

INSTITUTE OF ACTUARIES OF INDIA

Subject SP2 - Life Insurance

November 2025 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 examiners have given credit for any alternative approach or interpretation which they consider to be reasonable.

Solution 1

a) Uses of asset shares

- To determine fair payouts on maturity or surrender.
- To guide the level of terminal bonuses.
- To assist in deciding reversionary bonus rates.
- To monitor the extent of bonus smoothing.
- To ensure equity between different cohorts of policyholders.
- To assess whether payouts are consistent with Policyholders' Reasonable Expectations (PRE).
- To monitor actual vs expected experience (investment, expenses, mortality, tax).
- To assess profitability of past and future business.
- To estimate cost of guarantees and surplus available for distribution.
- To determine alteration terms as per product structure.
- To support valuation and solvency analysis by comparing reserves to asset shares.
- To inform management and Board decisions on fund strategy and capital allocation.
- To test the reasonableness of bonus and payout scales over time.
- To identify cross-subsidies or inequities between different product generations.
- To help analyze surplus and monitor emerging sources of profit or loss.
- To assess the impact of changes in assumptions or experience on policyholder returns.
- Asset shares underpin decisions about shareholder transfers from participating funds.
- Asset shares are useful in setting internal management actions such as hedging or ALM
- They provide a basis for customer communications and fairness tests.

(6 marks)

b) Impact on asset shares

Increased lapses:

- Higher lapses reduce the flow of future premium income that would otherwise build asset shares. With fewer premiums, the accumulated fund attributable to each policy grows more slowly or may decline.
- Early-year acquisition costs become harder to recover when persistency falls. Upfront distribution costs (commissions, onboarding) are spread over fewer years, so the asset share per policy is reduced, particularly in the early durations.
- Selective lapse patterns can cause adverse selection on the remaining in-force book. If lower-risk lives lapse and higher-risk lives persist, the mortality experience for the surviving block worsens, further reducing asset shares.
- Persistency deterioration increases the effective fixed-cost burden per policy. Fixed expenses such as administration and technology are spread over a smaller premium or policy base, worsening expense assumptions used in asset-share calculations.
- Higher lapses can create volatility in cohort asset shares, complicating smoothing decisions. Rapid changes in the expected lifetime of cashflows makes it harder to project fair bonuses without risking cross-subsidies.
- Management actions to counter lapses (e.g., enhanced lapsation benefits) would themselves reduce asset shares if they require additional cost. Any incentive to retain business must be paid for, and such costs reduce the residual asset share available for bonuses.
- The extent of problem shall depend on the quantum of business sourced through bank.
- Also, given that acquisition cost of bancassurance models is usually high, better persistency becomes even more critical to help amortize the initial expenses.

(4 marks)

Higher mortality experience than expected

- Elevated mortality directly increases claims outgo relative to pricing assumptions, reducing the funds available to build asset shares. Each claim payment reduces the aggregate asset share pool and, on a per-policy basis, lowers the average entitlement.

- Mortality deterioration in semi-urban markets can be especially damaging if pricing and underwriting were calibrated to urban life tables. This geographic heterogeneity means asset shares for semi-urban cohorts will underperform relative to pricing.
- A persistent mortality adverse deviation will require revising assumptions, which lowers projected asset shares prospectively. Updating mortality assumptions reduces expected future asset-share accumulations and therefore the basis for future bonuses.
- Mortality shocks can also affect the balance between reversionary and terminal bonuses. If mortality reduces expected durations, the profile of when funds are paid changes and terminal bonus strategies may need to be adjusted.
- Management may need to consider underwriting or product changes in semi-urban channels to mitigate the mortality strain; these responses themselves affect asset-share calculations. For example, stricter underwriting increases acquisition friction and could reduce early asset shares. (3 marks)

