

Institute of Actuaries of India

Subject SA2 – Life Insurance

May 2014 Examination

INDICATIVE SOLUTIONS

Introduction

The indicative solution has been written by the Examiners with the aim of helping candidates. The solutions given are only indicative. It is realized that there could be other points as valid answers and examiner have given credit for any alternative approach or interpretation which they consider to be reasonable.

Solution 1 (i):**(a) Valuation rate of interest**

Strengthening the valuation rate of interest increases the statutory mathematical reserves.

The emergence and distribution of surplus on statutory basis thus gets deferred.

As the discount rate used for calculation of embedded value generally is more than the assumed investment return on underlying assets the delayed emergence of surplus has an effect of reduction in the embedded value of the company

The extent of impact depends upon factors including:

- Margin between the assumed investment return and the discount rate used for calculation of embedded value
- The proportion of annuity business to the total business written in the with profit fund
- The proportion of surplus distribution to the shareholder. For example if the business is written in 0:100 fund the impact is likely to be higher whereas if the business is written in 90:10 fund the impact is likely to be lower.

Here the annuity business is written in 90:10 fund so the impact would be relatively small reduction in the embedded value if the company increases the asset share by the present value of future surpluses arising on embedded value basis or calculates realistic policy liabilities using this amount. The change in the statutory valuation rate of interest would have no impact on the embedded value if the value of annuity business is included within the valuation of the free estate by calculating a realistic independent basis liability directly.

[4]

(b) Mortality assumption

If the strengthening of mortality basis is solely due to more prudent margin for adverse deviation, then the impact on embedded value is same as for the strengthening of the valuation rate of interest.

However if the strengthening is on account of change in the underlying expected future mortality of annuitants then the assumption used in the embedded value calculation should be reviewed and updated mortality assumption should be used in the calculation of embedded value in future.

The updating of mortality basis in such a way has the effect of reducing the embedded value of around 10% as the annuity business is written in 90:10 fund with 10% share going to the shareholder.

However, if the available free assets of company A are not sufficient to cover the increase the reserves as a result of strengthening the mortality basis then contribution from the shareholder's 0:100 without profit fund would be needed which means that the impact on the embedded value would be significantly higher.

[4]

(ii) :

The company would be carrying out experience analysis on the parameters which are to be used in calculating embedded value. The experience for sufficiently long past years needs to be considered to ascertain whether there has been a sustained period of significant variation in experience or whether the variation is just one off.

The data used in the analysis should be large enough for obtaining credible results. The statistical significance of the results would be considered. If the random variance does not imply that the underlying experience has worsened the company may not want to change the experience assumption.

The experience assumptions used for embedded value calculations should be a realistic estimate and representative of the future experience. The company, before making any decision, would therefore take into account the trend in experience. The company would also consider if there have been one off events e.g bad publicity etc. which are not likely to be repeated.

Persistency should be investigated by in-force duration to ascertain if there are any trends of policyholders surrendering their policies after a certain period. It is possible that business written in different time periods may be subject to different policy conditions which may in turn lead to different persistency experience.

While setting the assumptions the company should also consider the ability and willingness of the management to initiate necessary steps to improve persistency.

If the company has decided to update the experience assumption to be used in the embedded value calculations it should also consider the financial impact and the ability of the company to absorb it and the ways to solve this. An adverse impact in one year's experience is likely to have a much more significant impact if capitalized through a change in assumptions.

The change in the experience assumption may be effected by the company if it reflects the future experience it should consider the perceived impact on the stakeholders and hence the manner in which it communicates the rationale of such change.

The change in persistency experience may have impact on other areas of operations of the company and hence the frequency of carrying out the experience analysis need to be fixed by the company.

[7]

(iii) :

In a traditional embedded value, best estimates of each element of future experience that will affect the transfers to shareholders, *eg* investment returns, claim and lapse rates, expenses are normally made. It then discounts the estimated future transfers at a single discount rate to the balance sheet date, to give the shareholder value.

