

## AF4

# Advanced Diploma in Financial Planning

## Unit AF4 – Investment planning

April 2014 examination

### SPECIAL NOTICES

All questions in this paper are based on English law and practice applicable in the tax year 2013/2014, unless stated otherwise in the question, and should be answered accordingly.

It should be assumed that all individuals are domiciled and resident in the UK unless otherwise stated.

Candidates should answer based on the legislative position immediately BEFORE the 2014 budget.

### Instructions

- Three hours are allowed for this paper.
- **Do not begin writing until the invigilator instructs you to.**
- **Read the instructions on page 3 carefully before answering any questions.**
- Provide the information requested on the answer book and form B.
- You are allowed to write on the inside pages of this question paper, but you must **NOT** write your name, candidate number, PIN or any other identification anywhere on this question paper.
- The answer book and this question paper must **both be handed in personally by you** to the invigilator before you leave the examination room. **Failure to comply with this regulation will result in your paper not being marked and you may be prevented from entering this examination in the future.**



## Unit AF4 – Investment Planning

### Instructions to candidates

#### Read the instructions below before answering any questions

Three hours are allowed for this paper which carries a total of 160 marks as follows:

- Section A: 80 marks
- Section B: 80 marks
- You are advised to spend approximately 90 minutes on Section A and 90 minutes on Section B.
- You are strongly advised to attempt **all** questions to gain maximum possible marks. The number of marks allocated to each question part is given next to the question and you should spend your time in accordance with that allocation.
- Read carefully all questions and information provided before starting to answer. Your answer will be marked strictly in accordance with the question set.
- You may find it helpful in some places to make rough notes in the answer booklet. If you do this, you should cross through these notes before you hand in the booklet.
- It is important to show all steps in a calculation, even if you have used a calculator.
- If you bring a calculator into the examination room, it must be a silent, battery or solar-powered, non-programmable calculator. The use of electronic equipment capable of being programmed to hold alphabetic or numerical data and/or formulae is prohibited. You may use a financial or scientific calculator, provided it meets these requirements.
- Tax tables are provided at the back of this question paper.
- Answer each question on a new page and leave six lines blank after each question part.

**Subject to providing sufficient detail you are advised to be as brief and concise as possible, using note format and short sentences on separate lines wherever possible.**

## SECTION A

This question is compulsory and carries 80 marks

## Question 1

Peter Jones adds to his Stocks and Shares ISA each year investing in the Abacus Growth Fund. The values and cash flows over the last year for this fund are shown in Table 1 below.

Table 1 – Abacus Growth Fund values and cash flows

Fund value 1 April 2013 (£)	Fund value 31 March 2014 (£)	Amount invested on 31 July 2013 (£)	Income paid out to Peter Jones over the period (£)
89,200	106,000	11,520	1,250

Peter has conducted his own research and is considering adding one of the following funds in Table 2 below to his ISA portfolio.

Table 2 - Funds

	Average return (before charges)	Beta	Standard deviation	Tracking error	Alpha
Jetons Fund	11.60	-	8.27	-	4.33
Pascal Fund	9.80	0.80	-	2.85	-

Both of the above funds in Table 2 invest in the same sector and the benchmark/market return over the period has been 7.8%. The risk free return over the period was 2.5%.

The Jetons Fund has an information ratio of 0.84. The Pascal Fund has a Sharpe ratio of 1.02. Both funds are only available as a clean share class with the same Ongoing Charge Figure. Neither fund has any initial or exit charges but the Pascal Fund has a performance fee.

Peter has noticed in the prospectuses that both funds are described as adopting a 'value' fund management style. Peter is unsure what this means and would like further clarification.

**Questions**

To gain maximum marks for calculations you **must** show **all** your workings and express your answers to **two** decimal places.