Rising distribution expenses

- Higher ongoing and project costs reduce the net returns credited to asset shares. When new technology projects and elevated distribution fees increase expenses, these are deducted from the resource base that builds asset shares.
- If digitalisation costs are capitalised or funded initially by the company, the timing of expense recognition matters for asset shares. Capitalised costs spread over time may create a lagged impact, whereas immediate expense recognition reduces asset shares in the short term.
- Increased distribution cost in semi-urban bancassurance (higher commission/servicing costs) disproportionately reduces those cohorts' asset shares. A channel with high acquisition cost needs longer persistency to breakeven; if persistency is low, the asset share is penalised.
- Expense inflation increases the risk that the planned bonus scale is unsustainable unless assumptions are reset. Asset-share comparisons will reveal if bonus scales should be reduced or expense recovery mechanisms introduced.
- Operational efficiencies from digitalisation may eventually improve asset shares, but only once the investment is amortised and recurring costs fall. Hence, timing and net present value of digital investments must be reflected in asset-share projections. (3 marks)

c) Risks of excessive smoothing

Excessive smoothing can create a persistent gap between reported bonuses and the underlying asset share, causing inter-cohort unfairness. If smoothing keeps bonuses artificially high for older cohorts, newer cohorts may pay for past generosity.

Protracted smoothing that ignores a sustained deterioration in asset shares risks insolvency or an unplanned rapid correction later. If the fund continues to pay bonuses above sustainable levels, reserves and solvency buffers can be eroded.

Over-smoothing reduces transparency and can damage policyholder trust if later payouts diverge significantly from expectations. If the company masks true economic performance, credibility with policyholders and regulators is harmed.

Excessive smoothing may transfer value from shareholders to policyholders (or vice versa) in unintended ways, raising governance issues especially when the company is preparing for an IPO. Management must be able to justify smoothing decisions objectively.

Regulatory scrutiny may increase if smoothing is used to manipulate reported policyholder outcomes; the company must document policy and controls. Good governance requires documented smoothing rules, board oversight and stress testing. (4 marks)

d) Fairness between cohorts

Fairness requires that each cohort receives benefits broadly in line with the asset share they have earned

Therefore, the insurer should maintain separate asset-share calculations by cohort or by homogenous risk group. Cohort-level tracking prevents cross-subsidies going undetected.

Older cohorts (2005–2010) with lower equity exposure will have different realized returns and volatility than newer, equity-heavy cohorts, so uniform bonus percentages can produce inequitable outcomes. A one-size-fits-all bonus scale may unfairly advantage one group.

One remedy is to maintain **cohort-specific terminal bonuses** or apply loading/discounts reflecting historic asset mix, so that final payouts align with each cohort's actual experience. Differential terminal bonuses are a practical tool for restoring balance.

Where feasible, establish **sub-funds** or internal funds that reflect different asset mixes and credit investment returns to the appropriate cohort. This structural approach isolates returns and reduces inadvertent cross-subsidy.

Transparent asset-share methodology and regular published reconciliations help demonstrate that older and newer cohorts are being treated equitably. Publication of summary reconciliations enables stakeholder scrutiny.

If cohorts have materially different expense or mortality experience, adjust the expense and mortality loadings used in each cohort's asset-share calculation. Cohort-specific assumptions reduce bias in allocated asset shares.

Retrospective corrections (e.g., adjustment to terminal bonuses) can be applied where past declarations are found to have created unacceptable cross-subsidies, subject to governance and affordability. Remedial adjustments must be transparent and justified.

Board-level oversight and independent actuarial review should be used to validate cohorting choices and any cohort-specific adjustments. Independent checks reduce governance risk.

Customer communications need to explain why different cohorts may receive different outcomes while emphasizing fairness principles. Clear explanations reduce perceptions of arbitrariness.

Where cohort separation is impractical, the insurer should adopt objective rules (e.g., formulaic bonus adjustments) to approximate cohort fairness. Objective formulas reduce discretion and regulatory pushback.

