Institute of Actuaries of India

Subject SP2 – Life Insurance Principles

March 2022 Examination

INDICATIVE SOLUTION

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) Contract design factors that may reduce capital requirement are as follows-

a) Lower guarantees
b) Charges that match the expenses by nature & timing
c) Low initial expenses / commission
d) Single premium
e) Low statutory provisioning requirements

(1/2 point for each point, Max 2)

ii) The insurer may consider the following factors before launching the online application –

1. **Competition**-
   - Whether competitors are already selling on line products and offering customer specific web based services
   - If yes, which features they are offering and whether these are necessary to include
   - Include additional features than competitor to differentiate from them
   - If no, then online application will be USP (Unique Sales Proposition) for insurer

2. **Customer Need**-
   - Insurer can carry out market research to assess the target market and expected level of demand of the new application
   - Consider the features that customers expect to have in online application
   - Whether customers are confident to buy products online without assistance of sales force of the company
   - Whether customers are confident to service their policy online without assistance of sales force of the company

3. **Development of online application**-
   - Consider how insurer would develop online application - whether internally using expertise from company or outsource the development to a vendor
   - The features to be incorporated in the application e.g. its design, various user friendly screens, etc.
   - The management of online application – resolving technical issues if any during functioning
   - The information of customer as detailed in proposal form to be captured in application
   - Validation of information, validation of mobile number- generating link in email or mobile and validating the same if any
   - Facility of uploading the necessary documents. E.g.- birth certificate, income proof etc.
   - Display of key features document and preview of proposal form
   - Sign off by the customer – whether digital signature or putting name and date
   - Integration of data captured in online platform with core system of insurer
   - Digital confirmation of transaction, e.g. email communication or sms on mobile
   - policy documents, premium receipt will be sent digitally and in encrypted formats

4. **General points about on-line application**-
   - Storage of data – whether it is stored in servers or in cloud
   - Business continuity plan in place
   - Internal controls and processes put in place e.g. password security, change of passwords due to addition of online platform

- Strengthening of Risk management processes, internal audit and IT security

5. **Pricing of the product**-
    - The product may have repriced for online sale as there may be change in target market as online platform may be used by different profile of people
    - Mortality assumption will be revised for a new target market
    - Expenses assumption may change as company will incur development cost for online channel and there may be expense saving if automation is adopted
    - Target market may be young people, with small sum assured and low net worth
    - Relevant, adequate and credible data may not available to company as the channel is new to company
    - Company may use other source of data- reinsurer's data, publicly available data, actuarial journals, competitor's data to reprice the product etc.
    - Cost benefit analysis may be done
    - If premiums are cheaper then own sales force may feel that they are being pushed out from selling of product

6. **Financing requirement-**
    - There may be increase in new business volume as online sale have huge penetration
    - Increased business volume will lead to higher new business strain
    - This may increase capital requirement for company
    - Company may revise or enter reinsurance arrangement for efficient capital management

7. **Expenses-**
    - Cost of developing on-line sales application to be considered
    - Cost of maintenance of on-line sales application
    - If developed in- house there may be training expenses
    - If outsourced the expenses may be lower due to expertise and economies of scale but may lead to dependence on service provider
    - Training expenses for administrative staff for handling revised processes
    - Savings in cost due to simple underwriting and claims processing, other policy services
    - Hence cost benefit analysis required
    - Advertising cost for online application
    - Higher volume of business may lead to economies of scale and can reduce per policy fixed expenses

8. **Risk characteristics**
    - May lead to risk of anti-selection as a result of both simpler underwriting and moving from individual sales through own sales force to more direct methods
    - More ease of claims registration may increase reporting of claims
    - Related Cyber risks may arise
    - May increase frauds if customers can amend the beneficiary
    - Third party risks if the development and maintenance is outsourced by the insurer
    - Expense risks if the actual expenses to develop the application is higher than expected
    - Mortality risk if actual mortality experience will be higher than expected
    - Higher new business may lead to enhanced capital requirement
    - If policies with smaller sum assured are sold may increase fixed cost as the contribution to fixed costs may be less for small sum assured policies
    - Data protection risk – personal data of policyholders need to be protected

