Unit 2: Investment Practice
Version 9, tested from 1 December 2011

Topic 18: Asset Classes

Demonstrate an ability to evaluate the characteristics, inherent risks, behaviour and correlation of asset classes

Section 18.1 Equity Capital Characteristics

18.1.1 identify the characteristics, and the risks to the investor, of the various classes of equity capital;

18.1.2 explain the reasons for issuance of preference shares and the implications to the investor;

18.1.3 explain the characteristics of Global and American Depository Receipts.

Section 18.2 Equity Issuance

18.2.1 distinguish between primary and secondary share issuance;

18.2.2 explain the key features of the following equity issuance methods:

- placing
- intermediaries offer
- offer for sale
- offer for sale by subscription.

18.2.3 define and explain the purpose of a rights issue, a scrip issue and a stock split;

18.2.4 calculate the theoretical ex-rights price and the value of the right (nil-paid) given the cum-rights price, the issuance ratio and the subscription price;

18.2.5 calculate the theoretical ex-scrip price given the scrip ratio and the cum-scrip price;

18.2.6 evaluate the options open to an investor in response to a rights offer and explain the effect on the investor's wealth;

18.2.7 explain the motivations behind a company buying back its own shares.

Section 18.3: Equity Valuation

18.3.1 calculate a holding period return for an ordinary share, comprising capital gain and dividend income;

18.3.2 explain the components, assumptions and limitations of the dividend discount model (Gordon's growth model);

18.3.3 calculate the present value of a share using the dividend discount model;

18.3.4 calculate an estimated growth rate for dividends using historic data or using return on equity and a retained earnings ratio;

18.3.5 explain the reasons for a company's chosen dividend policy;

18.3.6 explain the practical constraints on companies paying dividends;

18.3.7 explain the importance of the dividend yield and dividend cover in stock analysis;
18.3.8 calculate dividend yield and dividend cover.
18.3.9 distinguish between and evaluate the merits of relative valuation models and absolute valuation models and between historic and prospective measures of value;;
18.3.10 calculate a basic earnings per share;
18.3.11 explain what is meant by diluted earnings per share;
18.3.12 explain the rationale for the use of the following ratios in equity valuation:
- price-earnings
- price to book
- price to sales
- price to cash flow
- enterprise value (EV) to earnings before interest tax, depreciation and amortisation (EBITDA);

18.3.13 calculate price-earnings (both historic and prospective), price to book, price to sales, price to cash flow ratios for a company;
18.3.14 apply the company ratios in part 18.3.12 above to the valuation of another given company;
18.3.15 explain the possible shortfalls of using each of these price multiples in corporate valuation;
18.3.16 explain the basics of Free cash-flow based valuation methods (FCFF, FCFE) and Residual Income Valuation methods;
18.3.17 define (financial) gearing and evaluate the effect on required equity returns and thus dividend valuations;
18.3.18 explain the measures of economic value added (EVA) and market value added (MVA).

Section 18.4: Equity transaction costs

18.4.1 explain and identify transaction costs associated with dealing in UK equities;
18.4.2 calculate the total transaction costs for an equity transaction, given the appropriate data;
18.4.3 evaluate the impact of alternative trading platforms, facilitated by MiFiD, on transaction costs associated with equity dealing.

Section 18.5: Fixed Interest Securities - characteristics

18.5.1 explain the structure and characteristics of the various types of fixed income instruments issued in the UK including government bonds, index linked bonds, corporate bonds and Eurobonds;
18.5.2 understand the rationale for and risks to the issuer and holder of a convertible, callable or putable bond;
18.5.3 explain clean (quoted) and dirty pricing;
18.5.4 understand the valuation methodology for fixed income securities;
18.5.5 calculate the price of a fixed income security given its maturity, coupon and yield.

