

# INSTITUTE AND FACULTY OF ACTUARIES

## EXAMINATION

March 2016

### Subject CA3 – Communications

#### Paper 1

*Time allowed: 1 hour 30 minutes + 15 minutes reading time*

#### **INSTRUCTIONS TO THE CANDIDATE**

1. *You have 15 minutes before the start of the examination in which to read the question. You are strongly encouraged to use this time for reading only, but notes may be made. You then have 1 hour 30 minutes to complete the paper.*
2. *The work you submit MUST be saved in Microsoft Word 2007 format, e.g. using the docx file extension. You may only upload one document and you must not embed files in the document.*
3. *Copies of the Formulae and Tables, Core Reading for subjects CT1–CT8 inclusive and CA1 will be available electronically during the exam. These documents are for use during the exam period only and not for general use. No other material can be referred to.*
4. *In addition to this paper you should have available your own electronic calculator from the approved list, <http://www.actuaries.org.uk/studying/prepare-your-exams/authorised-calculators>*
5. *You are not permitted to use the internet to help you during the exam.*
6. *You are required to work through the exam assignment without assistance from another person. You are reminded that by undertaking this exam you are bound by the Institute and Faculty of Actuaries' Examinations Rules and Regulations. By submitting your files you are confirming that all the material is entirely your own work and you wish this to be taken into account for this assessment. Only the first submissions will be accepted.*
7. *Save your work regularly. Saving your work is your responsibility so failure to do so will not be a significant mitigating circumstance. Do NOT log off the application until you receive confirmation of receipt from the Online Education Team.*
8. *At the end of the examination, save your completed assignment and follow the upload instructions that have been provided. Once the exam is over all related material and notes made during the examination must be destroyed.*
9. *If you encounter any difficulties please email [online\\_exams@actuaries.org.uk](mailto:online_exams@actuaries.org.uk) or telephone the Online Education Team on +44 (0)1865 268255.*
10. *Professional behaviour is mandatory and no material relating to the exam may be disclosed or discussed with others, nor used in a further attempt at the exam. Failure to comply with this will be deemed to be a breach of the examination regulations and may result in disciplinary action.*

**PLEASE NOTE THAT THE CONTENT OF THIS PAPER IS CONFIDENTIAL AND STUDENTS ARE NOT TO DISCUSS OR REVEAL THE CONTENTS UNDER ANY CIRCUMSTANCES.**

You are an investment analyst at BB Investments, which manages a £50m portfolio of UK shares for the XY Pension Scheme, which is managed by a board of trustees. The Chairman of the board has written the following letter to the portfolio manager, Chris, who manages the portfolio on the trustees' behalf.

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*"Dear Chris,*

*I have read with interest your latest quarterly report describing the performance of the UK share portfolio you manage for the XY Pension Scheme and the changes you have recently made to it.*

*In particular, I see that you have made quite a large new investment in Company X plc. I believe the trustees will be surprised at this in view of the negative publicity this company has received of late, and the fact that its share price has been depressed following industrial action. It is likely that the trustees will be even more surprised that you have sold your holding in Company Y plc, as this is a much larger company whose share price has done so well recently. I anticipate some debate about this at the next trustees' meeting.*

*Please prepare a short paper for the meeting explaining the rationale for these decisions. It's important that the trustees have a broad understanding of the nature of the investments you make for us and how these are assessed. They need to be confident that the portfolio is invested in companies that have good prospects. I am particularly keen to help our two newly elected member trustees gain an understanding of these issues.*

*I look forward to receiving your paper in due course.*

*Yours sincerely,*

*James  
Chairman, XY Pension Trustees"*

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Chris has sent you the following email asking you to draft a short paper for the trustees' meeting.

Vanessa,

I've received the attached letter from James at XY Pension Trustees. As you know, this is a new client for us and it's important that they understand how we pick investments for them.

Please prepare a briefing paper for their next meeting. You should remind the trustees of the key features of our agreed investment approach – in particular, the types of companies we like to invest in - and outline why the changes James mentions are consistent with this. I would also remind them of how important it is that we keep to our guidelines, which have been agreed by the trustees.