9. **Administrative system**
    - Underwriting process may be simplified- automation is preferred
    - Policies with lower sum assured to be preferred for automated underwriting
    - For policies with higher sum assured or higher ages the facility to upload additional documents like medical reports with reasonable size to be created
    - May require lesser staff as underwriting is automated
    - Claims process to be defined
    - Whether all required claims document e.g. claim discharge form to be uploaded with reasonable size
    - The administrative systems needs further modifications to accommodate customer requests of change of mode, nomination , etc.
    - Data maintenance policy to be revisited for protection of data and maintaining confidential information of customers
    - Sensitive data of customers can be accessed by authorized persons only
    - Systems to be updated to maintain accurate and updated data

10. **Regulatory requirement**-
    - Whether regulatory approval is required to sell the product vide online application
    - Regulatory framework dealing with use of technological platform to be considered
    - Regulatory framework for using personal data e.g. national identity number

11. **Profitability**-
    - Profitability of the product depends on profitability criteria adopted by the company
    - May increase market share as more penetration in market

(Max 16)

iii) Implications of closing own sales channel for the insurance company:

The investigation results may not be proper

- The decision of insurer is based on last two year's data which is not reasonable. Hence data may not be adequate (sufficient volume) to take decision.
- There may be one off effect for fall in sales from sales channel. E.g. sales channel may not able to canvass business personally due to pandemic
- The company might not have made adjustment to data to incorporate changed circumstances
- Experience may be heterogeneous hence trend may be misleading

Expenses-

- Closing the channel will incur expenses to insurer as intimation to own sales force and intimation to existing customers
- To accommodate the services of them to other functions e.g. administrative functions
- May create HR issues as work force may be dissatisfied
- Need training expenses to train the own sales staff to other administrative work
- Re price the product as existing assumptions like expenses, volume of new business and mortality may not be relevant for new business

Regulatory approval

- Approval may be needed to close the existing channel
- The business plans, existing F & U may be revised to remove the channel

Additional Risks:

- Less diversification across distribution channel
- The policies with very high sum assured may not be solicited as the policyholders require personalized services and higher underwriting requirements e.g. medical reports
- On line business may lead to concentration of small policies
- Operational risk due to dissatisfied sales staff, staff may leave the company
- Data risk as relevant data is not available for re pricing the product as relevant data of online sales is not available
- Expense risk as changes need to be done in administrative system, sales literature, etc.

(1/2 Mark for each point, Max 5)

[23 Marks]

Solution 2:

i) The sales literature must contain the following information:

A- **Benefits payable under the product**-

a. Death benefit- as defined in the policy.
b. Maturity benefit- 100% of premium
c. Paid up benefit- as per terms & conditions of the policy document.
d. Surrender value - Whether payable or not.
e. Accident Benefit - Whether payable or not

B- **Exclusions**-

a) General Exclusions like war, participation in criminal & illegal acts may be stated as per policy terms & conditions
b) Specific exclusion for the product if any may be stated.

C- **General Information about the product** –

a. Minimum and maximum age at entry
b. minimum and maximum term of the contract
c. grace period to pay premium
d. revival period

D- Other features- whether loan is available under the policy or not

E- Name of the company and head office address and logo & contact details

(Max 4)

ii) Impact of introduction of simple products on other products-

Advantages

1. As the products are very simple and easy to understand, better customer understanding of the product at the point of sale. Hence the mis selling of the product will be less.

2. It will reduce customer complaints and will help to build brand image of the company.

3. This will help to cross sell the existing products of the company to prospective customers. Hence may increase sale of other products.

4. Increase in sale of policies will result in economies of scale for per policy expenses and investment for the company.