Section 18.6 Fixed Interest Securities - risk and return

18.6.1 identify the components of return of fixed income securities;

18.6.2 explain the main risks faced by bond holders and how these risks can be addressed;
18.6.3 explain the two components of interest rate risk (price and reinvestment risk);
18.6.4 explain the nature of the relationship between yield and price;
18.6.5 analyse the factors that affect the sensitivity of a bond's price to a change in required yield;
18.6.6 define and calculate the (Macaulay) duration of a bond;
18.6.7 define and calculate the modified duration of a bond;
18.6.8 calculate, given the duration of a bond, the change in price given a change in required yield;
18.6.9 explain the convexity error that arises from using duration to estimate a change in bond price using duration;
18.6.10 define credit risk as it affects bonds;
18.6.11 explain the role of the major credit rating agencies;
18.6.12 interpret the key classes of rating on the scales published by the major rating agencies;
18.6.13 explain the concept of debt seniority;
18.6.14 identify key features and financial ratios considered by credit rating agencies in conducting a corporate rating.

Section 18.7: Fixed Interest Securities - yields and the yield curve

18.7.1 define and calculate:
- flat yield
- gross redemption yield (GRY)
- net redemption yield (NRY)
- grossed-up NRY;

18.7.2 explain when each of the above measures may be appropriate to use;
18.7.3 define the yield curve;
18.7.4 explain the theories that contribute to explaining the shape of the yield curve;
18.7.5 define forward and spot interest rates;
18.7.6 explain the relationship between forward rates, spot rates and the GRY.

Section 18.8: Fixed Interest Securities - transaction costs

18.8.1 explain and identify transaction costs associated with dealing in UK fixed interest securities;
18.8.2 calculate the total transaction costs for a fixed interest security transaction, given the appropriate data;
18.8.3 contrast trading methods for fixed interest securities with equities and examine the impact on trading costs.

Section 18.9: Property

18.9.1 distinguish between the commercial and residential property markets;
18.9.2 understand the rationale for investing in property;
18.9.3 identify the main investors in the commercial property market and the characteristics of the principal commercial property sectors;

18.9.4 explain how the direct commercial property market works with regard to: ownership and lease structures; buying and selling; costs, the valuation of property and investment performance measurement;
18.9.5 identify the risks associated with property investment, both direct and indirect;
18.9.6 explain the routes to indirect property investment;
18.9.7 identify the transaction costs associated with property investment.

Section 18.10: Cash and Cash Equivalents

18.10.1 plain the main characteristics and risks associated with cash deposits and money market instruments (Treasury Bills, CDs, CP, FRNs);
18.10.2 calculate the discount and quoted yield on a UK Treasury Bill.

Section 18.11: Alternative Investments

18.11.1 explain the characteristics of the main commodity derivatives, including, energy, softs/biofuels, metals, emissions, weather;
18.11.2 identify the main commodity derivative indices, including GSCI, DJAIG and RICI;
18.11.3 explain how commodity exposure can be viewed as a hedge against inflation and 'event' risk;
18.11.4 understand the role of the Investment Property Databank indices in the market;
18.11.5 explain the advantages and risks of investing in 'alternative' investments, including gold and antiques.

Section 18.12: Correlation between asset classes

18.12.1 identify the correlation between the various asset classes (equity, fixed interest, property, cash and alternative investments) and explain its relevance to asset allocation;
18.12.2 explain the limitations of correlation analysis in extreme market conditions.

Section 18.13: Pricing, liquidity and fair value

18.13.1 explain the relationship between pricing, liquidity and fair value for the asset classes of equity, fixed interest, property, cash and alternative investments.

