service is greater than 10 years [0.5]

d): Illustrate a case study and the approach with a sample employee data to demonstrate the impact of the DB underpin for the DC scheme that brings out the key cost levers for the DB underpin (10)

1. Consider a single model point to demonstrate the key cost levers for the DB underpin (0.5)
2. The model point must be of a sample employee with a (2.5)
 - a. Particular age
 - b. Grade
 - c. Past service
 - d. Monthly pensionable salary
 - e. Retirement age
 - f. Accumulated DC balance
3. Make certain assumptions of the following factors (2)
 - a. Salary escalation rate
 - b. DC accumulation rate
 - c. Attrition – ignored for the purpose of demonstration of the key cost levers
 - d. Annuity rate
4. Choose the model point such that the DB underpin is applicable. For instance with low accumulated DC fund and remaining service to retirement and high average salary (1)
5. Calculate the Actuarial liability for the DB underpin using the Projected unit credit method (1)
6. Vary the salary escalation rate by 1% and re estimate the actuarial liability to demonstrate the impact of a higher salary escalation assumption on the liability (0.5)
7. Vary the DC accumulation rate by 0.50% and re estimate the actuarial liability to demonstrate the impact of a lower DC accumulation rate assumption on the liability (0.5)
8. Use an annuity rate basis that is more expensive than the current annuity basis and re estimate the actuarial liability to demonstrate the impact of an expensive annuity buy out rate assumption on the liability (0.5)

9. Summarize the results with the data, assumptions, method and plan provisions used along with the sensitivity results and commentary on the key cost levers and the materiality of the impact of changes in the key cost levers on the liability (1)
10. Also caveat the case study finding with limitations of the impact estimate being dependent on the particular model point being used (0.5)

Question 2:

You are a consulting actuary in India. The ministry of Finance has asked you for assistance to develop a comprehensive approach to minimum funding of employer provided defined benefit leaving service/retirement benefits in India. The Objective of the ministry is to ensure minimum funding so that the employee interests are protected in the case of insolvency of the Company.

You have been asked to provide an initial report to the Ministry for consideration. Outline the points you will make in your report, covering the following sections:

i) Brief description of the current employer provided leaving service/retirement benefits, the current legislation applicable to these benefits, in particular with regards to funding arrangements (5)

- Occupational Defined Benefit Leaving service / retirement arrangements in India can currently be categorized into mandatory and non-mandatory benefits [1/2]
- Mandatory schemes include Gratuity and Employee Pension Scheme 1995 [1/4]
- Non-mandatory schemes include; leave accumulation schemes, defined benefit pension, post retirement medical plans [1/4]
- Gratuity Scheme
 - Defined benefit lump sum on termination/resignation/death [1/4]
 - Governed by Gratuity Act 1972 [1/4]
 - Gratuity Act provides for vesting of 5 years (4 years 10 months) – not applicable on death or disability [1/4]
 - Minimum formula of 15/26 of Monthly Basic Salary (plus DA) of each year of service [1/4]
 - Gratuity Act mentions about mandatory funding, however, this has never been formally notified by the government [1/4]

- Current
ly, in the main, gratuity can be funded through a Trust or simply provisioned on the company's financial statements [1/4]
- If
funded, under the Income tax Rules the company obtains an ongoing tax allowance of up to 8.33% of Basic Wages each year for contributions to the Trust [1/4]
- The
income tax rules allows also a special initial contribution tax allowance if setting up the trust of 8.33% of basic Wages for each of the past years of service the trust funding is being set up for [1/4]
- Trusts
can either manage investments themselves directly or appoint a fund manager (insurance company) to manage the funds [1/4]
- Ministr
y of Finance has laid down a prescribed investment pattern if Trusts manage their own investments [1/4]
- The
lump sum paid to Employees is exempt for tax up to a total Gratuity payable of 1,000,000INR [1/4]
- Employees Pension Scheme 1995
 - This is
mandatory for all establishments covered under the Employees' Provident Funds and Miscellaneous Act, 1952. [1/4]
 - The
scheme is a defined benefit pension plan for employees. However, the contributions are defined for establishments by the EPFO [1/4]
 - Employ
er contributions are currently made from the overall 12% of basic Salary (plus DA) mandatory EPF contributions. The EPS1995 contribution allocation is 8.33% of basic salary (plus DA) with a maximum wage threshold of 6,500INR per month. [1/2]
 - The
Central Government also contributes 1.16% of monthly basic pay (plus DA) [1/4]
 - Funds
are managed by the Board of Trustees of the EPFO [1/4]
 - EPS199
5 pension is payable to employees subject to a 10 year vesting [1/4]
 - Early
payment before age 58 is possible subject to early payment adjustment factors [1/4]
 - The
pension formula is $1/70^{\text{th}}$ of pensionable salary for each year of pensionable service [1/4]