- (a) (i) Calculate, **showing all your workings**, the money weighted rate of return of the Abacus Growth Fund over the year 1 April 2013 to 31 March 2014. (9)
- (ii) Explain the limitations of money weighted return and why it is not considered appropriate when trying to evaluate and compare different funds. (4)
- (b) Calculate, **showing all your workings**, for the Jetons Fund, the range between which 95% of all distributions would have fallen. (6)
- (c) (i) Describe briefly what Alpha measures and what it indicates. (4)
- (ii) Calculate, **showing all your workings**, the Alpha of the Pascal Fund. (5)
- (d) (i) Explain briefly to Peter why the information ratio is valid when comparing the Jetons Fund and the Pascal Fund. (3)
- (ii) Calculate, **showing all your workings**, the Sharpe ratio for the Jetons Fund. (3)
- (iii) Calculate, **showing all your workings**, the information ratio for the Pascal Fund. (3)
- (e) (i) Identify what other client specific information would need to be established before making a suitable investment recommendation to Peter. (10)
- (ii) State, giving your reasons, based on your answers to parts (c) and (d) above and the information available in the case study, which fund you would recommend to Peter. (11)

Questions continue over the page

- (f) List **two** charges that could make up the Ongoing Charge figure (OCF) of the Pascal Fund and **four** charges that would not be included in the OCF. (6)
- (g) Explain what is meant by a 'value' fund management style and state a fundamental indicator you would associate with a value share. (6)
- (h) Identify and explain **five** changes outside of Peter's control that would prompt the need for a portfolio review meeting. *Exclude changes in the client circumstances, needs and objectives from your answer.* (10)

**Total marks available for this question: 80**

**Section B questions can be found on pages 8-11**

## SECTION B

**Both questions in this section are compulsory  
and carry an overall total of 80 marks**

**Question 2**

Tom Smith has a portfolio of equities. His largest holdings are in the shares of two house builders, Hornchurch Estates and Village Properties. Tom would like you to help him analyse the two shares. An extract from the accounts for the year ending March 2014 is shown below.

	<b>Hornchurch Estates</b>	<b>Village Properties</b>
	<b>(£ million)</b>	<b>(£ million)</b>
<b>Fixed assets</b>	1,300	1,100
<b>Current assets</b>		
Houses for sale/Inventories	3,000	100
Debtors	50	20
Cash and cash equivalents	150	80
<b>Current liabilities</b>	1,000	150
<b>Long term liabilities</b>	750	650
<b>Total net assets</b>	2,750	500

Tom would also like you to explain how the actions of the Bank of England Monetary Policy Committee may affect the economy and the investments that he owns.



**Questions**

To gain maximum marks for calculations you **must** show **all** your workings and express your answers to **two** decimal places.

- (a) (i) Explain why an increase in short term interest rates by a central bank would be expected to decrease the rate of inflation. (4)
- (ii) State **four** principal functions of a central bank, other than using interest rates to meet an inflation target. (4)
- (b) (i) Explain briefly what is meant by the term 'cyclical stock' and explain, giving your reasons, why house builders are considered to be so. (5)
- (ii) State the stages of an economic cycle and identify, giving your reasons, the point in the cycle which is likely to be the best time to invest in a house building firm. (8)
- (c) (i) Explain what is meant by liquidity when analysing company accounts and why this is important to house builders. (4)
- (ii) Calculate, **showing all your workings**, the working capital ratio for Hornchurch Estates. (4)
- (iii) Calculate, **showing all your workings**, the liquidity ratio (quick ratio) for Village Properties. (3)
- (iv) Explain briefly why the liquidity ratio may be more appropriate than the working capital ratio for a house builder. (4)
- (v) State **four** limitations of using simple ratios to analyse a business. (4)

**Total marks available for this question: 40**

Questions continue over the page

**Question 3**

Colin, aged 52, has worked for the Civil Service since leaving full-time education. His job is well paid and provides an excellent pension. He has no spouse or dependants and is debt free.

Over the years Colin has built up a substantial portfolio of direct investments in equities and fixed interests, details of which are shown in the table below.

<b>Asset Class</b>	<b>Benchmark Asset Allocation %</b>	<b>Index Performance %</b>	<b>Colin's Performance %</b>
<b>UK Equities</b>	65	12	14
<b>Overseas Equities</b>	20	10	6
<b>Fixed Interests</b>	15	4	3

Colin would like your opinion on his current portfolio's performance. He has informed you that his portfolio has the same asset allocation as the benchmark.