Topic 19: Investment Products

Demonstrate an ability to analyse the characteristics, inherent risks, behaviours and relevant tax considerations of investment products

19.1.1 compare and contrast investing through direct investments in securities and assets compared with investing through indirect investments;
19.1.2 distinguish between open and closed ended funds;
19.1.3 distinguish the features, risks and benefits of unit trusts, investment trusts and open-ended investment companies;

19.1.4 explain the additional benefits and risks of investing in split capital investment trusts;
19.1.5 explain the key features and objectives of Exchange Traded Funds (ETFs) and Exchange Traded Commodities (ETCs);
19.1.6 explain the key features and objectives of Venture Capital Trusts and Enterprise Investment Schemes;
19.1.7 explain the features and objectives of
- private client funds.
- hedge funds and funds of hedge funds
- structured products;
- wraps and other platforms;
19.1.8 identify the characteristics and advantages of Individual Savings Accounts (ISAs), Child Trust Funds (CTFs), National Savings and Investments, Life assurance based investments and Defined Contribution pension arrangements.

Topic 20: Derivatives and Other Instruments

Demonstrate an ability to analyse the characteristics, inherent risks of Derivatives and Other Instruments

Section 20.1: Derivatives

20.1.1 distinguish between forwards, futures and options;
20.1.2 explain the nature, trading and settlement of exchange traded derivatives;
20.1.3 understand the motive for using a futures contract rather than a trade in the underlying asset;
20.1.4 explain the nature of, and reasoning behind, a contango and backwardation market;
20.1.5 define the 'basis' of a futures contract;
20.1.6 know the contract specifications of the following NYSE Liffe contracts:
- short term interest rate (STIR) futures
- long Gilt futures
- FTSE 100 futures;
20.1.7 explain the possible uses of the above contracts in an investment management context;
20.1.8 understand the concept of index arbitrage;
20.1.9 distinguish between American style and European style options;
20.1.10 explain time value and intrinsic value relating to an option premium;
20.1.11 identify when an option is in-the-money, out-of-the-money, or at-the money;
20.1.12 calculate the time value of an option, given the premium, strike price and current market price;
20.1.13 explain the factors that determine the premium of an option;
20.1.14 calculate the maximum profit, maximum loss and the motivation behind the following option strategies:
- long and short call
- long and short put

- long and short straddle
- long and short strangle
- long and short butterfly
- covered call and protective put

20.1.15 explain the use of futures and options in hedging an equity portfolio;

20.1.16 calculate the number of FTSE 100 futures or options contracts required to hedge a portfolio with a specified beta value.

Section 20.2: Selling short, Stock Lending and Contracts for Differences (Swaps)

20.2.1 explain the mechanics and uses of short selling;

20.2.2 explain the role of stock lending in the markets, and the benefits to the participants;

20.2.3 Explain the nature of contracts for differences;

20.2.4 explain the nature of, and motivations behind:

- interest rate swaps
- currency swaps
- equity swaps
- inflation swaps.

Section 20.3: Convertibles and Warrants

20.3.1 explain the nature of convertible bonds and convertible preference shares;

20.3.2 calculate a conversion price, value and premium;

20.3.3 explain the component parts of the valuation of a convertible bond (namely straight bond value, call option value, dilution effect and conversion ratio);

20.3.4 define a warrant;

20.3.5 distinguish between a warrant and a call option;

20.3.6 explain the key features of covered warrants.

Section 20.4: Credit derivatives

20.4.1 explain the purpose mechanics and implications of a credit default swap (CDS);

20.4.2 explain the risks to the financial system resulting from the proliferation of credit derivatives.

Topic 21: Investment Theories and Models

Demonstrate an understanding of the merits and limitations of the main investment theories

Section 22.1: Risk and Return and the Importance of Diversification

21.1.1 explain the 'normal' trade-off between risk and return and the concept of 'dominance' between investment strategies;

21.1.2 explain the implications of assuming returns are normally distributed;