(7 marks)

e) Policyholder communication

Opening remarks: We aim to pay fair returns based on what your policy has actually earned over time, balancing short-term market moves with the need to keep your payouts stable and fair across policyholders

- We aim to treat all policyholders fairly, including those who bought policies many years ago.
- If different groups of policyholders have had different investment or expense experience, we reflect that in the payouts where appropriate. We use cohort-based adjustments if needed.
- Bonuses reflect the long-term performance of the with-profits fund rather than short-term stock market moves. We aim for steady outcomes over many years, not big swings from one year to the next.
- Sometimes market gains are kept partly to help smooth future years. Holding back some gains can avoid sharp drops in bad years.
- We use smoothing to avoid sharp ups and downs in yearly bonus rates. Sudden changes are confusing and unfair, so we smooth where possible.
- That means even when markets rise quickly, only part of the gain may be paid out immediately. The rest is used to protect returns in worse years.
- We only smooth within agreed rules approved by the board and regulators. These rules are designed to be fair and robust.
- An independent review and board oversight ensures decisions are checked for fairness. This gives you assurance that bonus decisions are not arbitrary.
 - If you would like more detail, we publish on our website a summary of how bonuses are calculated. Full transparency is our commitment.

(5 marks)

[32 Marks]

Solution 2:**a) Loss of ITC**

Input tax credit (ITC) means GST incurred on expenses of the company could be offset against GST collected from customers on premium payments. No ITC in essence means higher expenses for life insurers. This is a significant concern because:

Expense-heavy business model: Life insurers incur significant upfront acquisition and servicing costs. Without ITC, the cost increase dramatically for all expenses where GST is payable.

Margin pressure: Life products (esp. savings/ULIP) operate on thin margins; unrecoverable GST reduces profitability (and hence the market value of the company as well).

Sectoral disadvantage: Competing industries like banks and mutual funds are at a natural advantage in terms of ability to be able to create differential products, exercise synergies, lower the costs due to pull/ demand from customers. Life insurance industry, on the contrary, has a limited scope of innovation and is driven largely by push sales. GST change creates a further comparative disadvantage vs mutual funds and bank deposits, where no such ITC issue exists (2 marks)

b) Impact of GST Changes:**i) Profit and Loss account**

GST on maintenance expenses (renewal commission, IT contracts, consultancy fees, policy servicing costs) increases the expense line of revenue account, reducing reported profit in the current year.

Actuaries must incorporate higher expense levels into future projections, increasing statutory reserves.

While higher reserves will neutralize (to certain degree) any hit to future P&L, it will be a one-time debit to current year's financials

For businesses where reserves are negative (e.g., non-unit reserves in many unit-linked contracts), there shall be no increase in reserves as on date, but instead the impact of higher renewal expenses shall be a debit to future years' P&L.

For long-term businesses, even small increases in per-policy expenses compound over time, materially raising reserves.

For participating business, operating surplus shall be reduced. This will result in lower bonuses being available for policyholders and hence lower shareholder transfers in the year of change.

Higher reserves and higher acquisition expenses will mean higher new business strain, reduced free surplus, potentially constraining dividend capacity and new business growth. (4 marks)

ii) Embedded Value (EV)

$EV = \text{Value of In-Force (VIF)} + ANW$

Hit to the P&L in the current year shall mean a reduced ANW.

Higher projected expenses shall mean higher liability for shareholders and hence result in lowering VIF

The addition of two shall be total hit to embedded value.

However, if reserves are increased to account for higher expense liability, VIF shall increase, but ANW will reduce, with overall impact remaining same as above. This is true if EV is computed on market-consistent basis.

However, if the company computes traditional VNB, there will be an increased loss in EV due to higher cost of capital.

Impact of Future EV: (NBV): Higher projected expenses shall depress new business margins, and slowing EV growth. (3 marks)

iii) Competitiveness and strategic response

Industry structure: Larger insurers with efficiency advantages may absorb costs better than smaller peers, leading to market concentration.