The company may use one or both of the following:

- including risk margins in each of the estimates of future experience
- including a margin for risk in the discount rate applied to the estimated future transfers.

The margins should have regard to the uncertainty attaching to each element of future experience and the risks of the business.

The discount rate thus reflects the return required by the shareholders, allowing for the appropriate level of risk. The margin within the discount rate must implicitly cover market risk, insurance risk, operational risk and any other risks not explicitly allowed for elsewhere.

The investment analyst has a point as a single discount rate throughout has its own limitations. Further it assumes that all products and the cashflows in projections have the same level of risk. In practice however these may not hold. An explicit risk margin may to an extent mitigate the risk, but these margins would be subjective.

The company may more appropriately use risk-adjusted discount rates, by product type or type of cashflow. Stochastic model which uses calibrated risk-adjusted discount rates may also be alternatively used.

The company may have guaranteed benefits payable at maturity or on death or may have onerous options of guaranteed nature. The traditional embedded value method allows for the cost of such guarantees to the extent that the guarantee is expected to bite on the deterministic investment assumptions.

In low interest rate scenarios the guarantee might exceed the asset share and thus the expected mean cost of the guarantee, across a range of possible future scenarios, would not be zero. The traditional market value does not appropriately allow for the the market risk inherent within writing these guarantees and options.

The company may use sensitivity checking or value options and guarantees by using stochastic model. Using a stochastic model enables more sophisticated modelling of management and policyholder actions.

If the cost of guarantee can be met from within the with profit fund the impact on the shareholder transfer may be around 10% of the cost. If however the cost has to be met by the shareholders the impact on shareholder transfer may be significantly higher.

[11]

(iv) :

- The legislation requires that the regulator must approve such a transfer.
- No business shall be transferred from one insurer to another, or amalgamated with the business of another insurer except under a scheme of transfer and amalgamation which has been approved by the regulator.
- The scheme must set out the terms of the agreement under which the transfer or amalgamation is to be effected.
- The insurance companies must lodge such documents as the regulator may specify, including
 - up to date accounts
 - actuarial valuations
 - report on the scheme by an independent actuary
- The regulator should have the power to require that details of the scheme of transfer or amalgamation be available for inspection, be published in the press, or be provided to every policyholder affected by the scheme.

- Any affected policyholder should have the right to be heard by the regulator on any concerns or objections.
- Reasonable time must be allowed for the completion of all the formalities and for proper scrutiny of the scheme by policyholders and the public before the regulator approves the scheme.
- On completion of the transfer and amalgamation the insurers should provide reports, certificates or other documents to show that the process has been carried out in accordance with the scheme as approved.
- The amalgamation may be to rescue an insolvent company. This can be in the public interest even if policyholder benefits have to be reduced. For this reason the regulator needs the power to approve the scheme in certain circumstances even if policyholder entitlements are adversely affected.

[6]

(v) :

The company A would merge all of the without profits business of Company B into its 0:100 Non Profit Fund and is thus purchasing the entire profit that is expected to arise on the without profit business of company B. A separate with profit fund within which profits are shared between policyholders and shareholders in the ratio 90:10 would be created in company A account books for the with profits business of Company B which means that the company A is purchasing one ninth of the cost of future bonus to be declared on with profit business of company B .

Company A should also consider the deteriorating solvency position of company B. The solvency ratio of company B has declined from over 200% to 181% in less than 3 years and the projection for next three years show significant decline in the solvency ratio to 155%.

The statutory solvency ratio being a minimum of 150%.it appears that and a possibility of company B breaching this limit requiring infusion of capital should be a serious concern for company A and obviously should be factored in while pricing.

For without profit business assuming that Company B specific policy data and other relevant information are available Company A would build a detailed cashflow model of all of Company B's existing without profits business.

The model should allow for all of the future cashflows on the business, including all incomes and outgoes contingent or otherwise.