21.1.3 explain the importance of risk-measurement in the analysis of investments, and why ex-ante and ex-post measures of risk may be very different;
21.1.4 identify the commonly used measures of risk in investment analysis and fund management;
21.1.5 explain the shortfalls of standard deviation as a measure of investment risk;
21.1.6 explain the meaning of drawdown as a measure of risk;
21.1.7 understand the impact on changing levels of price volatility over time and how this affects predictions such as tracking error and downside risk;
21.1.8 understand the importance of correlation in constructing efficient portfolios and the difficulties, limitations and meaning of correlation coefficients;
21.1.9 calculate correlation coefficients from standard deviation/covariance of two investments;
21.1.10 explain diversification and its role in constructing efficient portfolios and its limitations during extreme market conditions;
21.1.11 explain the meaning of Value at Risk (VaR) and its advantages and disadvantages for risk management;
21.1.12 analyse and explain other types of investment risk including inflation, currency, interest rate, fraud and counterparty risk.

Section 21.2: Models of Return and Risk

21.2.1 explain the concept of investments being exposed to a number of common factors which partially explain their return and risk profile ("arbitrage pricing theory");
21.2.2 identify the assumptions behind the single-factor Capital Asset Pricing Model (CAPM) and identify other factors in common use;
21.2.3 explain the limitations of the CAPM model;
21.2.4 define the segmentation of risk into systematic (factor) risk and unsystematic ("investment specific") risk;
21.2.5 calculate the total risk given some systematic and unsystematic components;
21.2.6 calculate the expected return on a security by applying the CAPM through interpreting the beta of a security;
21.2.7 explain how the beta may be derived from a scatter chart of historic returns;
21.2.8 calculate the beta of an investment given the systematic risk of the investment and the risk of the market;
21.2.9 calculate the beta of an investment given the variance of the market return, and the covariance of the investment return with the market return;
21.2.10 calculate the beta of a portfolio given the component betas and the investment weightings;
21.2.11 explain how different asset class returns may be related, for example Merton models relating fixed income risk to equity.

Section 21.3: The Efficient Markets Hypothesis (EMH) and Behavioural Finance

21.3.1 explain the key concepts of the EMH;

21.3.2 explain the limitations of the EMH;
21.3.3 explain the basic concepts of the behavioural finance school of thought including heuristics and framing;
21.3.4 evaluate the evidence on market anomalies in relation to both EMH and behavioural finance interpretations.

Topic 22: Investment Management Principles

Demonstrate an understanding of the principles of investment management

Section 22.1: Investment Management Principles – fixed income

22.1.1 explain the following bond portfolio management techniques:
- cash matching /dedication
- immunisation
- contingent immunisation
- anomaly switches
- policy switches
- credit risk management
- riding the yield curve;

22.1.2 calculate the theoretical gain from riding the yield curve;
22.1.3 calculate duration for a bond portfolio;
22.1.4 explain the benefits and risks of using barbell and bond portfolio strategies.

Section 22.2: Fund management styles

22.2.1 distinguish between a 'top-down' and 'bottom-up' approach to fund management;
22.2.2 distinguish between active and passive fund management and explain the costs/benefits to the investor;
22.2.3 distinguish between strategic and tactical asset allocation;
22.2.4 explain the major investment styles prevalent in the fund management industry (including socially responsible investing – SRI).

Section 22.3: Liability driven investment (LDI)

22.3.1 explain the benefits and risks of an LDI strategy;
22.3.2 explain the process of a liability driven investment strategy;
22.3.3 evaluate some of the techniques used in LDI;
22.3.4 explain the use of basic measures of risk used in LDI.

Topic 23: Investment Performance Measurement

Demonstrate an understanding of the principles of investment performance measurement

Section 23.1: Total return and its Components

23.1.1 explain the importance of returns analysis in the portfolio management process;

23.1.2 identify the components of total return for a bond or equity portfolio;
23.1.3 calculate the income, capital and total return over a single period for an equity or bond portfolio;
23.1.4 calculate the reinvestment return on income over a specified investment horizon;
23.1.5 explain how returns are decomposed for different asset classes such as equities (sector/stock/interaction effect) and fixed income (shift/twist/spread return).

