INSTITUTE OF ACTUARIES OF INDIA

EXAMINATIONS

9th March 2022

Subject SA7 – Investment and Finance

Time allowed: 3 Hours 30 Minutes (14.30 - 18.00 Hours)

Total Marks: 100

INSTRUCTIONS TO THE CANDIDATES

- 1. Please read the instructions to examinees sent along with hall ticket carefully and follow without exception.
- 2. The answers are expected to be India Specific application for the syllabus and corresponding core reading. However, substantially the core reading material is still taken from material supplied by Actuarial Education Company which is meant for UK Fellowship examination. The core reading also contains some material which is India Specific, mostly the IRDA regulation. In view of this, it should be noted that focal point of answers is expected to be India Specific application. However, if application specific to any other country is quoted in the answer the candidate should answer the question with reference to Indian environment.
- 3. Mark allocations are shown in brackets.

(7)

(7)

(8)

(3)

(5)

(5)

- **Q.1)** You are a marketing Actuary in a large global fund. A portfolio manager in the fund wishes to launch a US private debt fund in the global market for institutional client and has asked you to prepare marketing material for potential institutional clients.
 - i) Describe the relative advantages of investing in public debt versus private debt for institutional clients.

The US portfolio manager decided to raise capital over a period of 12 to 18 months which then will be invested in Private Debt issued by US companies only. The term of the fund will be 10 years post closure of New Fund Offering (NFO). The intended portfolio size is expected to be USD 200 Million with portfolio manager committing a seed capital of USD 10 Million. The fund will distribute first 6% of annual returns to investors and rest of the returns will be distributed in the proportion of 20/80 (portfolio manager/investor). The Fund is expected to charge a flat fee of 1.5%.

The proposal is presented to risk committee and chairman of risk committee had expressed some reservation over the design. He asked you to identify the potential risk as well as any enhancements that could be made to make the product more appealing.

ii)

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- a) Describe the main risks for an investor and, where possible, suggest product enhancements to mitigate these risks.
- **b**) Describe the main risks for the firm in launching this product and if possible, suggest product enhancements to mitigate these risks.

A regulator in your country requires showing Effective Annual Charge (EAC) of the fund over the term of the fund and asked you to disclose the same in the NFO. The finance provided you details of other costs in addition to those described above:

- Administration cost 0.5%
- Advice fee 1.5% in the first year, 0.5% thereafter
- Other 3%

*please note all costs exclude VAT.

iii) Calculate the EAC assuming that full capacity of the fund is sold and an annualised return of 20% is achieved over the 10 year period.

Regulator has organised a webinar for effective interaction between fund managers and institutional investors. One of the agenda of the webinar is to present economic conditions:

iv)

- **a**) Describe the current state of Indian economy highlighting broad economic parameters and recent policy decisions.
- **b**) Provide an overview of the Indian and US capital markets with particular reference to the recent developments in these markets.

The portfolio manager is considering implementing an alternative fee charging structure consisting of a 2% pa flat fee plus a performance fee of 20% of any outperformance above WPI index change + 5%. Performance fees are measured over rolling 1-year period.

- **a**) Discuss the appropriateness of this proposed fee and the relative merits of performance fees compared with flat fees in the context of this fund.
- **b**) Recommend how this fee structure could be amended to be more attractive to investors and the portfolio manager.

(5) [**45**]

(10)

(5)

- **Q. 2)** A large Government-owned life insurance company is planning an Initial public offering (IPO). The company had decided to offer shares to the existing policyholders of the life insurance company at a discount of 5% on the issue price. This has led to an overwhelming response from the existing policyholders and many of them would be an amateur first time investors as well.
 - i) Discuss how a professional and amateur investor will analyse this investment differently. Discuss the behavioural aspects of the difference in the approach of investment analysis.

You are the Chief Research Officer of an investment advisory firm, an amateur high net worth Investor aged 65 years has approached you for your views on this investment.

ii) What are the main biases in conducting research? Please illustrate with examples. (7)

The investor would also need your expertise to understand whether he should invest directly in the company or go for a mutual fund scheme which invests more than 70% of his fund in the shares of this company. The remaining 30% is in other private life insurance companies.

- iii) Please advise with focus on his risk appetite and relative advantages and disadvantages of investing in the equity and a life insurance fund. (5)
 iv) What are lifecycle investments and what would be your advice to the client with regard to this. (3)
 v) Discuss how investment performance are measured and analysed. (10) [35]
- **Q. 3)** In the Union Budget announced recently, the Finance Minister announced the introduction of India's Central Bank Digital Currency (CBDC)
 - i) What is the Central Bank Digital Currency (CBDC)? How this currency is different from Fiat currency.

The general belief is that the digital rupee would give a 'big boost' to digital economy. It was also indicated that technologies such as block chain would be used by the Central bank to issue the currency.

ii) What is the economic rationale for introducing CBDC?	(5)
iii) What are the potential benefits and challenges related to CBDC implementation?	(10) [20]

v)