It would be helpful to illustrate the differences between Company X and Company Y by comparing and contrasting a few of the most important accounting metrics and ratios from

our database. I suggest using three that demonstrate the basic principles of assessing the relative valuation of companies, and also give the trustees sufficient information for them to understand why we prefer to invest in Company X rather than Company Y. I think the Dividend Yield, Price Earnings Ratio and expected three-year earnings growth would work well for this.

James mentions the recent publicity surrounding Company X, following the short strike that was in the news. You can use this to illustrate how we can take advantage of weak market sentiment to buy shares cheaply, provided the underlying prospects remain good. Equally, we will tend to sell shares if their prices seem overly high.

Please bear in mind the two new member trustees, for whom most of these concepts will be new, so you will need to stick to simple language.

Remember, the trustees like their papers to be short and to the point.

Thanks.

Chris  
Portfolio Manager, BB Investments

Draft a paper to be tabled at the meeting of the XY Pension Trustee board in approximately 650 words.

## Supplementary information

### 1. Outline of the investment approach

Manager's investment style (i.e., the agreed investment approach for the XY Pension Scheme)	This is a "value" philosophy in which the manager's principal criterion is the prospects for the future returns from an investment. The manager looks for shares on low valuations that s/he considers to be mispriced – e.g., shares are too cheap due to temporary factors, rather than for any fundamental weakness in the company. S/he will hold the shares as the price improves to better reflect the company's underlying strengths, and will sell if the shares become too expensive, perhaps due to overenthusiasm in the market.
Preferred investment characteristics of shares purchased	Investee companies should be profitable, with earnings expected to grow in the future. Relatively high dividends are preferred and there should be sound prospects for future business growth. Speculative companies (e.g., oil exploration or start-ups) are avoided.
Maximum proportion of portfolio that may be held in any one company	5%
Benchmark	FTSE All Share Total Return Index
Return objective	3% pa above the benchmark
Tracking error	5% pa
Fees	0.6% for the first £10m 0.4% thereafter

### 2. Data

The following is a sample of the information and ratios available on BB Investment's research database.

	<u>Company X plc</u>	<u>Company Y plc</u>
Period	Year to 31/12/2014	Year to 31/12/2014
Current share price	£9.50	£1.10
Dividend per share	£0.401	£0.0231
Dividend yield	4.221% pa	2.100% pa
Earnings per share	£1.005	£0.0615
Price/Earnings Ratio (PER)	9.453	17.886
Return on Capital Employed	15.827% pa	5.709% pa
Quick ratio	1.229	2.278
Expected three-year earnings growth*	8.041% pa	7.029% pa

	<u>Company X plc</u>	<u>Company Y plc</u>
Dividend cover	2.506	2.662
Net asset value per share	£2.10475	£0.45118
Asset gearing	36.663%	21.701%
Earnings before Tax and Interest (EBIT)	£14.064m	£88.429m
Pre-tax profit	£13.913m	£83.826m
Post-tax profit (earnings)	£9.788m	£60.256m
Shares in issue	10 million	1,000 million

\* *BB Investment's estimate*

### 3. Glossary & definitions

Dividend yield	Dividends per share / market price of an ordinary share
Earnings per share	Earnings attributable to ordinary shareholders / number of shares in issue
Price/Earnings Ratio	Market price of ordinary shares / earnings per share
Return on Capital Employed	Profit before tax / ( share capital + reserves )
Quick ratio	( Current assets – inventories ) / current liabilities
Divided cover	Earnings per share / dividend per share
Net asset value per share	( Ordinary shareholders' equity – intangible assets ) / number of ordinary shares in issue
Asset gearing	Borrowings / equity capital
Post-tax profit	Earnings attributable to ordinary shareholders
Tracking error	Standard deviation of annual portfolio return cf. benchmark return

*Note: The accounting ratios above are defined in accordance with the Core reading.*

**END OF PAPER**