Colin has never held any collective investment funds and would like to consider including such investments within his portfolio. He has been speaking to some friends who have recently invested in Exchange Traded Funds and would like further information on these.

Since Colin has never held any collective investment funds, he would also like to know the selection criteria relevant when making a decision about which funds to invest in.

**Questions**

To gain maximum marks for calculations you **must** show **all** your workings and express your answers to **two** decimal places.

- (a) (i) Calculate, **showing all your workings**, how Colin's portfolio of direct investments have performed against the benchmark. (10)
- (ii) Comment on how Colin's portfolio has achieved its overall return in comparison to the benchmark. (4)
- (b) (i) Explain briefly the mechanism by which a **synthetic** Exchange Traded Fund (ETF) secures its returns. (4)
- (ii) State the main risk Colin would be exposed to should he invest in a synthetic rather than a physical ETF and how the ETF manager could reduce this risk on an ongoing basis. (3)
- (iii) Explain briefly what activity ETF managers typically engage in to increase returns above that of the index they track. (3)
- (c) (i) List **eight** important considerations when selecting a collective investment fund. (8)
- (ii) State **four** advantages and **four** disadvantages of investing in a collective investment fund as opposed to direct investments. (8)
- Total marks available for this question: 40**

**The tax tables can be found on pages 13 – 19**

## INCOME TAX

RATES OF TAX	2012/2013	2013/2014
Starting rate for savings*	10%	10%
Basic rate	20%	20%
Higher rate	40%	40%
Additional rate	50%	45%
Starting-rate limit	£2,710*	£2,790*
Threshold of taxable income above which higher rate applies	£34,370	£32,010
Threshold of taxable income above which additional rate applies	£150,000	£150,000

Child benefit charge from 7 January 2013:

1% of benefit for every £100 of income over	£50,000	£50,000
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*\*Restricted to savings income only and not available if taxable non-savings income exceeds starting rate band.*

### MAIN PERSONAL ALLOWANCES AND RELIEFS

Income limit for Personal Allowance §	£100,000	£100,000
Personal Allowance (basic if born after 5 April 1948) §	£8,105	£9,440
Personal Allowance (if born between 6 April 1938 and 5 April 1948) §	£10,500	£10,500
Personal Allowance (if born before 6 April 1938) §	£10,660	£10,660
Married/civil partners (minimum) (if born before 6 April 1935) at 10% †	£2,960	£3,040
Married/civil partners (if born before 6 April 1935) at 10% †	£7,705	£7,915
Income limit for age-related allowances	£25,400	£26,100
Blind Person's Allowance	£2,100	£2,160
Enterprise Investment Scheme relief limit on £1,000,000 max	30%	30%
Seed Enterprise Investment relief limit on £100,000	50%	50%
Venture Capital Trust relief limit on £200,000 max	30%	30%

*§ the Personal Allowance reduces by £1 for every £2 of income above the income limit irrespective of age (under the income threshold).*

*† where at least one spouse/civil partner was born before 6 April 1935.*

Child Tax Credit (CTC)

- Child element per child (maximum)	£2,690	£2,720
- family element	£545	£545
Threshold for tapered withdrawal of CTC	£15,860	£15,910

## NATIONAL INSURANCE CONTRIBUTIONS

Class 1 Employee	Weekly	Monthly	Yearly
Lower Earnings Limit (LEL)	£109	£473	£5,668
Primary threshold	£149	£646	£7,755
Upper Accrual Point	£770	£3,337	£40,040
Upper Earnings Limit (UEL)	£797	£3,454	£41,450

Total earnings £ per week	CLASS 1 EMPLOYEE CONTRIBUTIONS	
	Contracted-in rate/contracted-out (money purchase)	Contracted-out rate (final salary)
Up to 149.00*	Nil	Nil
149.01 – 770.00	12%	10.6%
770.01 – 797.00	12%	12%
Above 797.00	2%	2%

*\*This is the primary threshold below which no NI contributions are payable. However, the lower earnings limit is £109 per week. This £109 to £149 band is a zero rate band introduced in order to protect lower earners' rights to contributory State benefits e.g. Basic State Pension.*

