THE CHARTERED INSURANCE INSTITUTE

CII

AF4

Advanced Diploma in Financial Planning

Unit AF4 – Investment planning

October 2016 Examination Guide

SPECIAL NOTICES

Candidates entered for the April 2017 examination should study this examination guide carefully in order to prepare themselves for the examination.

Practice in answering the questions is highly desirable and should be considered a critical part of a properly planned programme of examination preparation.

AF4 – Investment planning

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IMPORTANT GUIDANCE FOR CANDIDATES

Introduction

The purpose of this Examination Guide is to help you understand how examiners assess candidates' knowledge and their ability to apply this to a case study scenario. You can then use this understanding to help you in your preparation for the examination.

Before the examination

Study the syllabus carefully
This is available online at www.cii.co.uk or from Customer Service. All the questions in the examination are based directly on the syllabus. *You will be tested on the syllabus alone,* so it is vital that you are familiar with it.

There are books specifically produced to support your studies that provide coverage of all the syllabus areas, however you should be prepared to read around the subject. This is important particularly if you feel that further information is required to fully understand a topic or an alternative viewpoint is sought. The reading list which can be found with the syllabus provides valuable suggestions.

Note the assumed knowledge
For the Advanced Diploma in Financial Planning, candidates are assumed to have studied the relevant units of the Diploma in Financial Planning or the equivalent. This knowledge is set out on the relevant syllabus.

Read widely
If you do not have experience in advising clients whose financial needs are relatively sophisticated, *it is quite unrealistic to expect that the study of a single textbook will be sufficient to meet all your requirements.* While books specifically produced to support your studies will provide coverage of all the syllabus areas, you should be prepared to read around the subject. This is important, particularly if you feel that further information is required to fully understand a topic or an alternative viewpoint is sought. It is vital that your knowledge is widened beyond the scope of one book. The reading list which can be found with the syllabus provides valuable suggestions.

Make full use of the Examination Guide
This Examination Guide contains a full examination paper and model answers. The model answers show the types of responses the examiners are looking for and which would achieve maximum marks. *However, you should note that there are alternative answers to some question parts which would also gain high marks.* For the sake of clarity and brevity not all of these alternative answers are shown.

This guide and previous Examination Guides can be treated as 'mock' examination papers. Attempting them under examination conditions as far as possible, and then comparing your answers to the model ones, should be seen as an essential part of your exam preparation. The examiner's comments on candidates' actual performance in each question provide further valuable guidance. You can purchase copies of the most recent Examination Guides online at www.cii.co.uk. CII members can download free copies of older Examination Guides online at www.cii.co.uk/knowledge.

Know the layout of the tax tables
Familiarise yourself with the information contained within the tax tables printed at the back of each Examination Guide. These tax tables will be provided to candidates as part of the examination paper. The tax tables enable you to concentrate on answering the questions without having to worry about remembering all the information. *Please note that you are not allowed to take your own tax tables into the examination.*

Know the structure of the examination
Assessment is by means of a three-hour written paper in two sections. All questions are compulsory:

Section A consists of one case study, worth 80 marks. You will be expected to carry out a variety of tasks, after analysing the information provided.

Section B consists of two shorter case studies worth a total of 80 marks. Again you will be expected to carry out a variety of tasks based upon the information provided.

Each question part will clearly show the maximum marks which can be earned.

Appreciate the standard of the examination
Candidates must demonstrate that they are capable of advising clients *whose overall levels of income and capital require a more sophisticated scheme of investment* than is normally prepared by a level 4 qualified adviser. These clients require a critical appraisal of the various financial planning options available to them.

Exam rules and procedures It is important that when entering for the exam you familiarise yourself with the CII's service, in particular the rules and procedures that are in place. Visit www.cii.co.uk/assessment-information for full details.

In the examination

The following will help:

Spend your time in accordance with the allocation of marks

- The marks allocated to each question part are shown on the paper;
- If a question has just two marks allocated, there are likely to be only one or two points for which the examiner is looking for, so a long answer is wasting valuable time.
- Conversely, if a question has 12 marks allocated, a couple of lines will not be an adequate answer. Always remember that if the paper is not completed, your chances of passing will be reduced considerably.
- Do not spend excessive time on any one question; if the time allocation for that question has been used up, leave some space, go on to the next question and return to the incomplete question after you have completed the rest of the paper, if you have time.