5. The insurer is responsible for setting the premium rates hence can offer competitive premium rate to potential customers. The customers will prefer simple products over existing products offering similar benefits.

5. As the competitors are also offering similar products the customer can compare the price / premium and brand name of insurer while purchasing the product. Hence company will try to

enhance service standards which will improve sale. This will improve service standards of other existing products.

6. To reduce administrative expenses the insurer may introduce automation in underwriting and servicing this will further help to improve servicing efficiency of existing policies.

7. Increase in number of policies with reducing of administrative expenses will improve profitability of insurance company and improve market share.

8. Simple and affordable products will further create insurance demand in market and increase awareness which may further enhance sale of other products.

9. The simple products will offer diversification benefit across different existing products.

Disadvantages-

1. As the premium is one of the most important criterion to attract customers hence insurer will try to sell the product at a very competitive price or may be as a loss leader. Increase business volume will create capital need for insurance company.
2. Increase in volume will also create burden on administrative systems and insurer needs to incur further expenses in recruiting human resources to manage the business. This may increase per policy expenses for the company.
3. This will put the downward pressure on the premium rates of simple products by the competitors. Prices will be quoted only to cover marginal cost.
4. Unhealthy price war and competition in market may create cross subsidy with existing product of the insurer.
5. This may lead to discrimination among different sets of policyholders.
6. If adequate sales volume of simple products falls due to economic or internal factors of the insurer, the product will become unprofitable as it will fail to cover fixed expenses.
7. Regulator need to intervene in the market and mandate the premium rates for simple products to reduce price war and reduce exposure risk for the insurer.

(Max 6)

[10 Marks]

Solution 3:

i) The life insurance company needs to review its surrender value factors because-

- It's regulatory requirement
- Competitor's may be reviewing surrender value factors in line with regulations
- There may be changes in economic conditions of the country. This will have impact on interest rate and inflation.
- Over the years there may be improvement in mortality assumption due to development of new treatments, new medical drugs, improvement in standard of living of people, etc.
- Expenses and expense inflation might have changed in line with economic changes
- Hence, the assumptions used to calculate surrender value factors are not relevant now
- The assumptions used to calculate asset share of the policy and surrender value factors may be inconsistent as asset share might have calculated using actual experience

(1/2 mark for each point, Max 3)

ii) Part 1

Reasons for offering surrender value for single premium term assurance product:

- In single premium term insurance policy, the premium is received at the inception of contract. The claim amount is payable to policyholder if he dies within the term of the contract. The contract is generally a long term contract with term of policy more than 15 years**.**
- The single premium is invested as per investment strategy of the insurance company. A sizeable asset share is present in early policy years and will increase in line with increase in term of the contract**.**
- The asset share under policy by deduction of surrender penalty and other expenses of surrender can be paid to customer if he wishes to surrender the policy.
- Offering surrender value for single premium policies may be regulatory requirement and competitor's may be offering the same.

Part 2

Approach to calculating surrender values:

Surrender values would be set with reference to three values:

1. **Asset share**:
   - The company would not want to pay more than asset share
   - To avoid volatile surrender value terms, need to consider smoothed asset share i.e a retrospective policy value calculated on actual experience basis.
   - This will be the upper ceiling of surrender value payable, which may protect the company from making an overall loss from the contract.

2. **Prospective realistic reserve**:
- It allows the company to capitalize all the profits it is expecting to make on the contract (past and future profits)
- Should be calculated on best estimate basis with no margin.
- Capitalizing future profits may be unfair to surrendering policy holders hence premium basis may be preferred.

3. **Surrender administration expenses**:
- The cost of administering the surrender is borne by the surrendering policyholders, not by the company or continuing policyholders.