The income includes premium receipts, the investment returns expected to be earned for each asset class and the asset mix backing each block of business and the outgo includes death ,surrender, lapses, future expenses, taxes on investment income and profit arising. It should also consider the statutory reserves, solvency margin, options and guarantees etc.

Even if the full data is available the model building may require use of approximations. Depending upon the time available and the cost involved the company may use model points or would build and run the model using full data.

For the with profits business, asset shares need to be modelled. The modelling would include premium receipts plus investment returns, allowing for deaths and surrenders, expenses, other charges and deductions etc. and would be compared with the guaranteed benefits under each contract (sum assured plus vested bonuses). Assumptions would be required for the future bonuses expected to be declared on the with profits business. These asset shares would then be projected, for the likely shareholder income from the with profits business.

The shareholder income would be 1/9 of the cost of projected regular bonus and the terminal bonus on statutory valuation basis. Distribution of estate to with profit policyholders also need to be considered for 1/9th share.

The assumptions to be used in projections would use company B data and experience investigations and company A's likely future experience post merger and would probably start from best estimates erring on the prudent side.

The projected shareholder profits would then be discounted at a risk discount rate which should reflect the required return on capital of Company A shareholders taking into account the inherent level of risk within Company B.

The company should also consider if there are other willing buyers thus introducing possibility of company A paying higher purchase price than the embedded value.

As the Company B is closed to new business, Company A is unlikely to use the brand name of company B and hence may not consider any payment for goodwill.

Company A is also likely to consider the cost of transaction, the legacy issues and may take advice from external advisers in arriving at the amount to be offered for Company B.

[10]

(vi) :

The company needs to consider the pricing basis for each merged fund. If the combined cashflow is positive the fund will expand and thus the new fund should be priced on an offer basis. If the combined cashflow is negative the fund will contract and thus should be priced on a bid basis.

This decision may depend in part on the compatibility with systems that will be used by the managers of the underlying investments and all the underlying policy administration systems capturing unit movements.

The merger of funds may cause a change in basis for one of the premerged funds this introducing discontinuity in the price of units. The company may decide to implement the change in pricing basis in one go or may smooth it over a period of time. The company also needs to consider how to communicate this to stakeholders.

Companies A and B might have priced funds at different times of day. So the company needs to consider at what time the combined fund would be priced.

Further the companies might have been adopting different practices on surrender or switching in that such policyholders receive the previous day's price or the next day's price. Where there was a difference in approach requiring a change post merger it is important to consider whether the merged company has the freedom to make such change in the timing practices and the procedure for it.

The number of units allocated to the affected policyholders may be altered to ensure that the value of each individual's holding remain unaffected by merger.

It may be possible that before merger one fund had capital loss and the other fund had capital gains which may mean that the tax assumptions for pricing of funds may need to be reviewed.

Similarly the likely rate of turnover of assets may or not be similar to one of premerged funds and will depend on the active investment management. It is important as it will impact the assumption regarding discounting of the tax liability on unrealised capital gains/losses.

The merger company may have to update the valuation of some assets, e.g. property, if it has been decided that for the merged funds the valuation would occur more frequently than the most recent valuation at the date of merger.

Location of merged company and the proximity to other relevant teams e.g. the investment management team may also be an important consideration.

It may be possible that one or both of the companies may have outsourced its unit pricing calculations. The merged company will have to develop in-house capabilities or continue with the outsourcing.

[8]

[Total Marks-50]

Solution 2 (i) :

IRDA (Non-Linked Insurance Products) Regulations, 2013 lays down the structure around the Non-linked Variable Insurance Products (VIP).