Section 23.2: Money weighted and time weighted returns

23.2.1 identify the data requirements to calculate a
- money weighted return; and
- time weighted return;

23.2.2 calculate respectively, from such data, the
- money weighted return; or
- time weighted return;

23.2.3 interpret time-weighted and money-weighted returns.

Section 23.3: Choosing a benchmark, comparisons with investment objectives, base portfolio, indices

23.3.1 explain the purpose of benchmarking;
23.3.2 identify the characteristics of an appropriate benchmark;
23.3.3 identify the key types of benchmark used in the investment management industry;
23.3.4 explain how to construct a benchmark portfolio comprising global equities;

Section 23.4: Performance measurement including risk adjusted returns

23.4.1 explain the importance of risk analysis in performance evaluation;
23.4.2 explain and interpret the following risk adjusted measures of return:
- the Sharpe measure;
- the Treynor measure;
- the information ratio;
- Jensen's alpha;

23.4.3 calculate the Sharpe, Treynor, information ratio and Jensen measure;
23.4.4 explain how total return can be decomposed into the following:
- risk-free return
- return due to choice of benchmark
- return due to market timing
- return to diversifiable risk
- pure selectivity;

23.4.5 explain tracking error and its limitations.

Topic 24: The Macro-economic environment

Demonstrate an understanding of the macro-economic environment and its impact on investment.

Section 24.1 The macro-economic environment

24.1.1 identify the main long term UK and global socio-economic trends;
24.1.2 identify key economic indicators and explain their trends;
24.1.3 understand the relationship between and importance of the main World economies;
24.1.4 explain economic and financial cycles including their predictability and regional differences;
24.1.5 identify international differences in consumption, credit and savings

Section 24.2 Determination of National Income, the circular flow of income, consumption, the multiplier, the paradox of thrift, foreign trade and income determination

24.2.1 distinguish between GDP and GNP;
24.2.2 explain the difference between real and nominal GDP;
24.2.3 explain the components of the circular flow of income;
24.2.4 distinguish between injections into, and withdrawals from ('leakages') the circular flow;
24.2.5 distinguish between national income and GNP;
24.2.6 distinguish between classical economics and the Keynesian and Monetarist schools of thought;
24.2.7 explain the major components of the Keynesian model;
24.2.8 explain Keynesian equilibrium;
24.2.9 calculate the Keynesian multiplier given the marginal propensity to consume (mpc) or propensities to withdraw (tax, import and save);
24.2.10 explain the paradox of thrift.

Section 24.3: Inflation, Unemployment, Fiscal and Monetary Policy and the role of Central Banks

24.3.1 describe fiscal policy and its influence on aggregate demand;
24.3.2 explain the role of debt in the business cycle;
24.3.3 explain the problems associated with fiscal policy;
24.3.4 define money supply (from 'narrow' through to 'wide');
24.3.5 describe the fractional reserve banking system;
24.3.6 define the money multiplier and identify its determinants;
24.3.7 calculate the potential money multiplier given a cash reserve ratio;
24.3.8 explain the transmission mechanism whereby monetary policy influences economic aggregates;
24.3.9 define inflation and explain how it is measured in the UK;
24.3.10 define unemployment and explain how it is measured in the UK;
24.3.11 explain the relationship between inflation and unemployment;
24.3.12 explain how inflation targeting operates in the UK;
24.3.13 distinguish between the different approaches to the control of inflation taken by the major central banks;
24.3.14 explain the other tools (including Quantitative Easing (QE)) used by central banks to manage the economy and in particular inflation;

24.3.15 explain the impact of bank capital and liquidity requirements and the move towards macroprudential regulation on the macro-economy;
24.3.16 explain the role of securitisation on credit growth and the wider macro-economy.