Take great care to answer the question that has been set

- Many candidates leave the examination room confident that they have written a 'good' paper, only to be surprised when they receive a disappointing result. Often, the explanation for this lies in a failure to think carefully about what the examiner requires before putting pen to paper.
- Highlighting key words and phrases is a technique many candidates find useful.
- The model answers provided in this Examination Guide would gain full marks. Alternative answers that cover the same points and therefore answer the question that has been asked would also gain full marks.

Tackling questions

Tackle the questions in whatever order feels most comfortable. Generally, it is better to leave any questions which you find challenging until you have attempted the questions you are confident about. Candidates' should avoid mixing question parts, (for example, 1(a)(i) and (ii) followed by 2(b)(ii) followed by 1(e)(i)) as this often leads to candidates unintentionally failing to fully complete the examination paper. This can make the difference between achieving a pass or a narrow fail.

It is vital to label all parts of your answer correctly as many questions have multiple parts to them (for example, question 1(a) may have parts (i), (ii) and (iii)). Failure to fully distinguish between the separate question parts may mean that full credit cannot be awarded. It is also important to note that a full answer must be given to each question part and candidates should not include notes such as 'refer to answer given in 1(b)(i)'.

Answer format

Unless the question requires you to produce an answer in a particular format, such as a letter or a report, you should use 'bullet points' or short paragraphs. The model answers indicate what is acceptable for the different types of question.

Where you are asked to perform a calculation it is important to show **all** the steps in your answer. The majority of the marks will be allocated for demonstrating the correct method of calculation.

Provided handwriting is legible, candidates will **not** lose marks if it is 'untidy'. Similarly, marks are not lost due to poor spelling or grammar.

Calculators

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 alphabetical or numerical data and/or formulae is prohibited. You may use a financial or scientific calculator, provided it meets these requirements. The majority of the marks will be allocated for demonstrating the correct method of calculation.

EXAMINERS' COMMENTS

Candidates' overall performance

Overall candidates performed relatively well in this exam session in comparison to the average performance of previous sessions. Whilst some candidates may have felt apprehensive initially when addressing certain questions, such as the economics based ones, the answers given often gained high marks and demonstrated a sound understanding of the key points.

Most of the calculation questions on the paper were well answered. It was good to see that the majority of candidates recognised more recent developments that needed to be accounted for within the calculations, such as the dividend allowance or the residential property surcharge.

There was an element, especially in question one, of candidates being keen to weave some of the current economic trends and geopolitical developments at the forefront of their mind into their answers. This had a tendency to lead candidates' answers astray from directly addressing the exact question in front of them. Whilst it did not necessarily lose candidates marks it would certainly have taken up valuable time in the exam that could have been better utilised elsewhere.

Generally, Question 2 was the least well answered question and in particular candidates did not do as well as expected on the Centralised Investment Proposition questions. This is to some extent understandable as it has only become more prevalent amongst adviser firms in a post RDR world. Certainly today it is an investment approach that a significant proportion of IFAs and discretionary managers alike use. Therefore, it is important for candidates to understand what it is and crucially its associated advantages and disadvantages from a client's point of view.

Going forward we will continue to test the core areas, but at the same time move the exam forward with the ever changing world of investment planning. We have reduced the emphasis over the last few sessions on large calculations and where possible tried to test understanding over simple facts, in line with a level expected of an advanced diploma exam. Calculations will always form a fundamental part of the exam and going forward we would again expect calculation marks to represent around 20-30% of the exam marks.

Question 1

In part (a)(i) the two calculations were well answered by candidates.

In part (a)(ii), whilst most candidates successfully identified the direction of change over the last year for both ratios, fewer went on to identify likely reasons for the changes. Although the ratios are similar, the liquidity ratio has in fact decreased over the same period. One of the key reasons for the difference in direction of change of the two ratios stems from the key difference between the two calculations; that is, the liquidity ratio removes stock. Therefore stock must have increased over the period as a proportion of current assets. One likely explanation could be that the company is stockpiling oil due to lower oil price.

In part (b), whilst many candidates had an understanding of what the two terms represented, few candidates identified that a negative working capital ratio would not necessarily impact solvency as long as creditors stayed on board.

Part (c) was well answered by the majority of candidates.

In part (d)(i) some candidates were unable to accurately define fixed exchange rates and many in particular did not explain what an exchange rate would be fixed to (another currency) or by whom (government or central bank).

