

# **Institute of Actuaries of India**

## **Subject SA4: Pension & Other Employee Benefits**

### **September 2016 Examination**

# **INDICATIVE SOLUTION**

#### **Introduction**

The indicative solution has been written by the paper setters with the aim of helping markers of scripts so as to have a framework and be consistent while evaluating answers. The solutions given are only indicative. It is realized that there could be other points as valid answers and the marker may give credit for any such alternative approach or interpretation which the marker considers to be appropriate.

**Solution 1:****i] a) Key Purpose and Principles of accounting valuations, and which accounting standards may apply for company's benefit plans.**

The objective of this Statement is to prescribe the accounting and disclosure for employee benefits. Ensure consistency in reporting of employee benefits between companies. Ensure consistency in reporting of employee benefits between year to year. Avoid cost being distorted by timing and fluctuations of contributions/cashflows in and out of the plan. Accounting valuations should be a company's best estimate true and fair view of:

- i) a liability when an employee has provided service in exchange for employee benefits to be paid in the future; and
- ii) an expense when the enterprise consumes the economic benefit arising from service provided by an employee in exchange for employee benefits.

The standards that apply are: Accounting Standard (AS) 15 (revised 2005) issued by Institute of Chartered Accountants, India. The standards that apply are: International Accounting Standards 19 (IAS19) (Revised 2011) issued by International Accounting Standards Board. The aim is to have measurement, recognition and disclosure of the financial impact of the employee benefit plans in company accounts to inform the reader of the realistic costs of the plans. In case of defined contribution scheme the cost is measured by the contributions paid in the year. In case of defined benefits plans, like the Gratuity and leave accumulation plans the cost the company has will be measured as per the project unit method. Assets would be based on a fair value (typically market value). However this is not applicable for this company as the Defined benefits are not funded. The standards mentioned are not for pension/retirement trusts reports but only for corporate enterprises. Principle that formal and informal arrangements that result in an obligation for the company are to be covered.

**[6]****b) List the key outline of what these standards cover**

Scope of the Standard e.g. What type of plans are covered. Plans covered include employee benefits, except share based plans. Definitions of key terms. Classification of short term benefits (e.g. wages), post employment benefits and other long term benefits. Details of how cost should be recognised and measured for each classification of employee benefits. Disclosure requirements of each classification of employee benefit. With respect to post-employment benefits a classification of defined benefit and defined contribution plans. Classification of multi-employer plans. Treatment of State and Insured plans. For Defined

benefit post employment plans:

- Actuarial Method
- Components of the Income statement items for pension cost
- Components of the balance sheet items
- Principles of setting actuarial assumptions

Attribution of liability for periods of service.

Setting of Discount rates

Setting of salary, inflationary and medical inflation assumptions

Treatment of actuarial gains/losses

Treatment of special events such as settlements/curtailments

Treatment of past service costs

Plans assets measurement

Treatment of reimbursement rights

Transitional arrangements on first time adoption

[5]

### **c) Summarise the key difference areas of the standards applicable to the Company**

The IAS19 discount rate basis requires reference to high quality corporate bonds versus AS15 that requires reference to the Central government bond yield.

For this company that may mean setting different rates for the UK leave encashment plan (if the deputees liabilities form part of the UK local reporting financial statements).

The IAS19 pension cost has two differences.

a) actuarial gains/losses form part of the core P&L expense under AS15 (R) whereas in IAS19 it will flow through the Other Comprehensive Income Statement for the Gratuity plan

b) AS15 (R) pension expense will have an interest cost component and an expected return from assets component. In IAS19 there is only a net interest portion that is calculated on the net funded position at the opening of the period multiplied by the opening discount rate.

For the leave plan the P&L item will be the same as it is not funded and the gains/losses are recognised immediate for Other Long term benefits under IAS19 (same as AS15®).

Any plan improvements in AS15 could be recognised in that period just for vested benefits and unvested be amortised versus IAS19 whereby all impact of improvements is to be recognised as a past service cost in that period.

There are expanded disclosures in IAS19 such as:

- Description of key plan risks
- Description of funding policy

Detailed disclosure on quantitative impact of change in key actuarial assumptions.