Total earnings £ per week	CLASS 1 EMPLOYER CONTRIBUTIONS		
	Contracted-in rate	Contracted-out rate	
		Final salary	Money purchase
Below 148.00**	Nil	Nil	Nil
148.01 – 770.00	13.8%	10.4%	13.8%
770.01 – 797.00	13.8%	13.8%	13.8%
Excess over 797.00	13.8%	13.8%	13.8%

*\*\* Secondary earnings threshold.*

<b>Class 2 (self-employed)</b>	Flat rate per week £2.70 where earnings exceed £5,725 per annum.
<b>Class 3 (voluntary)</b>	Flat rate per week £13.55.
<b>Class 4 (self-employed)</b>	9% on profits between £7,755 - £41,450 2% on profits above £41,450.

## PENSIONS

TAX YEAR	LIFETIME ALLOWANCE	ANNUAL ALLOWANCE
2006/2007	£1,500,000	£215,000
2007/2008	£1,600,000	£225,000
2008/2009	£1,650,000	£235,000
2009/2010	£1,750,000	£245,000
2010/2011	£1,800,000	£255,000
2011/2012	£1,800,000	£50,000
2012/2013	£1,500,000	£50,000
2013/2014	£1,500,000	£50,000

### ANNUAL ALLOWANCE CHARGE

20% - 45% member's tax charge on the amount of total pension input in excess of the annual allowance.

### LIFETIME ALLOWANCE CHARGE

55% of excess over lifetime allowance if taken as a lump sum.

25% of excess over lifetime allowance if taken in the form of income, which is subsequently taxed under PAYE.

## CAPITAL GAINS TAX

EXEMPTIONS	2012/2013	2013/2014
Individuals, estates etc	£10,600	£10,900
Trusts generally	£5,300	£5,450
Chattels proceeds (restricted to five thirds of proceeds exceeding limit)	£6,000	£6,000
<b>TAX RATES</b>		
Individuals:		
Up to basic rate limit	18%	18%
Above basic rate limit	28%	28%
Trustees and Personal Representatives	28%	28%
Entrepreneurs' Relief* – Gains taxed at:	10%	10%
Lifetime limit	£10,000,000	£10,000,000

*\*For trading businesses and companies (minimum 5% employee or director shareholding) held for at least one year.*

## INHERITANCE TAX

### RATES OF TAX ON DEATH TRANSFERS

2012/2013    2013/2014

Transfers made after 5 April 2013

- Up to £325,000	Nil	Nil
- Excess over £325,000	40%	40%
- Lifetime transfers to and from certain trusts	20%	20%

*\*For deaths after 5 April 2013, a lower rate of 36% applies where at least 10% of deceased's net estate is left to charity.*

### MAIN EXEMPTIONS

Transfers to

- UK-domiciled spouse/civil partner	No limit	No limit
- non-UK-domiciled spouse/civil partner (from UK-domiciled spouse)	£55,000	£325,000
- UK-registered charities	No limit	No limit

Lifetime transfers

- Annual exemption per donor	£3,000	£3,000
- Small gifts exemption	£250	£250

Wedding/civil partnership gifts by

- parent	£5,000	£5,000
- grandparent	£2,500	£2,500
- other person	£1,000	£1,000

100% relief: businesses, unlisted/AIM companies, certain farmland/building

50% relief: certain other business assets

Reduced tax charge on gifts within 7 years of death:

- Years before death	0-3	3-4	4-5	5-6	6-7
- Inheritance Tax payable	100%	80%	60%	40%	20%



## CAR BENEFIT FOR EMPLOYEES

The charge for company car benefits is based on the carbon dioxide (CO<sub>2</sub>) emissions. There is no reduction for high business mileage users.

### For 2013/2014:

- Cars that cannot emit CO<sub>2</sub> have a 0% charge.
- The percentage charge is 5% of the car's list price for CO<sub>2</sub> emissions of 75g/km or less.
- For cars with CO<sub>2</sub> emissions of 76g/km to 94g/km the percentage is 10%.
- For cars with CO<sub>2</sub> emissions of 95g/km to 99g/km the percentage is 11%.
- Cars with CO<sub>2</sub> emissions of 100g/km have a percentage charge of 12% and thereafter the charge increases by 1% for every complete 5g/km to a maximum of 35% (emissions of 215g/km and above).

