

## EXAMINATIONS

10 April 2001 (am)

### Subject 301 — Investment and Asset Management

*Time allowed: Three hours*

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

1. *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 three hours to complete the paper.*
2. *You must not start writing your answers in the booklet until instructed to do so by the supervisor.*
3. *Write your surname in full, the initials of your other names and your Candidate's Number on the front of the answer booklet.*
4. *Mark allocations are shown in brackets.*
5. *Attempt all 11 questions, beginning your answer to each question on a separate sheet.*

#### **AT THE END OF THE EXAMINATION**

*Hand in BOTH your answer booklet and this question paper.*

*In addition to this paper you should have available  
Actuarial Tables and an electronic calculator.*

- 1** Two countries have announced a full review of their respective regulatory regimes for the investment management and securities industries. Country A is a substantial industrialised nation with a mature stock exchange. Country B is a substantial emerging market economy with a relatively small stock exchange and an underdeveloped capital market.

For each country, state with reasons the type of regime that might be most suitable. [6]

- 2**
- (i) Describe briefly the “money market”. [2]
  - (ii) List the financial instruments that are traded and the other transactions that are typically undertaken in the money market. [2]
  - (iii) Outline the reasons why an investment manager would purchase these investments. [3]
- [Total 7]

- 3**
- (i) State two expressions for the expected real total return to a domestic investor on an overseas asset. [4]
  - (ii) The real return on equities over the ten years to end December 1999 was nearly twice the average real return over the last century.  
  
Give reasons why the most recent experience may not be a reliable guide to future performance. [8]
- [Total 12]

- 4** List the possible uses for market indices and state the appropriateness for Japanese equities of using the Nikkei Dow 225 and Topix indices against these uses. [6]

- 5** Compare the main features of investments in offices and shops. [4]

- 6** Mr and Mrs X are both aged over 70 and own an apartment. Mr and Mrs X will sell the apartment to their daughter Mrs Y on the basis that Mr and Mrs X can live in the apartment rent-free until they are both dead.
- (i) List the factors you would take into account when calculating the price Mrs Y should offer for the purchase of the apartment. [6]
  - (ii) State with reasons the other factors relevant to Mrs Y’s consideration of this investment. [4]
- [Total 10]

- 7** You are the investment consultant to the trustees of a fund that has its assets split amongst several different fund managers. One of the trustees has written to you and his letter includes the following information relating to one of the managers:

	<i>1 January 2000</i>	<i>1 July 2000</i>	<i>31 December 2000</i>
Total Return Index	1,000	850	1,050
Fund Value (including new money)	\$1bn	\$1.15bn	\$1.45bn

He states, “allowing for the \$250m of new money received by this manager on 1 July 2000, this portion of the fund has grown by \$200m and therefore the manager has achieved a return of 20% over the year which compares to a 5% return on the index. This clearly indicates we should reallocate monies away from the other managers to this manager.”

- (i) Comment on the calculations the trustee has made and the comparison he has drawn.

Suggest a comparison you believe to be more appropriate. [5]

- (ii) State with reasons the other factors you would suggest the trustee considers before allocating more money to this fund manager. [5]  
[Total 10]

- 8** At October 2000 the assets of a fund stood at US\$5bn and they were equally split between the US, Europe and the rest of the world. Within each region the fund had exposure to diversified investments. The fund manager expected returns in the short term on European investments to exceed returns on US investments and considered a tactical switch.

- (i) State two reasons why the fund manager might have expected higher returns in the short term from European investments compared to US investments. [2]

- (ii) State two alternative ways the fund manager could have implemented this switch and comment on the advantages and disadvantages of each approach. [4]  
[Total 6]

- 9** (i) Outline three different ways of financially evaluating a capital project. [3]

- (ii) List the advantages and disadvantages of each method. [3]

- (iii) The evaluation process has revealed that the project managers will have a number of options at various stages of the project depending on the success of the project at that stage.

Describe how these options could be incorporated into the evaluation model. [2]  
[Total 8]

**10** You have recently completed a regular review of a large defined benefit pension fund. There has been a recent and major decline in the market value of the fund's assets. The company is keen to avoid increasing its contribution rate both now and in the future. With this objective in mind, the company has asked you to report on the following matters.

- (i) The fund surplus calculation has been made using the market value of assets.

Discuss the appropriateness of such a potentially volatile measure of value given the very long term nature of the future liabilities, including a reference to alternative asset valuation approaches. [5]

- (ii) The assets of the fund are invested in a range of equity, fixed interest and property investments without any formal regard to the matching of the assets to the liabilities.

Describe briefly the principles that might be employed by the fund to better match the value and timing of the assets with the value and timing of the liabilities. Outline the difficulties of trying to implement such a strategy in the case of a pension fund. [4]

- (iii) For the past several years the fund's investment objective has been to achieve an investment return in any given calendar year that is in the top quartile of returns earned by comparable pension funds. The fund's investment managers have met this objective in four out of the past five years. The fund's investment managers are not constrained as to their choice of investments.

State with reasons a proposed replacement objective or change to the current objective and/or any constraints that could be introduced in order to help to meet the company's objective of not increasing its contribution rate to the fund. [6]

[Total 15]

**11** A large general industrial company has a fast developing information technology and computer services division. This division is expected to generate the majority of the company's earnings over the next five years and the company's broker has sent your fund management team a note recommending they buy the company's latest stock issue. As the sector analyst, your colleagues have asked you to comment on whether the company is likely to outperform its industry sector.

- (i) List the principal features of general industrial companies. [4]

- (ii) Discuss briefly the factors that will affect the investment performance of all the companies in the sector. [4]

- (iii) Comment on the broker's recommendation, including any further information you would require. [8]

[Total 16]