- A few employers in specific circumstances have obtained an exemption from EPFO for the EPS 1995 contributions by setting up a separate trust to provide a defined benefit pension of at least the same or better than the EPS1995 scheme [1/2]
- Leave accumulation schemes
 - These are not governed by any specific legislation in terms of funding [1/4]
 - These are defined benefit plans for unused leave. The benefit can be encashed on leaving service, retirement, during service or simply available for availment during service [1/4]
 - The long term obligations should be provisioned on the financial statements in accordance with Accounting standards AS15 (revised 2005) [1/4]
- Defined benefit Pension
 - Largely only provided in the public sector companies, central and state government [1/4]
 - Would be governed by wage negotiations, pay commission agreements [1/4]
 - In terms of funding the public sector company plans would be governed by the same as private sector schemes as far as income tax regulations [1/2]
 - Employers have a tax allowance to contribute to DB or DC superannuation schemes up to a total of 27% of basic salary (plus DA) when combined with Provident fund contributions. [1/4]
 - Central government, most state governments and public sector companies have moved or are moving to a defined contribution superannuation approach for new entrants effective over the last few years in India [1/4]

Total [maximum 5 Marks]

- ii) The main aspects that would need to be covered in the legislative framework, indicating implications of potential options for different stakeholders ;
- a. Measurement of funding (5) Measur
 - b. Responsibilities of the sponsoring employer and Trustees (5) Respon
 - c. How the Sponsor covenant would be factored into the process (5) How

d.	Treatm
ent of funding in a Winding up situation	(10)
e.	The
role of actuarial guidance in such a framework	(10)
f.	Monito
ring mechanism of such a framework	(5)
	(Total 40)

Measurement of funding

[1/4 mark each point, maximum 5]

- Most critical
 - Accounting
 - basis
 - Consistent with financial statements so easier to communicate to external stakeholders
 - Can be a volatile measure for liabilities as market value based in terms of discount rates, and asset values
 - Assumptions are to be best estimate
 - Experience in overseas countries like UK, has been that accounting basis has led to volatile contribution requirements and change in asset allocation strategies
 - Assets at market value
 - Long term funding basis
 - Provides ability to look longer term and smooth out short term volatilities
 - Assumptions may be more subjective in nature
 - Less transparent and more difficult to explain to external stakeholders
 - Assets value to be consistent with liability assumptions and could be market value, a smoothed value or even a discounted notional cashflow value
 - Discontinuanc
 - e basis
 - Assumes scheme closes on valuation date

- understand Easy to
 - realizable value Assets at
 - basis Prescribed
 - consistency across all plans in the country Ensures
 - subjectivity of deciding assumptions by stakeholders Eliminates
 - not fit all in terms of assumptions and lead to unrealistic values in certain circumstances One size may
 - E.g. in different industries, new schemes vs mature schemes, open vs closed schemes
- Legislation will
 - need to address other points
 - mandatory time frequency that funding is measured Will there be a
 - the minimum funding target prescribed to each scheme What will be
 - time period would a minimum level of funding be required to be met Over what
 - targets be formulae based or risk principles based Will funding
 - funding measurements will also need to be within existing tax laws in terms of contributions The level of
 - need to be a maximum funding level for tax purposes also prescribed. One is not prescribed at the moment in India Will there
 - different measurements applicable for different circumstances Will there be
 - scheme may have discontinuance basis E.g. Closed
 - have more of a going concern basis like accounting or long term funding basis Open scheme