In part (d)(ii) most candidates identified some of the economic factors, although a lesser number of candidates accurately identified the correct direction of change in the stated factor that would lead to a depreciation of sterling. While a great level of economic understanding was not required for this ‘identify’ question the answers provided did highlight a general weakness in candidates’ knowledge in this important area (syllabus learning outcome 1). It was also notable how the topic of BREXIT found its way into candidates’ answers which, whilst occasionally it led candidates to providing mark worthy points, was overall a distraction.

Part (d)(iii) was generally well answered. Perhaps because candidates, who followed the markets, would have seen UK exporters benefiting from the depreciation of sterling since the EU referendum result. Most candidates recognised that Luxury Motors plc’s product would be cheaper to buy in China which would likely lead to higher sales and profitability but often missed the potential downside of increasing costs of importing raw materials.

In part (d)(iv) the likely effect on inflation was also generally well answered and again was a very topical issue at the time of the exam.

In part (e)(i) whilst the bulk of candidates scored around 50% of the marks, it was a little disappointing to see the marks were not higher, as it was an area tested in the previous exam. Essentially most candidates knew the FTSE 100 was composed of the 100 largest companies by market capitalisation. However, only the better candidates developed their answers to cover other points, such as, the free float requirement or the fact constituents are determined quarterly.

In part (e)(ii) the calculation was overall well done and most candidates correctly included the new dividend tax allowance and applied the correct rate of tax before entering the net dividend figure into the holding period return formula.

In part (e)(iii), almost all candidates identified the outperformance of Geoff’s portfolio, but many candidates did not specifically mention the impact of dividends, which was key.

In part (e)(iv) most candidates correctly highlighted the difference in composition of the FTSE 100 versus Geoff’s portfolio as an important reason why using the FTSE 100 as a benchmark for Geoff’s portfolio may not be ideal. Other limitations such as the fact the index takes no account of charges/tax were not as prevalent.

Part (f)(i) covered methods of index tracking, a question which has been asked in the past, but a surprising number of candidates did not do as well as expected on what should have been a straight forward question.

Part (f)(ii) tested not only textbook advantages and disadvantages of a portfolio of direct shares versus an index tracker fund, but also required candidates to think about the practicalities of selling Geoff's portfolio to invest in a tracker fund (initial costs, CGT implications, etc). Overall the disadvantages of the tracker fund were answered more successfully than the advantages.

Question 2

Most candidates did well with the two calculations in part (a) and identified at least one reason for raising money via a rights issue. However, part (b) on alternatives to a rights issue for raising capital was generally not well answered and many candidates suggested issuing a corporate bond which is a form of debt and would not result in raising additional share capital as the question asked.

In part (c) the majority of candidates knew the two options Tommy had in relation to the rights issue assuming he decided not to take up the offer.

In part (d)(i), the calculations were well answered, possibly helped by the fact there was more than one way to calculate the value of one Aspen share after the bonus issue. Typically candidates also at least identified reducing the share price as one reason for a scrip/bonus issue in part (d)(ii) with better prepared candidates noting other valid reasons, for example, as an alternative to paying a dividend, a scrip/bonus issue may be more tax efficient for the investor.

On the whole part (e) was not well answered with many candidates seemingly unaware of what a Centralised Investment Proposition was and also the advantages and disadvantages. As an approach that has gained traction within both adviser and discretionary communities alike, and having been the subject of FCA (then FSA) thematic reviews, it is important to understand its advantages and disadvantages. Key advantages of this approach are that it removes adviser/behavioural bias as well as portfolio drift, although its criticisms include the fact that it is not bespoke to the client (shoehorning) and the assumptions/past data underpinning the model portfolios used may be wrong and not borne out in future.

In part (f) almost all candidates were able to identify the main difference between advisory and discretionary management being the need to seek client approval to act. Few candidates went further than this and looked at other issues such as speed of execution or administration.

Question 3

In part (a) the calculation of the net amount Dawn would receive should she decide to sell her buy-to-let property was generally calculated correctly. However, it was noted that a number of candidates applied Capital Gains Tax (CGT) to the difference between the sales proceeds and the mortgage amount as opposed to the purchase price. Another place where marks were missed was by not deducting the CGT Annual Exemption or using the incorrect tax rate (typically without the additional 8% residential property surcharge).

In part (a)(ii) most candidates identified at least two of the costs of sale.

In part (b) the majority of candidates were able to identify and explain at least three key risks and many achieved full marks.