Section 24.4: The foreign exchange market, government policy and exchange rates, fixed floating and managed exchange rates, and the balance of payments

24.4.1 explain how changes in supply and demand for a currency will affect its value on the foreign exchange markets;
24.4.2 identify the key components of the balance of payments;
24.4.3 explain the relationship between the supply and demand for a currency and the underlying transactions represented in the balance of payments;
24.4.4 distinguish between a fixed, floating and a managed exchange rate ('dirty-floating' regime);
24.4.5 explain the economic benefits and costs of a fixed exchange rate mechanism;
24.4.6 explain the implications of persistent global imbalances of trade and capital;
24.4.7 explain the notion of purchasing power parity as a forecasting tool for exchange rates;
24.4.8 explain the effectiveness of monetary and fiscal policy in fixed and floating exchange rate regimes;
24.4.9 understand the nature and basic operations of the foreign exchange market;
24.4.10 explain the nature of exchange rate risk and how it can be managed;
24.4.11 explain spot and forward exchange rates;
24.4.12 calculate forward rates using interest rate parity (IRP);
24.4.13 explain the concept of purchasing power parity (PPP);
24.4.14 distinguish between IRP and PPP;
24.4.15 explain the International Fisher effect.

Topic 25: Micro-economics

Demonstrate an understanding of micro-economics

Section 25.1: Demand and supply

25.1.1 explain the laws of supply and demand;
25.1.2 distinguish between *movements along* demand and supply schedules and *shifts* thereof;
25.1.3 identify the factors that cause a demand or supply schedule to shift;
25.1.4 describe, calculate and interpret own price elasticity of demand and its impact on total revenues;
25.1.5 identify the factors that determine own price elasticity of demand;

25.1.6 explain, calculate and interpret the concept of cross elasticity of demand (as applied to substitute and complementary goods);
25.1.7 explain, calculate and interpret elasticity of supply and its dependence on the flexibility of factors of production.

Section 25.2: The costs of production; marginal costs, average costs and total costs

25.2.1 distinguish between explicit (accounting) costs and opportunity (economic) costs;
25.2.2 explain the concept of normal, supernormal and sub-normal levels of profit;
25.2.3 define fixed costs, variable costs, marginal costs, total costs and average costs;
25.2.4 explain the shapes of the short-run marginal cost, average variable cost, average fixed cost, and average total cost curves;
25.2.5 explain the law of diminishing marginal returns and its impact on the shape of short-run cost curves;
25.2.6 explain the relationship between total revenue, average revenue and marginal revenues for a normal demand schedule;
25.2.7 explain the relationship between marginal cost and marginal revenue and how this determines the profit maximising level of output for a firm.

Section 25.3: Short and long run costs, economies and diseconomies of scale

25.3.1 define short-run and long-run in the context of cost behaviour;
25.3.2 explain the notions of economies of scale, a minimum efficient scale and diseconomies of scale and their impact on the shape of the long-run average cost curve;
25.3.3 explain the relationship between long run marginal costs and long run average costs and explain how this determines the level of output for productive efficiency to arise.

Section 25.4: Perfect competition and monopoly

25.4.1 identify the conditions that characterise a perfectly competitive ('price-taker') market;
25.4.2 explain the conditions of long-run equilibrium for a price-taker;
25.4.3 explain the market mechanics through which only normal levels of profit can be earned by price takers in the long-run;
25.4.4 explain the relationship between short run supply and marginal cost for a price-taker;
25.4.5 describe the shape of the long run supply curve for a perfectly competitive industry;
25.4.6 explain the decision by a price taker facing economic losses to either continue to operate or shut down;
25.4.7 identify the conditions that characterise a pure monopoly;
25.4.8 explain the conditions of long run equilibrium for a monopoly;
25.4.9 distinguish between the equilibrium price, output levels, and productive efficiency of a monopoly compared to a perfectly competitive firm;

25.4.10 explain price discrimination and the conditions under which it will prevail.