4. **General points**:
- Use retrospective values at early duration, blending into prospective values at later duration
- The Surrender expenses would be deducted
- The surrender value at short duration may be higher than the reserve in order to compare more favorably with premium paid
- To avoid disappointing policyholders and negative publicity
- To meet policyholder's reasonable expectations as regards to illustrative surrender value given in sales literature
- Competitive consideration needs to pay surrender values in line with the similar products offered by the competitors
- For surrenders near maturity surrender values are in line with maturity value
- Surrender value need to be consistent with paid up value
- The calculation of surrender may be easy to apply using computer package

(Max 8)

iii)

1. The company would start by analyzing recent renewal (persistency) experience on its term assurance portfolio.

2. It will need to choose a long enough period (5-6 years) to give credible results.

3. The data need to be relevant.

4. The factors that affect persistency experience are as follows:

- Duration of policy in force
- Sales method and target market

Other variables that will affect the persistency rates and which may be used to classify the data are:

- Frequency and size of premium
- Premium payment method
- Original term of contract
- Gender & age

5.The extent to which this classification is possible will depend on the volume of data available.

6. The data may be grouped by above variables (by nine -ten year-bands) to ensure reasonable quantities of data per cell.

7. Once the data are classified as required, persistency rates over each year could be determined as the number of policies in force at the beginning of the year.

8. Withdrawal rates by year in force could then to be derived as one minus the persistency rates over each year.

9. Alternatively divide the numbers of withdrawals by the appropriate exposed to risk at each duration.

10. Persistency rates can also be calculated cumulatively as the number surviving the year divided by the number of in-force at the outset of the contract.

11. Might also compare actual persistency with that expected according to the current persistency assumption.

12, adjust the estimates by any one-off or unusual past events or economic factors.

13. The company might also look at industry persistency data for this class of business but industry data will be heterogeneous hence may be used carefully

14.Any trends in data if observed e.g. effects of economic recession, etc.

I15. n forming price assumptions, the company will need to adjust these figures for anything that has changed since the period which has been analyzed.

Examples might be:

- Changes in tax regime and other legislation affecting the contracts
- The economic situation
- The competitive situation

- Change in sales channel

16. The company will particularly concern about the effect of early lapses on profitability, and so on its assumptions may be on the prudent side of realistic.

17. It may also sensitivity test on higher rates of lapse.

(1/2 mark for each point, Max 8)
[19 Marks]

Solution 4:

i) The risks the company is exposed to are:

I. Longevity risk

- When pricing the contract, the life insurance company will have made an assumption regarding the expected mortality of the annuitants.
- The annuity portfolio may suffer generally lighter mortality than allowed for when the product was priced meaning that the annuitants live for longer and receive more annuity payments than was expected at the outset of the contract.
- In particular underestimating the rate of improvement of life expectancy over time is a significant risk.

II. Mix of business (mortality risk)

- We are not told whether the company offers unisex annuity rates or different rates for males and females. If the company offers unisex rates, then it is exposed to the risk of the ratio of male to female lives being different to that assumed when setting the annuity rates.
- Generally, females tend to live for longer, hence if the life insurance company writes more business for female lives than the proportion assumed when the annuity rates were being set then on average, the annuitants will live for longer than allowed for in the pricing basis.
- We are also not told whether the company offers different annuity rates for smokers and non-smokers. Non-smokers usually exhibit lighter mortality i.e. they live longer, than smokers.
- If the life insurer offers a single set of rates that does not differentiate between smokers and non-smokers and the company sells annuities to a greater proportion of non-smoker's than allowed for in the pricing basis, then the insurer will make a loss on this portfolio.
- This can be exacerbated by anti-selection risk.
- The company may also have allowed for a mix of business by target market / source of business / geographical location, in pricing which it may have mis-estimated.

III. Expense risk

- The insurer is exposed to the risk of underestimating the general level of expenses that it will incur to administer this business.
- The insurer is also exposed to the risk that it has underestimated the expense inflation that it will suffer from during the life time of the annuitants.
- It is likely that there will be cross-subsidies between large and small policies, and that if the average case size is smaller than assumed during pricing then the life insurer may not be able to recoup all of the expenses related to writing this business.