Strategic levers:

There may be an increased focus on cost optimization (automation, digital distribution).

Market may see a push towards on higher-margin products like protection products.

Industry participants may lobby for regulatory relief.

(2 marks)

[11 Marks]

Solution 3:

a) Importance of accurate data

Valuation sensitivity: Actuarial reserves are derived from projected cashflows that use ages, sums assured, policy terms and premium patterns. Small errors (e.g., DOB off by 1 year, or missing premiums) change the mortality/persistency basis applied and therefore materially alter reserve estimates.

Pricing & experience credibility: Management decisions (pricing, bonus-setting, product changes) rely on credible historical experience; corrupted data biases experience studies and leads to mispricing or misplaced product design choices.

Regulatory & solvency reporting: Aggregate figures used in statutory returns and solvency calculations must be reliable; data errors can lead to misstated capital ratios.

Operational, reinsurance and customer impact: Incorrect premium/payment records may lead to wrongful lapses, claim disputes and reinsurance mis-allocations.

(4 marks)

b) Types of data checks

Completeness / reconciliation checks:

Reconcile policy counts, aggregate sums assured and total premiums between legacy, new system and accounting ledgers.

Tolerance guidance: agree acceptable variances (e.g., <0.1% absolute on counts or an agreed INR tolerance) and flag exceptions.

Field Validation checks:

Automated rules: DOB within plausible range (e.g., policyholder age 16–120), issue date ≤ valuation date, premiums > 0.

Validate data types and formats (dates, numeric precision).

Consistency checks

Ensure logical relationships: issue date + term = maturity date; premium frequency consistent with premium amount; declared age consistent with DOB.

Flag contradictions for manual review.

Reasonableness checks:

Compare pre- and post-migration distributions (age, sums assured, policy term, premium size) using simple statistical checks (mean, median, percentiles) and, where appropriate, a distribution test (e.g., compare histograms, etc.) to spot shifts.

Prioritize by risk: large-sum policies, business in-force near maturity, or blocks with unusual persistency.

Sample checks:

Manually verify sample against original source docs (applications, underwriting files, bank receipts). Stratified random sampling (e.g., min 100 policies or 1% of book, whichever larger; oversample high-value strata) can be used.

Review of change-tracking or audit trail:

Review migration transformation scripts, mapping rules and logs; ensure every transformation step has an audit trail.

(5 marks)

[9 Marks]**Solution 4:****a) Pricing considerations — assumptions and profit criteria**Mortality and longevity assumptions

- Pricing requires an assessment of mortality during accumulation and longevity post-vesting.
- The GMAR exposes the company to the risk of annuitants living longer than expected; hence conservative longevity tables with appropriate margins should be used.
- Experience studies may be sparse in the middle-class digital segment, requiring reliance on industry data adjusted for the company's expected mix.

Persistency assumptions

- Digital distribution can be cost-efficient but often leads to higher early lapses.
- Lapses reduce the spread of upfront expenses and may make guarantees more costly if only less healthy lives persist.
- Pricing should therefore allow for selective lapsation and for variation in persistency by policy duration.

Expense assumptions

- Ticket sizes are low, so fixed expenses per policy may be relatively large in proportion to premium.
- Pricing must reflect setup costs of digital platforms, ongoing IT maintenance, and customer service.
- Allowance must also be made for expense inflation.

Investment assumptions

- The accumulation phase offers equity and debt switches, creating variability in returns.
- Pricing must project realistic asset returns and volatility, ensuring guarantees are sustainable even if customers switch to lower-yielding debt funds or if equity returns were to be sub-optimal.
- The GMAR at vesting requires explicit modelling of the cost of honoring this promise/guarantee in adverse investment conditions.
- Stochastic modelling or scenario analysis may be required to estimate the cost of providing the guarantee.
- Potential hedging costs or reserving requirements should be reflected in the premium structure.
- Equity exposure increases volatility of returns and hence increases the Cost of Guarantee (CoG); pricing must incorporate this through higher guarantee charges or margins.
- Switching flexibility means the insurer cannot rely on a stable asset allocation; pricing must therefore allow for adverse policyholder behaviour such as moving to debt funds late in the term, which increases the likelihood of the GMAR biting, especially if the fund had not grown to reasonable size before switching.