Following are the regulatory considerations that need to be taken into account while designing the Non-Linked Non-participating Variable Insurance Product (VIP):

- **Death Benefits: following death benefit option may be offered**
 - a) The sum assured as agreed in the policy plus the balance in the policy account or
 - b) Higher of the sum assured as agreed in the policy or the balance in the policy account
- In either case, the sum assured shall be at a minimum consistent with the provision stipulated in accordance with Regulation 5 of IRDA (Linked Insurance Products) Regulations, 2013
- **Maturity Benefit:** Minimum maturity benefit shall be at least equal to the balance in the policy account.
- **Interest rate declaration:**

The Variable insurance products shall have a:

 - Guaranteed non-negative interest rate, referred as minimum floor rate (MFR) and
 - Non-negative additional interest rate (AIR), which is over and above the minimum floor rate, to be accrued at various points in time as approved in the File and Use clearance accorded by the Authority.
 - **Non- negative residual additions**, if any, shall be credited to the policy account in order to meet the maximum reduction in yield as stipulated in IRDA (Linked Insurance Products) Regulations, 2013 at the end of each year starting from policy year 5. Such non-negative residual additions shall be determined as:
 - Gross Investment Yield earned in the shadow account at the end of each policy year less actual yield earned in the policy account value, at the end of each policy year less yield referred in the reduction in yield at that duration

- This minimum floor rate, as approved in the File and Use clearance accorded by the Authority shall be guaranteed for the entire term of the policy accumulating on the balance of the policy account;
- At each interval, after the minimum floor rate is credited, the non-negative additional interest rate shall be credited to the balance of the policy account value.

➤ **Policy Account Value:**

- Every variable non-linked insurance policy shall have a corresponding policy account whose balance shall depict the accrual to the policyholder. The policy account shall be credited with premium net of charges. The guaranteed rate and variable interest rate shall be applicable to the balance of the policy account.
- Shadow policy account value shall be maintained on a daily basis.
- The policy account value shall comply with the maximum reduction in yield requirements as stipulated in IRDA (Linked Insurance Products), Regulations, 2013.

➤ **Charges, Reduction in yield, Discontinuance Terms, Surrender Value, Partial withdrawals and Top-ups:**

- All the provisions applicable to variable linked insurance products in accordance with the IRDA (Linked Insurance Products), Regulations, 2013 shall be applicable to the non-linked variable insurance products for charges, reduction in yield, discontinuance terms, surrender value, partial withdrawals, top-ups etc.

The major non regulatory considerations are:

- Purely from like to like comparison vis-a-vis other lines of business, the product offers a reasonable value proposition to policyholders arising from underlying guarantee on the fund.
- The attractiveness of the product to the policyholders shall depend on the absolute guarantee and how long the guarantee is offered. While the MFR can be a single guaranteed rate applicable on the account value throughout the policy period, the requirement around AIR is that the same has to be defined at the outset and need not be same percentage or absolute amount through-out the period.
- Flexibility in defining the AIR may help the company in enhancing the marketability of the product However; this has to be considered carefully along with the management of guarantees embedded in this product in the form of MFR.
- Optimal balance need to be maintained between the marketability of the product (with higher guarantee) and management of same within risk mitigates available and risk appetite of the company.
- Given the cap on charges, it may not possible to offer similar commission as in other Non-Linked products. Hence distribution channels which are more or less adapted to high remuneration may not be suitable for distributing this kind of products.
- However, given the perceived ease of sale, transparency offered in this product and relatively higher average premium compared to other Non-Linked products, the product may find some space in orthodox channels as well.
- Discontinuance of premium and surrender are the keys options for the policyholders in this product. The risk arises from exercising such options can partially mitigated by level and timing of the charges and expenses; and also the asset mix backing the liability of the product.
- The product design should take in to account the IT and operational issues arising maintaining shadow accounts. A single shadow account at policy level may not be sufficient to comply with the above regulatory requirement given the underlying complexities of quantifying and meeting the RIY regulation.
- There could be other IT and operational challenges stemming from managing discontinuance fund and how to allow for various movements in and out of the fund.