Section 25.5: Commonly used methods of assessing industries/companies

25.5.1 understand how business cycles may affect relative industry performance;
25.5.2 explain Porter's five competitive forces that drive industry competition;
25.5.3 explain the product life cycle and the characteristics of each phase (introduction, growth, maturity and decline);
25.5.4 explain the concept of strengths, weaknesses, opportunities and threats (SWOT) analysis and its role in corporate evaluation;
25.5.5 explain the 4Ps marketing mix (product, price, promotion and place) in the context of analysing competitive advantage and threats.

Topic 26: Statistics and Financial Mathematics

Demonstrate an ability to apply statistical and financial mathematics techniques

Section 26.1: Sources of Data

26.1.1 distinguish between primary and secondary sources of data;
26.1.2 identify examples of primary and secondary data;
26.1.3 distinguish between a population and a sample;
26.1.4 explain the key sampling methods;
26.1.5 distinguish between continuous and discrete data;
26.1.6 define categorical data and explain how it can be converted to ordinal data;
26.1.7 interpret a frequency and relative frequency distribution;
26.1.8 explain the use of the following in the presentation of data:

- Lorenz curve
- pie chart
- bar chart
- histogram
- scatter plots
- graphs.

Section 26.2: Summary Data

26.2.1 define, explain and calculate the following measures of central tendency for both raw data and interval data:

- arithmetic mean
- geometric mean
- median
- mode

26.2.2 distinguish between symmetric and skewed data;
26.2.3 explain the relationship between the mean, median and mode for symmetric and skewed data;

26.2.4 define, explain and calculate the following measures of dispersion for both raw data and interval data:
- standard deviation (population and sample)
- variance
- range
- quartiles and percentiles
- inter-quartile range;

26.2.5 explain the notion of statistical significance in the context of investment decisions.

Section 26.3: Correlation and bivariate linear regression

26.3.1 explain the least-squares regression technique in deriving a line of best fit;
26.3.2 distinguish between the dependent and independent variable;
26.3.3 interpret the intercept and gradient components of a regression line;
26.3.4 calculate a forecast value for the dependent variable given the regression line equation;
26.3.5 explain and interpret the correlation coefficient in the context of linear regression;
26.3.6 explain the shortfalls in the application of linear regression to forecasting including correlation does not imply causation and the pitfalls of data-mining;
26.3.7 explain the concept of autocorrelation and appreciate the impact of extreme events on correlation

Section 26.4: Index numbers

26.4.1 explain the purpose of an index value;
26.4.2 calculate an index level for the current year, given the base year data and the current year data;
26.4.3 explain the role of financial market indices in fund management;
26.4.4 explain and calculate a price relative for a share;
26.4.5 calculate and interpret a simple arithmetic index;
26.4.6 calculate an index level having re-based the index series;
26.4.7 calculate and interpret a geometric index;
26.4.8 calculate and interpret a market value weighted index;
26.4.9 understand the composition and construction of key global bond and equity market indices;
26.4.10 explain the relevance of free-floating indices.

Section 26.5: Simple and compound interest

26.5.1 distinguish simple interest from compound interest;
26.5.2 calculate simple and compound interest over multiple periods;
26.5.3 distinguish a nominal (simple) annual interest rate from an effective (compound) annual rate;
26.5.4 calculate the annual compound rate given the nominal rate and the frequency of compounding;
26.5.5 calculate the annual nominal rate of interest given the annual compound rate and the frequency of compounding;
26.5.6 explain the concept of continuous compounding;

26.5.7 calculate the effective continuously compounded rate given the nominal rate.

Section 26.6: The time value of money - present and future value calculations, annuities, perpetuities, and mortgages

26.6.1 calculate and interpret future values for:

- single sums
- annuities;

26.6.2 calculate and interpret present values for:
- single sums
- annuities
- perpetuities;

26.6.3 calculate equal instalments on a repayment mortgage given the present value of the borrowings, the fixed mortgage rate and the term of the borrowing.

