

INSTITUTE OF ACTUARIES OF INDIA
EXAMINATIONS

21st May 2024

Subject CP1 – Actuarial Practice
(Paper A)

Time allowed: 3 Hours 15 Minutes (14.45 - 18.00 Hours)

Total Marks: 100

- Q. 1)** State how the following may have implications on the operation of a financial service providers' business?
- i) Accounting Standards
 - ii) Risk, Capital Adequacy and Solvency
 - iii) Corporate Governance
- [6]**
- Q. 2)** Country ABC has witnessed a significant increase in the customer complaints and financial frauds in the recent years. The financial regulator of the country has set up a task force of industry experts to investigate the rising trends in the customer complaints and the frauds and recommend the steps that could be taken to deal with the issue. You have been invited as a member of the task force to represent the insurance industry. In one of the meetings of task force, you would like to make a presentation on the existence of information asymmetry as one of the key reason for customer complaints and frauds in the insurance sector.
- i) Define Information Asymmetry? (1)
 - ii) Suggest steps that the Government or the Financial sector Regulator can take to deal with the issues arising from the information asymmetry in the insurance sector. (8)
- [9]**
- Q. 3)** The Government of Country X is planning to launch a new welfare scheme for its citizens. The ministry related to the Social Welfare Affairs has sent a proposal in this regard to the finance ministry for its approval. You are an Actuary working in a reputed consultancy firm in the country. After going through the proposal, the finance ministry has approached your firm to share a report with the ministry covering various aspects as the firm may deem relevant for the ministry to consider before approving the proposal.
- i) Identify a range of potential stakeholders in offering a social welfare scheme. (3)
 - ii) Discuss various factors that you would advise the Government to consider before it launches new welfare scheme. (5)
- [8]**
- Q. 4)** Food Point is a food tech Company operating as an on-line restaurant aggregator and food Ordering and delivering company. The key revenue of the company is from restaurant advertising and online food ordering. The company has its operations primarily in the Tier 1 and Tier 2 cities of the country and across various countries. Recently, a new Director has been appointed on the Board of the Company. The new Director will be the Chair of Risk Management Committee of the company.
- i) Define Risk Management process and explain various aspects of the risk management process. (3)
- The Director has sought a report from the CEO describing the key risks that the company faces and the ways the company manages these risks currently.
- ii) Explain briefly the important risks that CEO will include in his report to the Director. (8)
 - iii) Describe various insurance products that might be appropriate in helping to manage the risks that the company is exposed to. (5)
- [16]**

Q. 5) PITY Bank is a mid-size bank operating in country A. The bank offers a range of loan products. In its last Board meeting, the Board has been discussing a proposal to capitalize the bank by borrowing fresh capital from the market.

i) List the reasons why a Bank would need fresh capital. (4)

ii) Define Capital Management in terms of provider of financial products. (2)

The Central Bank of Country A has recently published a research report on the quality of lending by the Banks regulated under its regime. In its study, the Central Bank has observed an aggressive unsecured retail lending by the Banks which has resulted in increased systematic risk in the banking sector. You are Chief Risk officer of PITY bank in the country which has got significant exposure to the unsecured retail loans as observed by the Central Bank. Your CEO is worried that an increased exposure to unsecured loans can have significant impact on Bank's solvency capital requirement. He has asked you to re-assess the capital requirement of the Bank as result of recent changes in the Bank's loan profile.

iii) Briefly discuss different measures used by a Bank for assessing its capital requirement. *(No need to explain the calculation of capital requirement)* (4)

iv) Explain with reasons the likely impact of the increased exposure to unsecured loans on the Bank. (4)

The Central Bank has directed all the Banks to review their risk management position and submit a report to the Central Bank. Your CEO has asked you to prepare a detailed report illustrating the risk profile of your Bank and the factors that the Central Bank would consider in assessing the risk management of the company.

v) Suggest various items that you could cover in your report. (4)

[18]

Q. 6) Fund DB is a large final salary defined benefit pension scheme in Country A where the Pensions in payment are guaranteed to increase at the lower of price inflation or 5% each year.

i) List the main factors that would influence the long-term investment strategy of such a Fund. (4)

ii) Keeping in view the liability profile of the fund, discuss with reasons the various asset types that might be appropriate for the fund to consider for investment. (8)

Country A has recently witnessed a significant increase in the inflation rate in its economy. The Chief Investment Officer (CIO) of the scheme expects that the inflation rate in the country is likely to remain high in the short to medium term. CIO has, therefore, proposed changes in the existing asset allocation for both domestic and overseas investments. He has proposed a reduction in the equity and bond allocation both in the domestic and overseas market and increase the allocation in the money market instruments.

iii) Discuss the possible reasons why an institution like DB fund may at times prefer holding money market instruments instead of equities and bonds. (4)

[16]

- Q. 7)** You are working in actuarial department of Company A which is a small health Insurance company selling health insurance covers. You have recently attended a seminar on “Actuary- Well known for their Professional Advice”. One of the sessions in the seminar covered Actuarial Control Cycle employed by the actuaries in advising their client.

Yesterday, your manager received a proposal from CEO wherein the company is planning to launch a critical illness product. CEO has asked your manager to provide his views on the actuarial aspects related to the new launch. You are assisting your manager in preparing a response to CEO.

Describe how you would use actuarial control cycle and various aspects considered under in it in preparing your response to CEO.

[10]

- Q. 8)** A medium-size life insurance company has been writing term insurance, unit-linked business, and non-linked business. You have recently joined the company as a Valuation Actuary and you have been going through the various actuarial analysis reports that have been prepared by your predecessor for the management. The previous year valuation of the company reveals that company’s profit arising during the year has declined significantly despite reporting surplus in the previous years.

i) Discuss why an actuary would be interested in carrying out the analysis of its profit. (7)

ii) Outline the key reason for the possible causes of decline in profit and briefly comment on the line(s) of the business which would be impacted by these causes. (10)

[17]