- Given the cap on charges, the Profit margin in this product is likely on the lower side compared to other Non-Linked products and at the same time the capital requirement is higher than the Linked products (where cap on charges apply). The profit margin may come under additional pressure from the fact that regulation doesn't permit levying a guarantee charge to reflect the cost unless the guarantee is 4% pa throughout the policy term. In such case, the cost of guarantee has to be met from other charges which are subject to various caps as defined in the regulation.
- Hence, it is important to estimate the incremental volume expected from the business so that the absolute margin for the overall portfolio is protected. In case of additional requirement of complying with certain internal target profit margin, consideration should be given to how to achieve the margin and possible alteration in the planned business mix.
- The projected P&L and Capital requirement should be drawn up to assess the impact of the product on both the earning and capital.
- All these should be evaluated against the existing business plan so as to enable appropriate management action to steer strategic objective of the company
- The feasibility of the product should also be assessed against any other internal benchmark that the company might have.

[12]

(ii) :

- As per the IRDA (Non-Linked Products) Regulations, 2013, the assets backing the liabilities of the product should be earmarked separately. Given this is a Non- participating Variable Insurance product the exposure norms for regulatory purpose would be driven by the broad classification as in Regulation 3a of IRDA (Investment) (Fifth Amendment) Regulations, 2013 and as detailed in Regulation 4
- All fund of life insurance business, one year renewable pure Group Term Assurance Business and non- unit reserve of all categories of Unit Linked life insurance Business have to be invested in the following manner:

Type of Investment	Percentage to total funds
Central Government Securities	Not less than 25%
Central Government Securities, State Government Securities and other approved securities	Not less than 50% (including above)
All other investments including Approved investments and other investments	Not exceeding 50%
Other investments	Not exceeding 15%
Investment in housing and infrastructure sector	Not less than 15%

All these investments will be subject to the exposure norms defined in the regulations.

- Although there is no specific restriction which is applicable to the ear-marked fund of the VIP product, the overall exposure norms as detailed in grid above should be adhered to, including other regulatory considerations.

The investment strategy should be decided within this overall framework and seek to optimise the return to the policyholder subject to the constraint of maintaining the financial strength of the company.

- The factors that can be considered while framing the investment strategy for the VIP fund
 - The investment objective which is influenced by the nature of the liability- to protect the underlying guarantee, while supporting higher payouts over longer time horizon
 - The Strategic Asset Allocation(SAA) which in turn depends on factors like –investor’s risk tolerance, time horizon and benefits from diversification
 - The exposure in corporate bond which in turn would depend on the current and projected credit spread vis-a-vis equivalent risk free bond, the credit rating and possible default risk, the competitive pressure to improve the upside of the expected return and the liquidity of the instruments
 - The underlying guarantee arising from MFR and AIR and management of the guarantee especially with respect to surrender/lapse and that the liability values may not move with the market value of the assets, no significant protection from surrender charges (which is zero at the end of five years) and inability to apply Market Value Adjustment (even in case of mass surrender).
 - This effect could be amplified if dynamic policyholder behavior is considered. Higher surrender could be expected during periods when the guaranteed surrender value bites, for the policyholder could then reinvest the surrender value when market values of assets are depressed

- The Investment strategy should also reflect the underlying vintage of the policies and how mature the portfolio is.

- Considerations for equity as an asset classes apart from the expectation of upside
 - The Possible impact on earning arising from meeting the guarantee
 - Additional capital requirement to demonstrate solvency in case market value is lower than the book value
 - Management action in relations to discretion used in terms of timing to book unrealised gains/losses.
 - This also depends on the risk appetite of the company and how the company would like to manage the solvency position.
 - Hence the ability to offer a reasonably high equity could be constrained by the company’s appetite for regulatory capital at risk.

- The SAA should reflect the dynamic nature of the liability and allow for periodic review and updation.

- The Investment Committee and Board approved strategic allocation could be in the broad range of 75-85% in fixed interest securities (with 20-30% in corporate bonds), 10-20% in equities and 5-10% in money market instruments and cash (to manage ongoing liquidity)--depending on risk appetite, the solvency position of the company, projected size of the fund and other considerations as outlined above.