IV. Volume risk

- The life insurer is exposed to the risk of writing too little business, which may result in any development and marketing costs not being recouped through the expense loadings in the annuities sold.

- The life insurer is also at risk from writing too much business, in which case it may not be able to provide good service to its annuitants e.g. policies may take too long to set up, payments may be made late and so on.
- This would damage the insurer's reputation and may lead to a loss of new business in future years.
- Higher than expected volumes can also cause capital strain, depending on the onerousness of the regulatory regime.

V. <u>Mismatch risk</u>

- The insurer provides a guaranteed income for life for each annuitant. If the life insurance company chooses to invest the initial premiums received in such a way that there is a mismatch between the assets and liabilities for this contract (e.g. by expected term, nature or currency) or if it is not possible for the life insurer to invest in assets that match the liabilities (e.g. because the outstanding duration of the liabilities is too long and assets of corresponding during are not available) then the insurer is taking an additional mismatch risk for this block of business.
- And there is extra risk if annuity rates are not changed frequently enough in line with movements in the yields of the matching assets that will be purchased.
- There will be extra risk if use corporate bonds due to default risk.

VI. <u>Marketing and competition risk</u>

- Immediate annuities are generally very price sensitive, with a high degree of competition between insurers to gain market share.
- There is a risk that the company may be unable or unwilling to match the premium rates offered by other insurers in the market or that it does not monitor market premium rates pro-actively enough, and hence loses the market share that it has managed to build up.
- There is also a risk of management pressure leading to the company offering annuity rates that are too high.
- In order to be competitive and maintain market share life insurers may try to offer additional features, such as the guaranteed income of 5% of the initial single premium, for life, included in this product and so in this respect the insurer is aiming to market an attractive product.
- However, if the insurer has marketed the same immediate annuity product for the last few years, then its competitors are likely to have copied this feature by now and may be offering more innovative features, making this life insurers product look outdated.

VII. <u>Other risks</u>

- Data problems – in particular, the insurer may have limited data which is too short for identifying trends, including delays in notification of death.
- Fraud – deaths not notified by family or fraudulent behavior by insurers own staff.
- Regulatory change e.g. discrimination legislation could mean having to reprice everything and also could exacerbate anti-selection risk.
- Tax changes – may affect the relative attractiveness of the product.

(Max 13)

ii)

1. A policyholder is more likely to surrender an immediate annuity if he or she is critically ill or thinks that they might die in future.
2. If we give surrender values to these policyholders, the average mortality experience of those who will remain will improve, which will be a big cost to the company.
3. Hence, the company should pay surrender values only under immediate annuity with return of purchase price.
4. Mortality is the most significant assumption and it requires a prudent valuation should incorporate margins for adverse deviations.

5. A prudent estimate of the base mortality plus a prudent estimate of the assumed future mortality improvement rates is also required.
6. In this case, prudent means:
    a. a lower percentage of a mortality table for the base table assumption and
    b. a faster rate of improvement in mortality (i.e. lower, slower deaths).
7. However, mortality rate should also factor the critical illness rate, where the probability of purchase price being paid shall be earlier.
8. The insurer will look at any mortality and morbidity experience studies that it has carried out since it last set the supervisory reserve assumption:
    a. to determine whether the experience suggests that the assumption should be tightened i.e. lighter mortality should be assumed, or
    b. whether the mortality assumption can be weakened, by assuming heavier mortality than was assumed previously.
9. The insurer will also take into account the extent to which there is a statutory guidance that has to be followed in setting the assumption e.g. regulations may specify the annuitant mortality assumption to be used.
10. For future mortality improvements and offering surrender values on critical illness, the company is likely to look at external data sources, such as the latest trends shown in academic studies, data from consultancies and reinsurers.