Section 26.7: The internal rate of return and net present value

26.7.1 calculate and interpret the net present value of a series of investment cash flows;
26.7.2 calculate and interpret an internal rate of return;
26.7.3 explain how NPVs and IRRs can be used in investment decision making;
26.7.4 explain the limitations of each technique;
26.7.5 explain why decisions using each technique may conflict;
26.7.6 explain the scenarios in which multiple IRRs may occur.

Topic 27: Accounting

Demonstrate an understanding of accounting principles

Section 27.1: Fundamental Precepts

27.1.1 explain the legal requirement to prepare financial statements;
27.1.2 explain the concept of a company being a separate legal entity, and the purpose of the preparation of the accounts;
27.1.3 define 'small companies' for the purpose of financial statement preparation and explain the relevance of this definition;
27.1.4 explain when accounts may be required to be prepared under IFRSs rather than UK GAAP;
27.1.5 explain the role of the auditor;27.1.6 identify, in outline, the reasons for auditors issuing a qualified report.

Section 27.2: The Balance Sheet

27.2.1 explain the purpose of a balance sheet;
27.2.2 identify and explain the key balance sheet categories and content;
27.2.3 distinguish between capital and revenue expenditure;
27.2.4 explain the valuation of non-current assets;
27.2.5 calculate depreciation under the straight-line and reducing balance methods;
27.2.6 calculate the profit or loss on disposal of a non-current asset;
27.2.7 explain the principles behind the valuation of inventories;
27.2.8 explain the effects of first-in-first-out and last-in-first-out valuations on inventory values and profits;
27.2.9 dentify the types of current and non-current liabilities that typically appear in financial statements;
27.2.10 explain the concept of a provision;
27.2.11 explain the treatment of contingent liabilities within financial statements;
27.2.12 explain the treatment of pension costs in financial statements;
27.2.13 explain what is meant by a post-balance sheet event;

27.2.14 distinguish among authorised, issued, paid up and called up share capital;
27.2.15 explain the effect of the following on a balance sheet:
- rights issue
- bonus/scrip issue
- stock split
- share repurchases;

27.2.16 identify and explain the main types of reserve found in the balance sheet.

Section 27.3: The accounting treatment of financial instruments

27.3.1 identify the various classifications of financial instrument and outline the accounting treatment of each.

Section 27.4: The Income Statement and Statement of Changes in Equity

27.4.1 identify and explain the classification of expenses based on nature or function;
27.4.2 explain the principle of revenue recognition;
27.4.3 identify the following different levels of profit and understand which classes of expenses are considered in arriving at each level:
- gross profit;
- trading (or operating) profit; and
- net profit;

27.4.4 explain the objective of a statement of changes in equity;
27.4.5 identify the information to be reported in a statement of change in equity.

Section 27.5: The Cash Flow Statement

27.5.1 explain the purpose of a cash flow statement;
27.5.2 identify the classification of cash flow activities;
27.5.3 calculate net cash flow from operations given operating profit (or vice versa) and the relevant balance sheet movements.

Section 27.6: Group Accounts

27.6.1 define and distinguish between corporate investments, associated companies and subsidiaries;
27.6.2 explain the purpose of group accounts;
27.6.3 define a minority interest and explain how it is represented in the financial statements;
27.6.4 explain how goodwill arises in acquisition accounting;
27.6.5 explain the treatment of goodwill and intangible assets in the group accounts, including amortisation, useful lives and the requirement for impairment reviews.

Section 27.7 Major Accounting Ratios

27.7.1 distinguish between profitability, liquidity, and gearing ratios;
27.7.2 define and calculate return on capital employed;
27.7.3 define and calculate return on equity;
27.7.4 explain how return on capital employed can be broken down into profit margin and asset turnover;

27.7.5 define, calculate and interpret
- operational gearing
- financial gearing
- the current ratio
- the quick ratio (acid test);

27.7.6 explain the effect of the following on the major accounting ratios:
- rights issue
- bonus/scrip issue
- stock split
- share repurchases.