[9]

(iii) :

- The valuation exercise needs to be carried out in compliance to IRDA (Asset Liability Solvency margin etc) Regulations, 2000 and using Gross premium reserving mythology
- The future value of the investable fund is required to be projected with an estimated growth in line with valuation interest rate.
- The projection should allow for allow for any cost of guarantee arising from two layers of guarantee offered in the product.
- While assessing the cost of guarantee the AA may refer the provisions of GN 22 for modelling investment return. It may also allow for the likely future policyholder behavior and the extent to which this is correlated with value of guarantee
- While there is no regulatory requirement to hold the account value and reserve for cost over charges separately (also known as Non-unit reserve), the ASLM regulations do allow for the other methods as long as the method produces reserve which at least equal to the amount that shall be produced by the application of gross premium methodology.
- AA should be aware that using the gross premium method the reserve could be lower than the account value due to capitalisation of future charges, which may be addressed by holding a separate reserve other than the account value with a floor of zero to avoid capitalisation of future profits.
- However, whatever methodologies being followed, AA should ensure the Reserve is as high as the surrender value.
- During the initial period when reduction of yield is not applicable (first five years) the account value will grow by the guaranteed rate of interest which could be lower than the actual earning of the fund; however, the reserve should allow for any accrual of such additional earning in order to meet the reduction of yield through residual addition.
- While there is no regulatory requirement to hold this additional accrual of investment earning as a separate reserve, AA should be aware of any possible profit capitalisation arising from bundling the reserving calculation and plausible scenarios where this may lead to under estimation of reserve including higher lapse.
- The reserving basis should allow for margins for various assumptions in compliance with APS 7
- Any management action envisaged in future should be appropriately considered while valuing the liability.

[8]**(iv) :**

- The ALM risk arises from a situation that there are insufficient amount of money available to enable the company to meet the liabilities as they fall due.
- The key ALM risk in this product stems from management of the interest guarantee of MFR and AIR which are decided at the outset of the product.
- The regulation around the product also requires that accrual of residual addition to meet the RIY from 5th year onwards which can also increase ALM risk from volatile asset classes.
- Management of guarantee risk from discontinuance and surrender may also pose significant ALM risk. The risk arises from the fact that MVA (Market Value adjustment) cannot be levied to allow for any adjustment penalty if market value of assets is lower than the book value of the assets, in particular case of mass discontinuance.
- Added to the above risk, is the risk stemming from policyholders dynamic behavior with very little protection from low surrender penalty when surrender option is in the money given the underlying guarantee.

- The specific issues that may arise for early discontinuance/surrender
 - Capital strain if charges are not matched by expenses
 - Surrender penalty may not be sufficient to recoup the entire acquisition expenses
 - This is more prevalent for monthly mode policies where discontinuance can happen at the earliest
- However, during the first five years of the policy, the regulation provides a few deterrents from exits. This is applied in the form surrender charges and moving entire account value to discontinuance fund.
- If the guarantee under product is closer to the return expected on the discontinued fund (4% as presently prescribed) then the incentive to surrender/ lapse is relatively low unless triggered by genuine inability to pay the premium.
- Major issues with the product design emerge at the end of five years.
 - There is no restriction on surrender with the end of lock-in period and no surrender charges to be applied on the account value
 - Account Value started reflecting the residual addition in compliance with ROY
 - No MVA to protect from market value of assets being lower than the book value of the assets.
- The possible mitigation measures which could be explored:
 - Monitor the equity exposure and market value of the assets vis-a-vis book value of assets
 - Active management of the fund including timely realisations (buy and sell or sell and buy in order to book profits/losses) and rebalancing of assets to ensure book value moves closer to market value of assets. This is additionally managed through suitable choice of duration of fixed interest instruments.
 - However, duration matching is clearly difficult because of the range of maturity dates in one fund. However, bonds need not be valued at market value, as they are treated as “Held to Maturity”. However, they may need to be realised at time when the assets are distressed.
- In the current regulations, hedging is generally not allowed to manage broad spectrum of risk. Insures are allowed only to hedge interest rate risk for premiums that are expected in one year through some selected instrument.
- Hence, the overall guarantee risk is proposed to be managed through suitable choice of assets constituting the fund backing the liability. The asset mix should be combination of risk free, corporate and some exposure to equity depending on the size and tenure of the guarantee offered. The asset mix should reflect risk appetite of the company taking in to consideration the desire to improve the expected return to the policyholder. As part of ALM monitoring mechanism this mix should be continuously monitored and suitable rebalancing action to be undertaken to reflect any change in capital market and the trigger arising from product design.
- Due to significant complexities in setting up various layers of guarantee in the system and calculation of RIY at various points of times, there could be major operational risk in managing all these features in the administration system.
- The issues that may come up –
 - Managing several proxy / shadow account to allow for calculation gross yield , net yield, with/without service tax and other risk and guarantee charge