There is an additional 3% supplement for diesel cars not meeting Euro IV emission standards. However, the maximum charge remains 35% of the car's list price.

**Car fuel** The benefit is calculated as the CO<sub>2</sub> emissions % relevant to the car and that % applied to a set figure (£21,100 for 2013/2014) e.g. car emission 100g/km = 12% on car benefit scale. 12% of £21,100 = £2,532.

1. **Accessories** are, in most cases, included in the list price on which the benefit is calculated.
2. **List price** is reduced for capital contributions made by the employee up to £5,000.
3. **Car benefit** is reduced by the amount of employee's contributions towards running costs.
4. **Fuel scale** is reduced only if the employee makes good **all** the fuel used for private journeys.
5. **All car and fuel benefits** are subject to employers National Insurance Contributions (Class 1A) of 13.8%.

## PRIVATE VEHICLES USED FOR WORK

	2012/2013 Rates	2013/2014 Rates
<b>Cars</b>		
On the first 10,000 business miles in tax year	45p per mile	45p per mile
Each business mile above 10,000 business miles	25p per mile	25p per mile
<b>Motor Cycles</b>	24p per mile	24p per mile
<b>Bicycles</b>	20p per mile	20p per mile

## MAIN CAPITAL AND OTHER ALLOWANCES

	2012/2013	2013/2014	
Plant & machinery (excluding cars) 100% annual investment allowance (first year)	£25,000	£250,000	
Plant & machinery (reducing balance) per annum	18%	18%	
Patent rights & know-how (reducing balance) per annum	25%	25%	
Certain long-life assets, integral features of buildings (reducing balance) per annum	8%	8%	
Energy & water-efficient equipment	100%	100%	
Zero emission goods vehicles (new)	100%	100%	
Qualifying flat conversions, business premises & renovations	100%	100%	
<b>Motor cars:</b> Expenditure on or after 01 April 2013 (Corporation Tax) or 06 April 2013 (Income Tax)			
CO <sub>2</sub> emissions of g/km:	95 or less*	96-130	131 or more
Capital allowance:	100%	18%	8%
	first year	reducing balance	reducing balance
*If new			
Research & Development: Capital expenditure		100%	

## CORPORATION TAX

	2012/2013	2013/2014
Full rate	24%	23%
Small companies rate	20%	20%
Small companies limit	£300,000	£300,000
Effective marginal rate	25%	23.75%
Upper marginal limit	£1,500,000	£1,500,000

## VALUE ADDED TAX

	2012/2013	2013/2014
Standard rate	20%	20%
Annual registration threshold	£77,000	£79,000
Deregistration threshold	£75,000	£77,000

## MAIN SOCIAL SECURITY BENEFITS

		2012/2013	2013/2014
		£	£
Child Benefit	First child	20.30	20.30
	Subsequent children	13.40	13.40
	Guardian's allowance	15.55	15.90
Employment and Support Allowance	Assessment Phase		
	Age 16 – 24	Up to 56.25	Up to 56.80
	Aged 25 or over	Up to 71.00	Up to 71.70
	Main Phase		
	Work Related Activity Group	Up to 99.15	Up to 100.15
	Support Group	Up to 105.05	Up to 106.50
Attendance Allowance	Lower rate	51.85	53.00
	Higher rate	77.45	79.15
Retirement Pension	Single	107.45	110.15
	Married	171.85	176.15
Pension Credit	Single person standard minimum guarantee	142.70	145.40
	Married couple standard minimum guarantee	217.90	222.05
	Maximum savings ignored in calculating income	10,000.00	10,000.00
Bereavement Payment (lump sum)		2,000.00	2,000.00
Widowed Parent's Allowance		105.95	108.30
Jobseekers Allowance	Age 16 - 24	56.25	56.80
	Age 25 or over	71.00	71.70
Statutory Maternity, Paternity and Adoption Pay		135.45	136.78

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