Disclosure of estimated benefit outflows in future years.

Disclosure of projected benefit obligation reconciliation and actuarial gains/losses to be bifurcated into experience items and change of assumption impact.

[5]

**d)** P&L expense in IAS19 will be less volatile so less surprises than in AS15R. P&L pension expense under IAS19 can be calculated at the start of the year which helps the company planning and making monthly provisions. OCI remeasurements disclosure separated by different aspects of actuarial gains/losses may mean greater scrutiny on appropriateness of assumptions. When reporting under IAS19 for the UK deputies leave accumulation plan, the discount rate is likely to be lower than if measured under AS15R. Therefore the projected obligation will be higher. The Company should consider materiality with its auditor as to whether the same discount rate can be used.

[2]

**e) Define:**

**Project Benefit Obligation;**

Discounted present value of benefits attributed by the plan's benefit formula to past service already rendered by employees, up to the valuation date.

For in service employees this needs to include future pay levels to the time of exit and all types of decrements.

**Current Service Cost;**

This is the discounted present value of benefits attributed by the plan's benefit formula to services rendered by employees during the accounting period. It is measured using an assumption as to future pay levels under the projected unit method.

It is calculated in respect of members/employees present at the start of the accounting period.

**Actuarial gains/Loss:**

Actuarial Gains or Losses may result from an unexpected increase or decrease in either the Present Value of a Benefit Obligation or the Fair Value of any related Plan Assets.

Two most common sources of gains/losses are:

- the experience in the time period has turned out to be different from that assumed
- the assumptions for calculation of the obligation have changed since the last calculation of the obligation

[2]

**ii] "Cost" can be defined in various ways**

There is accounting cost; funding cost; cash outlay from the plan. The ultimate cost of a defined benefit plan is only ever really known when the final benefit is paid to the final beneficiary. For accounting costs, the accrual concept means that costs need to be recognised over the period in which the employee renders service in the organization. For a defined contribution plan, like the company has in UK, the cost for the company is limited to the contributions paid. That is also consistent with the concept that cost is recognised in the year the employee gains that benefit and the employer benefits from the service of that employee in the period. Measuring cost by the benefits amount paid out will lead to fluctuations in cost and not an appropriate recognition of cost through service period of the employee. For example: In the Gratuity plan where payment is a lump sum; no cost would be recognised until the person leaves and then a large lump sum appears in the year of leaving the company. This is also true of the leave encashment. In the leave plan; employees can also avail from their balances whilst in service. This cost also needs to be recognised. There is an impact here due to:

- potential added cost for the company to have replacement resources during an employee's absence
- the avilment cost would typically be based on the CTC ("cost to company") gross salary rather than the encashment that is typically only on Basic Salary. Therefore avilment cost is higher in that scenario.

In the CFO's approach - no avilment cost/impact would get costed for. Funding is about the company's decision on when and how it wants to meet the benefits outlay. The company currently has decided not to pre-fund the benefits for the Gratuity plan or leave plan. The company is adopting a pay-as you go model from company cashflows to meet benefit payments. The defined contribution plan is by definition is funded to a separate arrangement.

[8]

iii] a) The difference is the total of the actuarial loss of 2.5 +1 Cr. It means the IAS19 P&L will be 3.5Cr lower pension cost shown, as the 3.5Cr will go into the OCI.

[1]

b) The PBO at December 2015 will not change as that is based on the membership at 31<sup>st</sup> December 2015. However the P&L items can be looked into altering in the following ways: The existing interest cost may assume the transfer is as at 1 January, It is now in fact 5 months later. This should be double checked and adjusted accordingly. Interest cost should also now include 5 months interest cost of the value of the liability as at 31 December 2014 for those members that transferred later. Service Cost should also now include 5 months for those members that transferred later. If the service cost included all members for the full year then there needs to be a reduction for 5 months worth for those transferring. The transferring liability could be recalculated as at 1 June 2015. The transferring liability could be recalculated as at 1 June 2015. Discount rate assumption for the transfer calculation may be different, as well as the membership that eventually transferred may be different. The transfer amount is taken as a balance sheet transfer and not P&L. The costs for those individuals has been recognised in previous P&L periods already and by removing the obligation it does not mean one effectively reverses all that P&L cost. Before embarking with recalculation, this may need to be checked with the auditor to agree that the impact is material enough.