Reinsurance considerations

- The company should consider reinsuring longevity risk arising from the GMAR.
- Availability and cost of such reinsurance will influence the pricing basis.

Profit criteria

- The company should aim for a return on capital that exceeds its hurdle rate, commonly expressed as an internal rate of return (IRR).
- Measures such as new business margin (NBM) and value of new business (VNB) should also be used, as they are standard in EV reporting.
- Pricing must balance profitability with competitiveness in the growing retirement market.
- The switching feature can improve product marketability on digital platforms, potentially increasing expected volumes; this may influence the acceptable profit margin or required IRR.
- However, increased guarantee cost and volatility due to equity investment may constrain how competitively the product can be priced, because of requiring higher guarantee charges or more conservative profit targets.

Other considerations

- Regulatory caps on charges and fairness to policyholders limit the extent to which expenses can be passed on.
 - Distribution incentives for digital platforms must be built in, even if it is lower than agency commissions.
- (11 marks)

b) Reserving and capital requirements — impact of GMAR

- The GMAR introduces guaranteed liability at the point of vesting. Reserves must allow for the worst-case scenario in which investment performance is insufficient to cover the guaranteed annuity rate.
 - This implies holding higher reserves than for a purely unit-linked accumulation product.
 - The reserving basis must use prudent assumptions for mortality, longevity, expenses, and investment returns, in line with regulatory requirements.
 - Stress and scenario testing is needed to ensure that reserves remain adequate under adverse economic conditions, such as prolonged low interest rates.
 - Switching also increases volatility in projected fund values; hence reserves must allow for adverse switching behaviour, which increases the probability that the GMAR will bite.
 - From a capital perspective, the GMAR increases the solvency capital requirement (SCR) for market risk and longevity risk.
 - The switching feature amplifies market risk capital, as the insurer must consider the worst-case asset mix under policyholder behaviour when projecting guarantee strain.
 - This may require additional capital buffers or risk-mitigation strategies (e.g., reinsurance or hedging).
- (3 marks)

c) Strategic implications of launching via digital platform

Digital channels may appeal to tech-savvy customers and reduce commission costs.

This shall help to not only reach masses, but the quality of lives is likely to be better.

However, given that sales shall not be advisor-driven, they may not foster persistency as effectively as traditional agency models.

Reaching customers efficiently and gathering data for targeted marketing may give a competitive edge over traditional channels in a long run.

Digital success could enhance ABC Life's positioning from distribution perspective and can result in further opportunities of cross-sell/ up-sell.

(2 marks)

d) Competitive Positioning

Market opportunity: The product taps into a genuine societal need — retirement security for the middle class. If executed well, it could capture significant volumes.

Competitive positioning: The GMAR differentiates the product but may be easily replicated by competitors. First-mover advantage may be limited without strong branding.

Profitability balance: The combination of small ticket sizes and a guarantee creates pressure on margins; scale is essential to make the business viable.

Reputation and brand: Success could enhance ABC Life's positioning as an innovative and socially relevant insurer; failure could damage trust.

Competitive differentiation through flexibility and guarantees – Offering switching between equity and debt funds along with a guaranteed minimum annuity rate makes the product attractive compared to traditional annuities. However, this also introduces higher risk and capital requirements, which must be managed carefully to avoid eroding competitive advantage. (3 marks)

e) Risks and management strategiesMortality and longevity risk

Nature: Incorrect assumptions about survival to vesting or annuitant longevity post-vesting could materially affect profitability, particularly given the GMAR.