(Max 6)

iii) Possible reasons why the business levels may have been declining include:

1. There may have been a number of new entrants entering the market offering aggressive rates in order to obtain market share.
2. Existing competitors may have decided to make immediate annuities a business line of core importance to their strategy and they may have increased the competitiveness of their rates.
3. All serious players in the annuity market are likely to frequently re-price their annuities and hence the life insurance company in question may be uncompetitive because they have been too slow to react to their competitors' active re-pricing strategies.
4. There may be increased availability of alternative types of annuities, such as impaired life annuities, offering differentiated rates for smokers etc., which will provide better rates to smokers than a single set of annuity rates based on the total population.
5. There may also be increased availability of more sophisticated products such as drawdown products that allow the annuity to be drawn down in tranches, rather than locking into a fixed rate on a retirement date.
6. Competitors may also have launched with profits annuities, resulting in declining sales for traditional immediate annuities.
7. Company performance on unit-linked/with profits annuities could have been poor, which could lead to potential customers going elsewhere.
8. There may have been legislative changes meaning that e.g. immediate annuities no longer have to be compulsorily bought at retirement.
9. There may have been fiscal changes resulting in immediate annuities no longer being attractive from a tax perspective.
10. The company may be perceived to be financially weak, which especially in the current stock market conditions, may impact business volumes.
11. The company may have a poor reputation for reliable payment systems or poor customer service, which has impacted on its sales volumes.
12. The company may generally have been poor at marketing/have spent little on brand awareness, which may have resulted in declining sales.
13. Competitors may offer better commission levels.
14. Economic downturn – policyholders may put off retiring, leading to lower volumes.

(Max 4)

iv) Rather than re-price the annuity, the company could look at other alternatives to increase new business volumes. These could be:

1.Intoduce alternative distribution channels, where a change in the sales distribution channel may result in a change to the targeted market, or a change to the number of potential customers that are introduced to the product.
  --online channel

2.Introduce price sensitive alternative design options with similar profit margin to capture various needs e,g,:
  -- add in capital repayment guarantees
  -- offer impaired life annuities if not already offered
  -- other variations such as unit-linked or index linked or with profits annuities
  -- introduce variable annuity structure

3. Offer temporary annuity products, if the company looks at selling alternative products to the immediate annuity. These products might be more attractive than the immediate annuity to certain target markets.
4. Expand the portfolio to other product types, subject to having sufficient capital resources like deferred annuity.
5. Target marketing campaign at employers workplace and offer the product under group platform to issue through group employers or any other specific groups of individuals.
6.Introduce huge discounts, if profit margins allow, for ill-health lives.
7.Offer higher commissions, if higher volumes compensate for in the profit margins.
8. Promotions, e.g. increased advertising. In particular this could be to counter e.g. any recent adverse publicity due to share price falls or due to perceived financial weakness.
9.The company could also look to promote its improved customer services with some of its sales channels if it has had a poor reputation for customer service in the past or via “free gifts” or incentives or sponsorship to generate increased brand awareness.
10. Convince the decision makers at Government / regulator to change the legal framework to make it more attractive, if the market as a whole is not very active, for e.g., tax rules applying to the benefit received, or premium paid.
11. Consider using reinsurance (if not using already), or changing existing reinsurance arrangements to improve terms.

(Max 7)
[30 Marks]

Solution 5:

i) The company can invest in asset classes permitted under the regulations:

1. Government securities
2. Corporate Bonds
3. Bank deposits(FDs,RDs etc)
4. Equities
5. Real estate
6. Money market securities
7. Commodities such as Gold etc.
8. Cash and cash equivalents
9. Hedge funds
10. Mutual Funds
11. Exchange Traded Funds
12. Derivatives
13. Cryptocurrency

(1/2 Mark for each point, Maximum Marks – 2)

ii)