[5]

c) There are the following areas in which to consider in deciding about funding the gratuity benefits:

Regulations affecting the decision.

Investment decisions and ongoing decisions.

Accounting implications for the company.

Funding decisions

Governance of the Trust

Process of set up

Administration

Employee communication

### **Why fund?**

Sets aside funds separate from the company to meet future obligations so the fortunes of meeting accrued obligations are not entirely dependent on the company's fortunes. Employees feel there is more security in the benefit provision if there are separate assets. If pre-funding is done then the company has the ability to smoothen out contributions, plan and decide funding approach rather than have volatility / variations in timing of benefit payments having to be met

immediately through company cashflows. If the separate fund is tax approved then the company benefits as investment return within the Trust would be tax exempt. The company can take advantage of contributions being tax deductible. This not entirely an additional tax benefit as benefit payments (if company not funding) are also tax deductible. However, pre funding means that the tax deduction to the extent of the contributions are obtained earlier and, again, not dependent on the timing of benefit payments. In India, under Income Tax rules, 8.33% of total wages, as a contribution, can be paid as contributions into a gratuity Trust as a tax deductible expense. If the company is already paying low corporation tax or is tax exempt (like in a SEZ, or sunrise industry) then the tax benefit is less advantageous.

### **Accounting Implications**

In a funded plan, under IAS19 the net interest cost will fall (to the extent of the total assets multiplied by the discount rate), thereby reducing the P&L expense.

*An example of the above based on the actual question data to illustrate the point.*

Under AS15R, the P&L expense will fall to the extent of the return on plan assets obtained during the year. The CFO should be aware that IAS19 and AS15R P&L items will diverge at different times. Assuming same assumptions comparison of the P&L expense for IAS19 and AS15(R): if plan in surplus and  $DR > EROA$  then expenses lower in IAS19

if plan in surplus and  $DR < EROA$  then expenses higher in IAS19

if plan in deficit and  $DR > EROA$  then expenses higher in IAS19

if plan in deficit and  $DR < EROA$  then expenses lower in IAS19

Under AS15R, any variance in asset returns compared to the expected rate of return will lead to volatility in the P&L item through actuarial gains/losses on assets.

### **Structure of setting up and managing the Fund**

To obtain the tax advantages, the separate fund must be set up as an irrevocable trust and get tax approved status for the same under Fourth Schedule under the Income Tax Rules. The key requirements are as follows: Record the company's decision of setting up the trust. Draft Trust Deed and Rules. Appoint Trustees.

Decide how the Trust funds are going to be invested

Put the requisite administration in place for the Trust: e.g. bank account, accounts, benefit payments, tax filings, contribution payments / investments, trustee meetings take place.

### **Role of Stakeholders**

The Company and Trustees will be key stakeholders. The Trustees' role needs to be specified in the Trust Deed. It should also indicate which areas they are permitted to decide themselves, versus act on instruction of the company versus act in consultation with the company. Trustees will be largely concerned with ensuring that the funds in the plan are sufficient to meet the

obligations. Trustees will discuss the approach of funding / contribution strategy with the company keeping in mind the funding levels and also covenant of the company. Often in India, Trustees are also officers of the Company and so there are core conflicts of interest that can emerge in matters of funding and investment strategy decisions. The CFO would often be a key individual who will be in that position and will need to manage the conflict of interest carefully. The Company will want maximum influence on the way the fund is managed. This is easier in India as there are very limited regulations/requirements on such trusts/trustees. However, a Trustee will be liable for core compliance risks and any known misappropriation of funds and will need to have suitable governance in place.

### **Funding**

A key decision will be the funding strategy/contribution strategy.

The CFO should obtain a projections related to how the DBO will evolve, given different scenarios and the business plans, say for 3 to 5 years.