Management: Use conservative longevity assumptions, reinsure longevity risk, and regularly monitor emerging experience to refine the basis.

Persistency risk

Nature: Low persistency leads to expense strain and reduces expected future profits. There is also the risk of anti-selection if only long-living or more healthy customers persist.

Management: Design features that encourage persistency, such as loyalty bonuses or persistency-linked benefits. Use digital tools for reminders and ease of premium payment. Targeted retention campaigns for high-value policies.

Asset–liability mismatch (ALM) and investment risk

Nature: The company guarantees a minimum annuity rate but allows policyholders to invest in funds with variable returns. If assets underperform, ABC Life may face a shortfall at vesting.

Management: Adopt an ALM strategy that matches a portion of liabilities with long-duration bonds. Use derivatives to hedge extreme interest rate movements. Undertake dynamic monitoring of asset and liability cashflows.

Operational and distribution risk

Nature: Reliance on a new digital platform creates exposure to IT failures, cyber attacks, and poor customer experience. Inadequate digital disclosures may result in mis-selling complaints.

Management: Invest in robust IT infrastructure and cyber security, clear disclosure of guarantees and risks, and strong complaint resolution mechanisms.

Reputational and regulatory risk

Nature: Guarantees are complex and may be misunderstood by policyholders, leading to reputational damage or regulatory intervention.

Management: Provide transparent illustrations, obtain regulatory approval of product features, and engage with regulators proactively. (10 marks)

[29 Marks]

Solution 5:**a) Main types of reinsurance contracts****1. Original terms (coinsurance) reinsurance:**

- The reinsurer takes a fixed proportion of all premiums and pays the same proportion of all claims.
- The insurer may receive a reinsurance commission to offset initial expenses and distribution costs.
- Often arranged on a quota share basis, where a constant proportion of every policy is ceded, or on a surplus basis, where only the portion of sum assured above a fixed retention limit is reinsured.
- Suitable for term assurance where the insurer wants to limit exposure to large sums assured while retaining participation in experience.
- Helps reduce new business strain since the reinsurer shares initial commissions and a part of risk, resulting in lower reserving or capital requirements.

2. Risk premium (yearly renewable term) reinsurance:

- The reinsurer receives an annual premium to cover a defined share of the mortality risk during that year.
- Premiums are calculated as a rate per unit of sum at risk and reviewed periodically.
- Reinsurance liability ceases when the underlying policy ceases.
- Widely used for pure protection portfolios such as term assurance, since the risk is purely mortality-related and renews annually. However, if the insurer is offering long-term rate guarantees to direct customers, the arrangement may not be suitable.
- Simple to administer and provides flexibility to change retention levels as experience evolves.

3. Excess of loss reinsurance

- A non-proportional form of reinsurance where the insurer retains claims up to a predetermined retention per life, and the reinsurer pays any excess.
- Appropriate for term assurance portfolios containing high individual sums assured, limiting the insurer's exposure to exceptional claims.
- May also include catastrophe excess of loss protection, which covers multiple death claims arising from a single event (e.g., natural disaster or accident).
- Protects the insurer's solvency from extreme mortality events rather than routine fluctuations.

4. Stop-loss reinsurance

- The reinsurer covers aggregate claims over a defined threshold, e.g. when total annual death claims exceed 120% of expected claims.
- Provides protection against adverse portfolio-level mortality experience rather than individual large claims.
- Useful for group term assurance or large homogeneous books where volatility arises from overall mortality deviations.
- Especially important in this scenario as the company is mid-sized and may not have capacity to absorb large volatility.

5. Financial reinsurance

- Structured arrangements designed primarily to provide capital relief or smooth reported profits rather than transfer mortality risk.
- Common for term assurance business experiencing significant new business strain, where part of initial expenses is financed by the reinsurer and repaid from future profits.