In part (c) candidates also generally did very well and showed a good understanding of why a property OEIC may be holding a large amount of cash and the implications this would have on performance. It is possible that candidates may have occasionally not gained marks because they did not identify the more obvious answers, such as the fact the fund would hold a large amount of cash to pay anticipated redemptions/for liquidity purposes. As ever, in an examination it is sometimes a good strategy to start by stating the obvious and building from there.

In part (d) most candidates performed well and appeared well versed in the advantages of investing in a property OEIC versus a direct property investment. Most candidates noted the advantages of greater diversity and professional fund management with the higher marks going to those who identified additional points, such as, the fact a property OEIC can be partially sold or invested into on a regular basis with smaller investment amounts.

In part (e)(i) the dividend yield calculations were straight forward and well answered. The remainder of the question was less well answered and demonstrated that candidates still do not have an in depth knowledge of products such as REITs. The answers to part (e)(ii) stemmed from the difference in the structure of the two collective investment vehicles (discounts, gearing, etc) whilst part (e)(iii) required the candidates to think why a property manager would select a property with a lower yield, with the final part (e)(iv) testing more technical knowledge. Often the answers to part (e)(iii) did not seem developed enough with a lot of candidates recognising that a manager's focus may be on capital appreciation of the properties at the expense of a higher yield without mentioning any other explanations.

THE CHARTERED INSURANCE INSTITUTE

AF4

Advanced Diploma in Financial Planning

Unit AF4 – Investment planning

October 2016 examination

SPECIAL NOTICES

All questions in this paper are based on English law and practice applicable in the tax year 2016/2017, 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.

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

Read carefully all information provided in the case study before attempting the questions. Your answers should take into account the clients circumstances as set out in the case study. Please carry out ALL of the tasks (a), (b), (c), (d), (e) and (f) which follow.

Geoff has recently retired. He is a higher-rate tax payer and has accumulated over his working life a portfolio of 10 UK shares. One of these shares is Black Gold plc, an oil exploration and production company. Sample accounts figures and ratios for Black Gold plc are shown in Table 1 below.

Table 1

Company	2015 Working capital (current) ratio	2015 Liquidity ratio	2016 Stock (£m)	2016 Current assets (£m)	2016 Current liabilities (£m)
Black Gold plc	1.25	1.05	31	87	63

Geoff also owns shares in Z&M Haulage plc, a transport and logistics company. He is aware that the oil price has fallen from historic highs and is currently trading at a low level. He would like to know how this may impact upon Black Gold plc and Z&M Haulage plc.

Another of Geoff's shares is in Luxury Motors plc who sell the majority of their cars to the Chinese market. Geoff is interested in understanding how Luxury Motors plc has been affected by sterling's recent fall against the Yuan (RMB). He has also read that China had been seeking to move from a fixed to a floating exchange rate but is unsure what this means.

Finally, Geoff is interested in how his share portfolio has performed relative to the FTSE 100. Over the last year, Geoff's portfolio has fallen from £355,440 to £343,000 but his shares have paid gross dividends of £8,800 all of which have been paid in the tax year 2016/2017 and not reinvested. The FTSE 100 has dropped by 4.7% over the same period.

Geoff has been concerned about his portfolio losses over the last year and is considering selling them all and investing into a FTSE 100 index tracker.

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 2016 working capital (current) and liquidity ratios for Black Gold plc. **(6)**

(ii) Comment on the direction of change in Black Gold plc's working capital (current) and liquidity ratio from 2015 to 2016 and give likely reasons for the changes. **(7)**

(b) Explain briefly what is meant by the following terms and how they relate to the solvency of a company:

(i) negative operating cash flow; **(3)**

(ii) negative working capital. **(3)**

(c) **(i)** State the impact the low oil price will have on Z&M Haulage plc and how it could seek to benefit over the medium term. **(3)**

(ii) Explain briefly what actions the management of Black Gold plc might take to minimise the impact of a lower oil price on its financial position. **(3)**

(d) **(i)** Explain briefly what is meant by a fixed and floating exchange rate. **(4)**

(ii) Identify **four** key economic factors which could result in the depreciation of sterling. **(4)**

(iii) Explain the likely impact the fall of sterling against the Yuan (RMB) would have on Luxury Motors plc. **(5)**

(iv) Explain, giving your reasons, the likely impact a depreciation in the value of sterling would have on the rate of inflation in the UK. **(3)**

(e) **(i)** Explain how the FTSE 100 is composed. **(5)**

(ii) Calculate, **showing all your workings**, the percentage holding period return on Geoff's portfolio net of tax over the last year. **(7)**

