

# **Actuarial Society of India**

**Examinations**

**November 2006**

**CA3 Communications**

**Indicative Solution**

**Indicative Solution & Marking Guide: Question 1**

To: Marketing Director  
From: Student Actuary  
Date: 1 October 2006

Subject: Article

This memo captures various aspects of the attached article. In particular it addresses the seven issues that you have raised which are covered in the subsequent sections.

**Market efficiency**

Market efficiency refers to the concept that the market prices reflect the latest information available.

Exchange traded funds (ETFs) track an index and therefore reflect the view that returns net of fees above the index cannot be earned. Since past prices of an index are publicly available this indicates market efficiency.

**Fee and service**

Fund managers charge a fee for their service. The fee depends on how much human intervention is required in managing funds ranging from low fees for ETFs to high fees for alternate asset classes. However, there is no guarantee that funds charging higher fees will yield higher returns.

**Alpha and Beta**

The overall returns generated by a fund are broken down to alpha and beta. Alpha refers to the returns generated by the managers' outperformance above the market. Beta is the return generated by the market itself.

ETFs, as described above, are funds that track an index. Therefore, the market drives the returns on ETFs, hence all of the return is through beta.

Alternative asset classes such as hedge funds involve the fund manager's intervention and therefore the returns are a combination of alpha and beta, with alpha playing a dominating role.

**Institutional investors' interest in alternative asset classes**

Institutional investors such as pension funds have assessed the returns expected in the future. Given the investment outlook, they believe that the likely aggregate returns will be around 6% by investing in traditional asset classes such as bonds and equities. Funding their liabilities require the fund assets to grow at rates higher than 6%. These investors have therefore decided to invest in alternative asset classes in the hope of earning higher returns, even though the past performance net of fees is not that

encouraging. Finally, the returns on the alternate asset classes are not closely correlated with traditional assets providing a form of diversification.

**Investment option for bank's deposit scheme**

A bank has introduced a deposit scheme that returns the capital plus returns generated on the BSE200 index. Therefore an appropriate investment option will be to invest in an Exchange Traded Fund on the BSE200 index.

**Correlation and Diversification**

Correlation in fund management refers to the relationship of returns from different asset classes. Correlation can range from  $-1$  to  $+1$ . A positive number indicates that the returns move in the same direction while a negative number indicates that returns move in opposite direction.

Diversification in fund management indicates that the funds are invested in different assets classes that are negatively correlated or have low correlation. This is akin to the concept of not putting all the eggs in one basket.

**Limit on funds under management**

Fund managers offering alternate asset classes have limited investment opportunities. As the fund size grows these opportunities start shrinking and the returns become correlated with traditional asset classes. Thus fund managers may stop taking new investors in order to generate high returns for their existing investors despite the temptation of new investors.

I would be glad to address any query that you may still have on the article.

[547 words]

**Marking guide**

Marks are split as follows –

Meeting objectives	Upto 14 marks
Presentation	Upto 22 marks
Contents	Upto 24 marks

**Meeting objectives**

Has the script met the overall objective of

- ✍ Explaining the technical aspects of the article?
- ✍ Covering each of the 7 topics raised by the Marketing Director

Will the reader:

- ✍ Understand the explanations?
- ✍ Be satisfied with the answer?

**Presentation**

- ✍ Clear statement of purpose
- ✍ Logical structure
- ✍ Appropriate language used
- ✍ Suitable sentence length
- ✍ Ideas grouped appropriately in paragraphs
- ✍ Suitable ending
- ✍ Correct grammar
- ✍ Correct spelling and punctuation

**Contents**

- ✍ Market efficiency
- ✍ Fee and service
- ✍ Alpha and Beta
- ✍ Institutional investors' interest in alternative asset classes
- ✍ Investment option for bank's deposit scheme
- ✍ Correlation and Diversification
- ✍ Limit on funds under management

[Total 60]

**Penalties**

Cut marks for

- ✍ Very poor grammar, spelling or punctuation
- ✍ Requests for more information
- ✍ Speculative statements
- ✍ Too much detail
- ✍ Use of technical jargon
- ✍ Excessive waffle

**Indicative Solution & Marking Guide: Question 2****Indicative solution**

<Address>

<Date>

Dear <Policyholder>,

**Home Contents Insurance Claim – Policy number 123456**

Thank you for your letter of <date> in connection with the reduction in your claim on your home contents insurance policy.

In your letter you queried the rationale for the offer of Rs44,250 as settlement of your claim even though you submitted a claim for Rs75,000. In this letter I will explain why we have reduced your claim amount of Rs75,000 to Rs44,250.

**Why the Rs44,250 offer is less than the amount you claimed**

This offer is lower than you expected due to the following reasons:

- ? the value of your home contents was estimated to be Rs200,000 whereas you insured them for a sum of only Rs125,000
- ? the policy restricted the amount payable for loss of any cash at home to Rs3,000
- ? the claim payment has been reduced further by the deductible of Rs2,500

These reasons are explained in greater detail below.

**Value of the contents**

When applying for the insurance cover, you indicated the contents of your home were worth approximately Rs125,000.

Following submission of your claim, our claims team assessed the total value of all the insured items to be Rs200,000. This suggests that, at the time the policy commenced, you insured only 62.5% (125,000 / 200,000) of the real value of the contents of your home.

We have therefore reduced the claim amount for damage to your home contents to 62.5% of Rs70,000 or Rs43,750.

**Policy restriction on cash**

Your policy documents show that the maximum payment for loss of cash is Rs3,000 and we have therefore limited the claim for loss of cash to Rs3,000.

**Deductible**

A deductible of Rs2,500 was set up when your policy commenced and is shown in your policy document. So Rs2,500 has been deducted from the amount payable to you. The purpose of the deductible is to lower the premium than it would have been without a deductible as the insurer pays out less, and does not pay out at all for small claims below the limit.

**How the Rs44,250 has been calculated**

Your total insurance amount payable is therefore:

- ? Rs43,750 in respect of home contents
- ? **Plus** Rs3,000 in respect of cash
- ? **Less** Rs2,500 in deductible

or a total of Rs44,250

I hope this has clarified why the payment offered is less than your claim amount. I should be grateful for your confirmation that you accept the offered amount of Rs44,250. I will then arrange for the payment to be made.

If you have any further queries, please do not hesitate to contact me at the above address.

Yours sincerely

<Your Name>

Customer Services Manager

**Marking guide**

Marks are split as follows –

Meeting objectives	Upto 10 marks
Presentation	Upto 16 marks
Contents	Upto 14 marks

**Meeting objectives**

Has the script met the overall objective of:

- ✍ Explaining the rationale behind the reduction in claim amount?
- ✍ Explaining how under insurance is treated?
- ✍ Explaining the policy limit on cash
- ✍ Explaining the deductible

Will the reader:

- ✍ Understand the explanations?
- ✍ Be satisfied with the answer?

**Presentation**

- ✍ Clear statement of purpose
- ✍ Logical structure
- ✍ Appropriate language used
- ✍ Suitable sentence length
- ✍ Ideas grouped appropriately in paragraphs
- ✍ Suitable ending
- ✍ Correct grammar
- ✍ Correct spelling and punctuation

**Contents**

- ✍ The % of under insurance
- ✍ The need to adjust the claim for under insurance
- ✍ Policy restriction on cash
- ✍ Deductible
- ✍ Rationale for deductible and its impact
- ✍ Overall claim calculation

[Total 40]



**Penalties**

Cut marks for

- ✍ Very poor grammar, spelling or punctuation
- ✍ Requests for more information
- ✍ Speculative statements
- ✍ Excessive waffle