Responsibilities of the sponsoring employer and Trustees

[1/4 mark each point, maximum 4]

- determining contributions could be legislated in a number of ways
 - Trustees
 - Employer
 - one party in consultation with the other party
 - and trustees agree funding and contributions
- on impact comes on investment decisions as well
 - investment performance or mismatch can have a direct impact on the funding and contribution requirements
- each party in deciding assumptions
- be a difficult situation as there can be a conflict of roles
 - tasked with ensuring suitable security and adequacy of funds to pay benefits
 - also have matters of financing efficiency, affordability and cashflow priorities for the business to balance
 - prudence desired will potentially be in conflict too
 - usually want a higher return strategy than Trustees
 - also want to balance not introducing volatility in funding levels
- may address which party picks up the cost of conducting funding measurements using professional advisers

The power of

Decided by the

Decided by the

Decided by

Both employer

A similar knock

The

The roles of

This will often

Trustee is

Employer will

The degree of

Employer will

Employer will

Legislation

How the Sponsor covenant would be factored into the process

[1/4 mark each point unless indicated, total maximum 5]

- willingness and ability for the sponsoring employer to commit and meet the financial obligations of the plans is critical to developing funding legislation

The

- This ensures that legislation is also relevant and adaptable to the commercial realities against the background of defined benefit plans's ultimate costs being unknown in advance and being long term in nature
- Legislation will need to establish a framework for measuring the sponsor covenant
 - This is analogous to measuring credit risk
 - Techniques include:
 - Assessment measures like parameters of business outlook and financial metrics
 - For listed companies one can look at market analysts reports and also the implied default risk the market assess through the listed entities issued securities
 - Credit rating agency scores
 - Legislation could define what information needs to be shared by the employer, how these assessments are conducted e.g. independent assessments or internal assessments
- Legislation will need to define when such exercises are required and maybe define exceptions
 - If the scheme is very well funded then less reliance may be placed
 - The scheme is near closure and prospect of further contributions is small or not significant
 - When the sponsor is deemed to be as good as certain (e.g. PSUs)
 - The type of plan and duration of the anticipated plan liabilities and reliance on the sponsor
- Legislation may define how often such reviews /assessments are conducted and if there are any interim trigger points to perform such an assessment [1/2]
- Under what circumstances should the employer be required to automatically inform the Trustees about changes to the sponsor covenant [1/2]
- Guidance could be given in the legislative framework on how contribution and funding plans should be related to the covenant assessments

- Alter pattern of long term contribution requirements based on improving or deteriorating covenant [1/2]
- Consider one off lump sum contributions to improve funding position sooner if funding position falls below a certain level [1/2]
- Changing investment strategy to less risky assets to improve security [1/2]
- Difficult balance of requiring funding of plans to be maintained or improved when a sponsor's covenant started falling and so Trustee requiring additional contributions when a sponsor can afford it less [1/2]
- The funding legislation will need to allow for some flexibility to ensure a fair balance can be achieved between funding requirements and sponsor ability to pay contributions and keep the plan open [1/2]

Treatment of funding in a Winding up situation

[Marks as indicated, maximum 10 marks]

- Would need to possibly differentiate if a plan is being wound up with an employer being wound up or an ongoing employer winding up a scheme [1/2]
- In India, typically a plan is only allowed to be wound up if the employer has become insolvent or ceasing to exist [1/2]
- Winding up legislation would need to define what are the wind up / discontinuance benefits
 - Applicability of vesting [1/2]
 - To include future service or not [1/2]
 - For salary related schemes like Gratuity; whether to allow for future salary growth or not [1/2]
 - For retirees of pension plans if any future increases should be allowed for or not [1/2]
- The base to asses cost of providing these benefits needs to be determined in the legislation [1/2]
 - Operate the scheme as a closed scheme [1/2]
 - Provide equitable interest values to each member to transfer to another plan [1/2]