(5 marks)

b) Factors for retention limits and structure

1. Size and distribution of sums assured: High sums assured create concentration risk; surplus or facultative reinsurance may be needed.
2. Company's capital strength / free asset ratio: Stronger companies can afford to retain more risk.
3. New business strain: Original terms or financial reinsurance may help reduce statutory reserve strain and capital requirement.
4. Volatility tolerance: How much fluctuation in claims or profits the insurer is prepared to accept.
5. Underwriting standards and experience: Strong underwriting allows higher retention; weak underwriting suggests greater reinsurance.
6. Reinsurance cost and commission terms: Cost of cover and commission recovery must justify the protection obtained.
7. Product features: Conversion, renewability, or riders can increase risk retained and influence structure.
8. Expected portfolio volumes and diversification: Larger, well-diversified portfolios allow higher retentions due to pooling of risk.
9. Counterparty considerations: Financial strength and credit rating of reinsurers; spreading exposure across multiple reinsurers.
10. Operational simplicity: Ease of administration and clarity of treaty terms.
11. Regulatory requirements: Some regulators impose limits on maximum retention or cession percentages.
12. Solvency capital requirements: Retention should align with available solvency capital and stress-test results.
13. Catastrophe exposure: Potential for multiple claims from a single event may require catastrophe excess-of-loss cover.
14. Profit and capital volatility impact: The insurer's appetite for earnings and capital volatility drives retention choice.
15. Experience credibility: Where mortality data is limited or uncertain (e.g. new entrant), more reinsurance is advisable.
16. Expected mortality and persistency assumptions: Poor persistency or anti-selection risk increases need for risk-sharing.
17. Market availability and pricing: Competitive reinsurance capacity and pricing influence structure choice.
18. Strategic objectives: Desire for capital efficiency, earnings stability, or building in-house risk capability.
19. Accounting and tax treatment: Different structures affect timing of profit recognition and tax implications.
20. Relationship with reinsurers: Past experience, reliability, and flexibility of reinsurer in handling claims and treaty adjustments.

(6 marks)

[11 Marks]**Solution 6:****a) Surrender Value Principles:**

1. The surrender value should represent the equitable value of the policyholder's benefits released on early termination of the contract.
2. The surrender value should be fair between policyholders who surrender and those who continue their policies.
3. It should be consistent with the principles used for determining bonuses and with-profit distributions.
4. The amount should broadly reflect the policy's asset share, allowing for the premiums paid, investment return earned, expenses, mortality, and any bonuses added.
5. The policy conditions and any regulatory minimum values must be taken into account.
6. Surrender penalties or market value reductions should only be applied to the extent necessary to protect remaining policyholders or to reflect costs incurred due to early surrender.
7. The surrender value basis should not encourage anti-selection or allow policyholders to profit from the timing of surrender.
8. It should be objective, transparent, and capable of consistent application across policyholders.

9. The approach should take into account the type of product, e.g. with-profits, without-profits, unit-linked, or conventional.
10. Allowance should be made for any guarantees or options attaching to the contract.
11. The method should be consistent with reserving and pricing bases, ensuring no double counting or inconsistencies in assumptions.
12. The company should ensure regulatory disclosure and fairness obligations are met, and surrender value scales are reviewed regularly. (5 marks)

b) Surrender Value in Immediate Annuity:

Offering surrender values on immediate annuity contracts is generally considered unreasonable and is rarely done in practice due to several key reasons:

Anti-selection / mortality risk – Policyholders who expect to live longer or shorter than average may disproportionately surrender, leading to financial loss for the insurer.

Disrupts pricing and asset-liability matching – Immediate annuities are priced for lifelong income; allowing surrenders complicates reserve management and can increase capital strain.

Administrative complexity and cost – Calculating fair surrender values requires adjusting for remaining life expectancy and investment returns, which is operationally difficult.

Contradicts product purpose – Immediate annuities are designed to provide guaranteed retirement income; surrender values undermine the long-term income objective. (3 marks)

[8 Marks]