Such projections should also include impact of future new entrants/growth and changes in business structure. The company can then decide what level of funding it wants to aim for over what period of time. There are the annual ongoing contributions plus past service contributions. Past service contributions are to build the fund for benefits already accrued. Income tax rules allow past service contributions tax deductible of 8.33% of wages for each past year of service. Companies would typically amortise the past service contributions over a few years. The company will also need to decide how often it should obtain funding valuations. There are no mandatory requirements in India for these. The funding decision and contributions will not directly impact the accounting costs under AS15R and IAS19.

### **Investments**

Two options exist in India: Self administered investments or external insurance based funding arrangements. Self administered investments need to adhere to the Ministry of Finance investment pattern that is a combination of Government Bonds; Other fixed interest and upto a 15% of contributions permission for equity exposure. Insurance based funding arrangements again have product options: either traditional products that provide a capital guarantee and stable returns or unit linked products that give greater investment flexibility but also are therefore market related and introduce an element of volatility/uncertainty. The company should only consider self administered investments if it has the expertise and infrastructure to choose, execute, monitor and administer the securities on a day to basis. There are also more complexities in doing the trust's financial statements accounting of these. Insurer managed arrangements are simpler. The CFO should also consider a asset liability analysis to ensure that the nature, terms of investments are suitable for the obligations that may evolve. If investing in more volatile arrangement may mean more volatile AS15R expense and also having to review

contribution requirements more often. If investing in more volatile arrangement may mean having to review contribution requirements more often.

[16]

[50 Marks]

### Solution 2:

#### **i) Reasons for offering benefit improvement:**

1) Growing surplus in Scheme B: The scheme is in surplus. The surplus has moved from 30 million to 40 million over the period of 2 years. The Company XYZ may be considering the use of growing surplus. They may be having the right on the surplus, especially when the scheme is fully funded and the members' contribution is limited to 3%:

2) Improvement in benefits may be the best choice of using surplus: as it strikes balance between the objectives of the company XYZ and its employees. For instance

- ✓ Increase in the death benefits and/or pension benefits will be understood & appreciated by the employees. The proposal may help to retain workforce and attract the new talents.
- ✓ If the present benefit package of the company is below industry level, improved benefits may place the package at par with or better than the package offered by the competitors in the industry.

3) Disadvantages of other options:

- There may be tax disadvantages of claiming refund( eg tax on the refund)
- Members' contribution is just 3%. Small reduction in contribution may not be appreciated by the members. It may be difficult to increase the contribution rate of members in future, if the circumstances warrant.
- Contribution Holidays or reduction in company's contribution by the Company temporarily may not be appreciated by the employees. It may be possible that the employees may demand for increase in wages in that case.

4) Other reasons:

- The company might have taken cautious approach while fixing the benefits at the time of introduction of the schemes. Looking to the experience of all these years the company may want to enhance the benefits to a reasonable level.
- There may be demand for enhancement of benefits from employees, particularly looking to the surplus available in the fund.

[4]

**ii] a) financial implications of proposal a:**

Scheme B is offering (final) Salary based pension benefit to the members where accrual rate is presently 1% for each year of service. It is proposed to increase the accrual rate to 1.25%, i.e. an increase of 25% in benefits.

It is not clear whether such increase is proposed prospectively or retrospectively.

Assuming members join at age 25 and retire at 60, the increase in pension benefits expressed as a % of salary will be (assuming increase is retrospectively):

Increase in pension benefits due to	Age 30	Age 40	Age 55
Past service	1.25%	3.75%	7.50%
Future service	7.50%	5.00%	1.25%
Total increase	8.75%	8.75%	8.75%

Following observations may be made from the above:

- Lower the age of members, lower will be the increase in accrued benefits and higher will be the increase in prospective benefits. Similarly higher the present age, lower will be the increase in prospective benefits.
- If proposed increase is given with retrospective effect, all the employees will be benefited but if the increase is given prospectively, then older employees may get smaller benefit.
- Since spouse pension in case of member's death while in service is already at 1.25% accrual rate, there may not be any increase in such benefit. (Though there is a separate proposal for increasing this benefit also)
- Similarly there will not be any increase in benefit for those who leave by resignation before 5 years service.

Employees resigning after 5 years of service will get increased deferred pension (or transfer value) depending the number of years of service in the scheme.

