Actuarial Society of India EXAMINATIONS

07th November 2006

Subject CA3 – Communications

Time allowed: 2 ½ Hours (02.15* - 05.00 pm)

Total Marks: 100

INSTRUCTIONS TO THE CANDIDATE

- 1. Do not write your name anywhere on the answer scripts. You have only b write your Candidate's Number on each answer script.
- **2.** In addition to this paper you should have available Actuarial Tables and an electronic calculator.
- 3. You have 15 minutes at the start of the examination in which to read the questions. You are strongly encouraged to use this time for reading only, but notes may be made. You then have 2 ½ hours to complete the paper.
- **4.** You must not start writing your answers until instructed to do so by the Supervisor.
- **5.** Attempt BOTH the questions.

Professional Conduct:

"It is brought to your notice that in accordance with provisions contained in the Professional Conduct Standards, If any candidate is found copying or involved in any other form of malpractice, during or in connection with the examination, Disciplinary action will be taken against the candidate which may include expulsion or suspension from the membership of ASI."

Candidates are advised that a reasonable standard of handwriting legibility is expected by the examiners and that candidates may be penalized if undue effort is required by the examiners to interpret scripts.

AT THE END OF THE EXAMINATION

Hand in BOTH your answer scripts and this question paper to the supervisor.

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Q.1) You are a student actuary working as an asset consultant for a large actuarial consultancy. Your boss, the consultancy's Marketing Director, has read an article on fund management in a magazine and has highlighted certain aspects of it.

It has never been easy to pay less to invest. No fewer than 136 exchange-traded funds (ETFs) were launched in the first half of 2006, more than in the whole of 2005.

For those who believe in efficient markets, this represents a triumph. ETFs are quoted securities that track a particular index, for a fee that is normally just a fraction of a percentage point. They enable investors to assemble a low-cost portfolio covering a wide range of assets from international equities, through government and corporate bonds, to commodities. No longer must investors be at the mercy of error-prone and expensive fund managers.

But as fast as the assets of ETFs and index-tracking mutual funds are growing, another section of the industry seems to be flourishing even faster. Alternative investment asset management (ranging from hedge funds through private equity to property) grew by around 20% in 2005, to \$1.26 trillion. Investors who take this route pay much higher fees in the hope of better performance. One of the fastest assets, funds of hedge funds, charge some of the highest fees of all.

At first sight, this might seem like a typical market, with low-cost commodity producers at one end and high-charging specialists at the other. Buy a Rolls Royce rather than a Trabant and you can expect higher standard of luxury and engineering in return for the much greater price. But fund management is not like any other industry; paying more does not necessarily get you a better service.

An index represents the average performance of all investors, before costs are deducted. If the fee paid to the fund manager increases, the return achieved by the average investor must decline. After fees, hedge-funds returns this year have been feeble. From January through August, the average hedge fund returned just 4.2%, less than S&P 500 index's 5.8% total return.

So why are people paying up? In part, because investors have learned to distinguish between market return, dubbed beta, and managers' outperformance, known as alpha.

The fund-management splits began with the decline of balanced managers, which took complete charge of an investor's portfolio, running everything from American equities through Japanese bonds to property. Clients became convinced that no one firm could produce good performance in every asset class, nor could they master the art of timing the switch from one asset to another.

High fees on alternative asset investment suggest investors can identify outperforming fund managers in advance. However, studies suggest this is extremely hard (hence the rubric routinely attached to financial products, "Past performance is no guarantee of future returns."

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And yet investors may be willing to gamble, despite the higher fees, because they desperately need high returns. The bear market between 2000 and 2002 brought a sober reassessment of the future returns likely from equities and bonds. With bonds yielding 4-5% and equities returning perhaps 3% on top, composite future returns of 6% or so looked inadequate. American pension funds, having analysed their liabilities, realise they need more than 6% to market up their shortfalls in their funds. Whether they earn alpha or not, they have to roll the dice and try to get it.

The same rationale led to the enthusiasm for other forms of alternative assets, such as property and commodities. **These appeared to offer a different source of returns that was not closely correlated to shares or bonds.** The problem is that, as more money has piled in, the character of such assets have changed. Prices have risen (reducing prospective returns) and exotic assets are more correlated with run-of-the mill ones.

Diversification is supposed to be the one "free lunch" in the financial markets. However, these new market niches may be too small to absorb the amount of capital investors would like to place in them. Furthermore, top-performing fund managers, especially in hedge funds, may well close their doors to new investors to prevent returns being diluted.

Nevertheless, investors will probably keep pursuing alpha, even though cheaper alternatives of ETFs and tracker funds are available.

You can assume that the Marketing Director is not familiar with financial matters. Draft a memo to your boss explaining the article in approximately 500 words. Your memo must cover the following aspects:

- 1. The term "efficient markets". Explain why the rise of ETFs indicates efficiency of markets.
- **2.** Explain the reason for the following statement being made in the article (para 4): "But fund management is not like any other industry; paying more does not necessarily get you a better service."
- **3.** Explain the terms alpha and beta and the role they play in generating returns for ETFs and alternative asset classes.
- **4.** The reasons for institutional investors such as pension funds to invest in alternative asset investments, particularly in the light of low hedge fund returns compared to the S&P 500 index and higher fees on such funds compared to ETFs.
- **5.** A bank has introduced a deposit scheme in which the capital is returned at the end of the term with returns linked to the BSE200 Index. Identify a suitable investment option for the bank out of the ones mentioned in the article.

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6. Explain the terms **Correlation** and **Diversification** in the context of fund management.

7. Your boss has commented, "Surely all fund managers aim to increase their funds under management as this would increase their profitability and reputation. I do not understand the statement that top-performing fund managers may well close their doors to new investors to prevent returns being diluted (para 11).

Explain the reasons for the statement.

[60]

Q.2) You work as a customer service manager of a general insurance company.

A policyholder has recently submitted an insurance claim for Rs75,000, comprising of Rs70,000 for damage to home contents following a fire with the balance being for cash of Rs5,000. The home contents have been insured for an amount of Rs125, 000.

Based on the claim assessors recommendation a notice of claim settlement for Rs44,250 was sent to the policyholder. Unable to understand the reason for the reduced claim settlement, the policyholder has written to the company for a written explanation of the reduction in claim amount.

Draft a letter to the policyholder in approximately 400 words explaining why the settlement amount is lower than the original claim amount.

You need not consider the implications for the premiums paid or the correction of premiums for the future as a result of underinsurance. Additionally, you should ignore any possible issues relating to no claims discounts or bonuses.

You may assume that there were no other problems with the details provided on the application form or the claim form.

Claim assessors report

- 1. The policy contract sent to the policyholder mentions the maximum insurance for cash to be Rs3, 000.
- 2. A visit to the home indicated that the policyholder's home contents were underinsured. The value of the contents, excluding cash, should have been Rs200, 000 and not Rs125, 000. Thus the non-cash claim has been reduced in the ratio of the value of home contents quoted to the true value, since the premiums have also been paid only to this extent.
- **3.** A deductible of Rs2, 500 exists in the event of a claim.

[40]