- Cost of securing benefits with an insurance company [1/2]
 - Currently, some of these options are limited in India due to availability of insurance products and also tax legislation of allowing transfers only in specific circumstances [1/2]
 - Legislation will need to have a provision that on wind up a “debt on employer” valuation is conducted [1]
 - Will need to decide if cost of administration of the wind up will need to be included as part of the assessment or kept outside the scheme (i.e. expenses met from other company assets) [1/2]
 - Gratuity plans would tend to only have employees and insolvency legislation does place employee dues high on the preferential creditors list for insolvencies in India [1/2]
 - Pension plans may have employees and retirees in the plan [1/2]
 - EPS1995 would not be impacted unless the company has an exempt trust [1/2]
 - If there is there is a wind up funding shortfall, how will assets be allocated in order to secure the benefits [1/2]
- An example for India could be: [1]
- Typically applicable only for pension plans, a winding up priority will be need to be defined
 - Insured arrangements are usually first (e.g. secured annuities)
 - Any employee voluntary contributions next
 - Pensioners paid form the fund usually rank next
 - Remainder employees’ benefits
 - One could require an immediate assessment of the investment strategy on wind up. Depending on the approach chosen for securing the benefits, one could define the assets too [1/2]
 - E.g. if insurance buyouts to happen then require risk free bonds [1/4]

The role of actuarial guidance in such a framework

[Marks as indicated, maximum 10 marks]

- of funding measured against regulatory minimum [1/4] E.g. adequacy
 - solvency as defined in the regulations [1/4] Adequacy of
 - target and schedule of contributions adequate to meet minimum requirements [1/4] Funding plan
- such a certification would be required [1/2] How often
- which certifications need to be provided [1/2] Timeframes in
- certificate is to be sent [1/4] To whom the
- the certification [1/4] The format of
- how the certificate should be made public as part of other reporting requirements such as trustee reports, a company's financial statements [1/4] Where and
- certificate is incorporated into the actuarial valuation report. An update to GN18 could be made to serve this purpose [1/2] How the

Monitoring mechanism of such a framework

[marks as indicated, maximum 5 marks]

- the minimum requirements will be measured (annually, triennially?), other triggers for interim measurements such as sales or wind ups [1] How frequent
- would need to ensure that certification and copies of such valuations and their reports are submitted by all schemes [1] A regulator
- where the minimum funding calculations are prescribed as well as assumptions, the regulator's role may be more about adherence to compliance [1/2] In a scenario
- regulations are more principles based, the regulators role will be more involved [1/2] Where the
 - involvement may be:
 - guidance to trustees and employers on interpretations of the legislations to help stakeholders [1/2] Providing

- Intervening in Trustee and employer discussion if required in order to facilitate agreement of methodology, assumptions to meet minimum funding requirements [1/2]
- Reviews of agreed funding plans and schedule of contributions [1/2]
- Facilitating sponsor covenant assessments [1/2]
- Review adequacy of prudence and choice of assumptions to measure funding adequacy [1/2]
- Education of trustees and employers not only to legislation but also principles of the exercise, explaining nuances, actuarial exercises [1/2]

iii)

Set out

key challenges in implementing such a framework

[1/2 mark each point, maximum 5 marks]

- Lack of knowledge on such matters in India
- Education will be the largest issue to employers, trustees, auditors, tax authorities and actuaries
- Policing compliances in such an environment will be difficult
- Except for certain DB pension plans, a very detailed framework may not be necessary
- Current Tax rules in terms of contribution allowances will need to be clarified in respect of DB plans a little more, as the fixed rates currently do not necessarily allow suitably for the nature of DB plans and meeting shortfalls
- This is especially true for DB pension plans currently
- There is also some ambiguity for leave schemes as well
- There will need to be a transition period for a number of years to fully implement the framework
- Employer may object to the additional regulatory burden and associated additional costs
- If a very prescriptive framework is implemented then the challenge will be how that is applicable to different type of companies vs a framework that is more principle based and therefore tailored to each employer's and plans situation
- Challenge with principle based is
 - the variability one gets in practice amongst companies,
 - the effort in monitoring the adherence

Total marks for Q 2: [Total 50]