The surplus in 2013-14 was 2.03% (=30/1480) which increased to 2.29% (=35/1530) in 2014-15 and to 2.59% (=40/1545) in 2015-16. If the accrual rate is increased from 1% to 1.25% retrospectively, then the liability may increase substantially (say, 20-25% depending on the distribution of vested benefits of active members & the attrition/mortality assumptions used in valuation). The scheme may therefore come under the risk of turning into huge deficit immediately.

The present surplus has probably been built up over a number of years. If we allow investment return on surplus, then the increase in surplus in 2014-15 & 2015-16 may be just 2-3 million which is just 0.14% ( $=2.5/1788$ ) of pensionable pay, where 1788 million is the total pensionable pay of scheme B employees.

The recommended rate of contribution is 13% (inclusive of 3% by employees) of pensionable pay which is generating about 0.14% of pensionable pay as surplus. Hence if 12.86% is being contributed, then it might not generate any surplus from contributions on present valuation basis. If accrual rate increase from 1 to 1.25% is implemented prospectively, then it may need a contribution of 16% ( $=12.86 \times 1.25$ ) in future on current valuation basis. If contribution remains at the same level, then the scheme may come under deficit even if the increase is implemented with prospective effect.

Above analysis is made on the limited information provided in the question. More detailed analysis may be done from information available in the valuation reports of the scheme actuary.

For example, from the assumptions used in the reports, we may find the strength of the assumptions used in valuation and their contribution to surplus. Also the analysis of surplus may reveal which of the factors have been contributing surplus and whether they are permanent or temporary.

Present surplus is quite small (2.59%). The cost of a final salary pension scheme depends on a number of factors such as:

- Future Salary increases (e) of the employees as compared with the investment return (i) earned by the Scheme. If the gap between i-e) narrows or turns negative, the cost will increase.
- Changes in the annuity rates – increasing purchase price quoted by the insurance companies will likely to escalate the cost.
- Changes in the membership profile caused by scheme experience. For instance if members are allowed to join at higher ages than assumed in valuation, the cost will increase.

We may therefore not be sure on the present surplus status of the scheme if the proposal is considered.

The financial implications will be aggravated further due to capping the members' contribution to 3% of salary.

[10]

**b) Financial implications of proposal b :**

For Group A members, the company is offering a Defined Contribution (DC) scheme. The cost to the Company expressed as a % of salary is presently known to the company. The proposal b introduces minimum guaranteed pension of 10% of pensionable pay which will make the scheme as a hybrid arrangement.

The cost of the guarantee will depend upon the pensionable service, salary progress of the members till their exit, investment return during accumulation period, and the annuity rates prevailing at the time of exit.

For example, the present value of pension of 10% of pensionable pay of Rs. 1.5 lakh per month for an average member aged 50 (with the assumption of salary increase 6% , investment return of 8%, annuity purchase price of Rs.10 per Re.1 pa) will be around 14.93 lakh (=  $0.10 \times 1.5 \times 12 \times 10 \times ((1.06/1.08)^{10})$ ).

The existing members will have some accumulated fund. Further the present value of future contributions of 13% of pensionable pay for the average member will be Rs. 21.14 lakh (=  $0.13 \times 1.5 \times 12 \times \text{annuity certain for ten years @1.8868\% rate}$ ). Thus the accumulated fund at normal retirement will generally be more than the purchase price for an average member. Hence the guarantee may not be onerous for an average member if the guarantee applies in case of normal retirement.

The proposal to guarantee pension as 10% of final salary is probably irrespective of the pensionable service put in by the member. The guarantee may be onerous in case of exit of a member during initial years.

There is also no clarity whether the guarantee will apply in case of normal retirement and death or disablement or it will also apply in case of resignation also.

If the guarantee applies in cases of resignations and that too without any minimum pensionable service, then the guarantee may be too onerous.

The guarantee may not be onerous for members retiring at NRA unless the salary hike is too high particularly during last few years.

The guarantee may also not be much in case of death and disablement as such cases will be very less in number.

[5]

**c) Financial implications of proposal c:**

Death benefits are contingent in nature. The cost of death benefits is dependent on the death experience of members under the schemes. Insurance solutions are available to provide generous death benefits at a small cost. Competition in the insurance market helps to keep the cost low.