1. The company should invest so as to maximise the overall return on the assets subject to the risks taken being within the financial resources available to it.
2. Under Unit Linked contracts, the benefits are determined directly by the value of investments underlying the contracts. Hence, the company invests in the assets which are used to determine the benefits.
3. Under With profits contracts:

    a. the asset should be denominated in the same currency as the liabilities so as to reduce currency risk.
    b. In practice some overseas assets may be held so as to diversify risk and reduce exposure to asset performance in a single country;
    c. the extent of this depends on policyholder expectations and practice of other companies, and the extent of the company's free assets.
    d. Some assets would normally be held in cash or near cash to meet immediate outgo, particularly as there is no stream of regular premium income.
    e. The part of the benefit in the form of basic sum assured and existing declared bonuses is guaranteed in nature. The appropriate assets to back this are therefore fixed interest type investments.
    f. The higher the basic sum assured for a given premium, the greater the proportion of fixed interest type investments that may be held.
    g. Conversely methods that defer distribution of surplus need a lower proportion of fixed interest investments.
    h. The part of the benefits distributed as future bonus is not guaranteed. The company will want, as far as possible, to maximise this part of the benefit as it will improve the returns to policyholders.
    i. This means investing in assets that will produce the highest expected return. To do this, a significant proportion of assets may therefore be held in equity type investments.
    j. This will be consistent with the expectation of policyholders who take out a with profits policy who will expect the proceeds to maintain their value in real terms. However, the company can only invest in equities to the extent that it is consistent with its financial resources and attitude to risk.
    k. Assets with the highest returns, such as equities, will also have the highest variance of return.
    l. Policyholders will expect the bonus rates to be smoother than returns earned on equities.
    m. The impact of this smoothing will reduce the free assets when equity returns are low and increase them when equity returns are high.
    n. The company therefore needs significant free assets in order to smooth the bonus rates.
    o. The low level of free assets will limit the extent to which the company can invest in equities unless shareholders are willing to inject significant capital into the company.

4. Another issue is that, until a significant block of existing business has built up, the company is exposed to the level of equity markets at the end of the ten years. This will again limit the extent to which it can invest in equities.
5. The company will need to consider whether it has the investment expertise to invest in all possible asset categories. As long as it has managed linked funds that invest in all asset categories then this should not pose a problem.

6. The company will need to reflect policyholder expectations when setting investment strategy.

7. Since there is no past practice for the company, this will be based on policyholder literature and the actions of other companies in the market.

8. The company has the opportunity to frame expectations appropriately by careful drafting of literature targeted at the appropriate market.

9. The company may consider the different tax treatment of different asset classes. The assets held should be sufficiently diversified so as to minimise the risk of over-exposure to any one counterparty.

10. Regulatory rules may limit the types of amounts of assets of certain types that can be held.

11. The company may want to minimise over-exposure to any particular asset type by holding some property as well as equities and by holding equities across a range of different sectors.

12. Features of certain assets may affect the supervisory valuation basis for the liabilities. Thus, efficient asset choices can affect free reserves and hence investment freedom.

(1/2 Mark for each point/sub-point, Maximum Marks – 12)

iii) Life insurance company may not offer terminal bonus for its with profit products because-

1. Company could be experiencing solvency difficulties hence benefits are being cut back now. Not paying terminal bonus helps this.
2. Company would not have any surplus arising to distribute because of:
    - Poor investment return
    - Adverse mortality experience
    - Adverse expense experience
    - New business strain
    - Cross subsidiaries in mix of business
3. The Company may have surplus to distribute but want to use for business objectives of company and improve free assets position
4. The company may be using a bonus distribution method which does not have terminal bonus as a feature.
5. Company may not have investment in equity and property hence investment profits are stable and predictable and does not need terminal bonus strategy.
6. Some policy lines may be in a position where the benefits guaranteed to date already exceed asset share, so no terminal bonus is due.
7. Competitor may not be paying terminal bonuses.

(1/2 Mark for each point/sub-point, Maximum Marks – 4)

[18 Marks]

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