- These calculations need to be performed allowing for each and every transaction in the policy
- Complexities in allowing discontinuance/revival in RIY calculation
- Tracking the unit value of top up separately from base policy can be administratively cumbersome.
- The reputational risk, in general arising from the fact that the benefits of the products are not well understood by company at the time of sale leading to customer dissatisfaction and the returns are not in line with what was expected. This being new type of product category, the risk of product benefits not being appreciated or understood by the policyholder is enormous.
- The risk can be mitigated through appropriate training of the sales force and ensuring all communication from company reflect underlying product features and the benefit appropriately
- The Product regulations specify that of a customized benefit illustration, illustrating the guaranteed and non-guaranteed benefits at gross investment returns of 4% and 8%. This illustration should lead to greater customer understanding of the product and future addition of various interest rates should follow the approach adopted in the benefit Illustration.
- The other risks and possible mitigation options, in this product are:
 - Mortality risk – mitigated through appropriate underwriting, reinsurance arrangements and regular mortality investigations
 - Expense risk- Continuous monitoring and appropriate management action if necessary
 - Volume risk- Get a buy- in from sales and commitment for certain minimum volume

[12]

(v) :

- Separate account of all receipts and payments in respect of this product is required to be maintained.
- The Insurer is required to prepare and report to the authority the business written under this segment separately in Revenue account and assets and liabilities in segmental balance sheet.
- The policy account value of VIP product is to be disclosed on the daily basis in the website through a specifically assigned identification number called “SAIN”
- Although, it’s not entirely clear, the VIP products may need to be reported separately; as part of Actuarial Report and Abstract where the AA is required to furnish the product details.
- The statement of policy account should be sent to the policyholders at least once in a year.
- The statement should give break up of opening balance, premium received, deduction towards charges, MFR earned, AIR earned and non-negative residual interest credited and closing balance.

[5]

(vi) :

Section 64VA of Insurance act, 1938 is the overarching section for solvency assessment of the insurers and IRDA (Assets Liabilities and Solvency Margins of insurers) Regulations, 2000 Schedule III-A specifies the method of determination of solvency margin for the life insurer.

- Available solvency margin is the excess value of assets (Form AA) over the value of life insurance liabilities (as per Form H of Actuarial Report and Abstract).
- Solvency Ratio means the ratio of the amount of Available Solvency Margin to the amount of Required Solvency Margin.
- Section 64V of Insurance act, 1938 lays down the mechanism valuations of assets for the purpose of ascertaining compliance with the provisions of Section 64 VA.

- The valuation of assets is further detailed in IRDA (Asset Liability Solvency margin regulation) IRDA (Preparation of financial statements and auditor's report of Insurance companies) Regulations, 2000.
- This has been further clarified vide various circulars issued by regulator on the valuation of debt securities for solvency purpose; these assets may continued to be valued at amortised cost till further instructions.
- The determination of required solvency margin should be done as per Form KT of Actuarial Report and Abstract. For computation of required solvency margin, the factors applicable for this product will be 3% (first factor) and 0.3% (second factor)

[4]

[Total Marks-50]