Company will already be having an arrangement (eg insurance) to provide death benefit under Scheme A. Enhancing the death benefit under scheme A will cost 50% more to the company as insurance cover is proposed to be enhanced by 50%.

However, as the company is already providing this benefit for a number of years, the additional cost, to a great extent, can be known easily.

Average age for scheme A members is 50 and their average salary is 1.5 lakh per month. Assuming they all are managerial employees experiencing 100% of AM 92 mortality, the cost of providing an additional cover of 5 times annual salary to an average employee will be of the order of 1.25% of salary ( $=0.002508 \times 5$ ).

Coming to scheme B, the employees presently have spouse pension of 1.25% of pensionable salary for each year of accrued service at death of the employee. The percentage of spouse pension increases with each additional service of the employee.

The spouse pension under the proposed change will be based on total service of employee till NRA and therefore the percentage pension will remain the same throughout the service of employee. For example, if an employee enters at age 24, the spouse pension in that case will remain unchanged as 45% of pensionable pay ( $=(60-24) \times 1.25\%$ ).

When this person reached at age 30, he will be entitled to spouse pension of 7.5% ( $=1.25\% \times (30-24)$ ) of pensionable pay under existing rules whereas under proposed rule he will be entitled to 45%. So in his case enhancement will be to the extent of 37.5%.

On the other hand when this employee reaches at age 56, his entitlement under current scheme will be 40% ( $=1.25\% \times (56-24)$ ) and hence the increase will just be 5%.

Thus for scheme B employees, the increase in benefit under proposed change will be higher for younger employees and will be lesser for older employees.

However, as this benefit will be available on death while in service, the cost for the same increase will be lower for younger employees.

Assuming employees in different age groups i.e. 25-35, 35-45 & 45-60 are evenly distributed , then the average age of group B comes to around 36  $(=(28 \times 30 + 11 \times 40 + 8 \times 52.5) / 47)$ . And the cost of proposed increased cover for an average employee will be around 0.42%  $(=((60 - 36) \times 0.0125 \times 13 \times 1.5 \times 0.000724)$ . This is on the assumption that scheme B group experiences 150% of AM92 mortality and annuity factor for spouses of deceased members is 13.

[7]

iii) The cost of guarantee under the proposal will arise, if the value of guaranteed pension is greater than the value of accumulated contributions under the DC scheme at the time of member's exit.

Stochastic models use cash flow approach to determine the cost.

Since the size of the scheme is small, the entire membership data may be used to project cash flows.

The interest rates earned on the funds during the active membership will be the underlying factor in the cost and it is appropriate to consider it as a stochastic variable.

The distribution chosen for the variable should reflect the investment performance of the assets backing the DC funds. The volatility assumptions for asset categories should be based on historic performance of the underlying assets with allowance for future changes.

Model should take into account the correlation with other parameters eg salary inflation, bond rates underlying the annuity rates.

Other parameters such as decrements (i.e. resignation, death, disability etc.) during active service, post retirement morality etc may be set on deterministic basis.

Cash flows will be projected preferably on month to month basis over the period up to NRA. The cash flows include corpus at the beginning rolled over, contributions, benefit payments during active period, the pension payments

Large simulations (say, 10000) of cash flows may be required to get reliable results.

Stochastic projections will produce the distribution of the cost of guarantee of the proposal.

The mean value of the distribution can be taken as the cost along with tails with the desired probability.

The results can be tested by varying the several factors to understand the sensitivity of the cost. Eg 20% increase in annuity purchase price; 5% improvement in longevity of pensioners etc.

[7]

iv) The investigations of the Scheme Actuary on the movement of surplus will cover the following aspects:

Reconciliation of movement of assets between the years to quantify the surplus arising during the year and to understand the factors causing the surplus:

- The process involves accumulating the assets at the beginning of the year with the expected return up to the end of the year.
- Ensure allowance is given for the cash flows such as contribution paid into the scheme and the benefits paid out, the timing of such cash flows. Excess of the assets at the end of the year over the assets at the beginning rolled up using the expected return after allowing for the cash flows during the year s will be the “surplus arising” during the year from the assets.
- Verify that all assets are included in the process;
- Verify that contribution paid into the scheme is in line with the recommended rate.
- Verify that the earnings in assets is accumulated up to the valuation date (eg fund statements given by the insurers usually reflect the position as at the end of the financial year; this has to be rolled up to the valuation date).
- Verify the reasonableness of the provisions made for NPA, expenses ,etc)
- Outperformance of assets will be the primary source of surplus arising from assets.

Similar analysis is to be made on the value of benefit obligations to quantify the “surplus arising” and to understand the factors causing surplus:

- The process involves rolling up the value of liabilities at the beginning by the discount rate. It should take into account the cost of additional service put in by the members during the period and the offset caused by the investment return earned on the assets. The excess of the rollup over the value of liability at the end of the year will be the “surplus arising” on the benefits side.
- Examine the causes of “surplus arising”
  - ✓ Are the benefits paid out are in line with the benefits valued?
  - ✓ What is the actual withdrawal experience of the scheme? Are they in line with the assumptions made in the valuation?
  - ✓ Does the age /salary distribution remain stable or the changes in the profile cause surplus;

- ✓ What is the strength of the basis? Does it cause surplus? -measure the surplus /deficit caused by the change of basis by running the valuation program both with old basis & revised basis.
- ✓ Check the correctness of the data used in the process; examine the data & consistency checks used in the valuation & examine whether the data error is a source of surplus.

**Considerations to be made by the Trustees:**

The investigation into the ability of the fund to continue to generate surplus over the future period should also take into account the continued ability of employer to finance the scheme, their powers to amend the rules of the Scheme.

If the fund is able to generate surplus sufficiently over the period to ensure the security of the vested benefits under all the foreseeable circumstances, there is a case for considering the proposal of the employer. Being the principal sponsor, he will be having strong claim over the surplus.

Trustee may take into account the alternative actions that may be taken by the employer if their proposal is not considered – for eg. Contribution Holidays will shift the surplus from the fund to the employer.

Can consider other options, eg partial use of surplus; smaller increases to the pension benefits; etc.

They should consider the Trust rules, funding objectives stated in the document, power to amend rules, discretionary powers in using surplus etc.

The Trustees should also strike a balance between the need to protect vested benefits of members & the Employer's reasonable claim over the surplus.

**The Reporting** should take into account the Professional guidelines given in APS 18.

The report addressed to Trustees must be confidential in nature. The report must specify the objective of the exercise, i.e. impact of the decision to use the surplus, on the security of the benefits.

It must specify the documents and data used in the investigation, checks made to ensure the reasonableness of the data.

It must explain the investigations made into the surplus of the scheme; the approach used in the process such as reconciliation of movements, assets & benefits over the period, cash flows taken into consideration.

It must specify the basis used in the investigation; if the basis used is different to the other documents, eg Valuation, explain the rationale for using different basis.

The report must include analysis of surplus by dissecting the surplus into its components viz investment, resignation, changing basis, benefit payments etc.

If any unidentified surplus is significant, it must be included in the report.

Sensitivity results illustrated should help the Trustees to understand the significance of the factors tested on the Scheme surplus to enable him to take a decision.

Indicate the several options available to the Trustees in considering the proposal and the merits of considering each of the proposals.

The report should include the safeguards to be considered by the Trustees to protect the members' interest and the need to maintain professional standards while discharging their role.

#### **Summary of Recommendations:**

In view of the investigations made it will be clear that the current surplus is small and is vulnerable to a number of factors. It is therefore recommended as under:

- Increase of accrual rate from 1 to 1.25% for Group B employees may neither be desirable retrospectively nor prospectively as it may push the scheme into deficit immediately.
- For Group A employees a guaranteed pension of 10% of their pensionable pay may be offered for those employees retiring at NRA (with some minimum service, say 5 years) as well as in case of death or disability while in service. It may not cost much but will have some additional cost.
- Lump sum death benefit for Group A employees may be increased but will increase the cost to the level the increase is provided.
- For Group B employees the spouse pension may be increased in case of death while in service as it may not cost much and will be appreciated by young employees.

[17]

[50 Marks]

\*\*\*\*\*