(iii) Assess, giving reasons, how Geoff's portfolio has performed in comparison to the FTSE 100 over the last year. **(4)**

(iv) Explain briefly the limitations of using the FTSE 100 as a benchmark for Geoff's portfolio. **(3)**

(f) **(i)** Explain to Geoff **four** different methods a FTSE 100 tracker could use to mirror the index performance. **(10)**

(ii) Explain **five** advantages and **five** disadvantages of Geoff selling his portfolio of shares to invest into a FTSE 100 tracker. **(10)**

Total marks available for this question: 80

SECTION B

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

Question 2

Read carefully all information provided in the case study before attempting the questions. Your answers should take into account the clients circumstances as set out in the case study. Please carry out ALL of the tasks (a), (b), (c), (d), (e) and (f) which follow.

Tommy, aged 23, has recently inherited a portfolio of shares and cash from his grandfather. He has some understanding of, and a keen interest in, investment processes. Tommy has approached you for advice and has read your brochure within which it states you utilise a Centralised Investment Proposition offering both advisory and discretionary management.

Tommy has been notified of a capital reorganisation of two of the shares he has inherited and has asked for clarification. Hornbeam plc has offered a five for twelve rights issue. Aspen plc has announced a scrip/bonus issue of two shares for every five held.

See Table 1 for details of these shares.

Table 1

Company	**Shares held**	**Pre-reorganisation share price £**	**Rights issue price £**
Hornbeam plc	11,700	3.45	1.80
Aspen plc	2,000	15.00	Not applicable

Questions

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

(a) For Hornbeam plc:

(i) Calculate, **showing all your workings**, how many shares Tommy will own if he takes up the rights offer in full. **(5)**

(ii) Calculate, **showing all your workings**, the theoretical ex-rights price of Tommy's shares. **(5)**

(iii) List **three** reasons why Hornbeam plc might have a rights issue. **(3)**

(b) Explain briefly **two** methods other than a rights issue Hornbeam plc could use to raise additional share capital via the stock market. **(4)**

(c) State **two** options Tommy has with his 'rights' if he decides not to take up the rights issue offer from Hornbeam plc. **(2)**

(d) **(i)** Calculate, **showing all your workings**, the value of one Aspen plc share after the bonus issue. **(4)**

(ii) Explain briefly why a company would have a scrip/bonus issue. **(2)**

(e) **(i)** Explain briefly to Tommy what is meant by a Centralised Investment Proposition and how it works. **(5)**

(ii) Explain briefly **three** advantages and **three** disadvantages of a Centralised Investment Proposition for Tommy. **(6)**

(f) Explain to Tommy the differences between advisory and discretionary management. **(4)**

Total marks available for this question: 40

Question 3

Read carefully all information provided in the case study before attempting the questions. Your answers should take into account the clients circumstances as set out in the case study. Please carry out ALL of the tasks (a), (b), (c), (d) and (e) which follow.

Dawn is a higher-rate taxpayer who owns a buy-to-let property she bought some years ago for £140,000. The property is now worth £163,000 and has an outstanding interest only mortgage of £119,000. She has not realised any capital gains or losses for the tax year 2016/2017 and is considering selling the property and investing elsewhere.

Dawn holds shares in the following open-ended investment company (OEIC):

Fund	**Share price p**	**Dividend p**	**Cash**
ABC Direct Property	1,400	45	18.3%

Dawn also has the following Real Estate Investment Trust (REIT):

Fund	**Value of properties £million**	**Debt £million**	**Share price p**	**Net asset value per share p**	**Dividend p**
Regional Land	620	186	70	75	3.8

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 amount Dawn would receive, after Capital Gains Tax and redemption of the existing mortgage, should she decide to sell her buy-to-let property. **(6)**

(ii) Identify **three** other costs that Dawn needs to consider before sale. **(3)**

(b) Explain **four** risks, other than legislation and taxation changes, that Dawn faces as a buy-to-let investor. **(8)**

(c) Identify **six** reasons why the ABC Direct Property OEIC may be holding a large cash balance and explain the implications of this for investment performance. **(6)**

(d) Identify **five** advantages of investing in property via the ABC Direct Property OEIC fund rather than a buy-to-let property. **(5)**

(e) **(i)** Calculate, **showing all your workings**, the income (dividend) yield on the ABC Direct Property OEIC and the Region Land REIT. **(4)**

(ii) Explain briefly why the REIT structure may lead to a different income yield in comparison to the OEIC. **(2)**

(iii) Explain briefly why an investment manager may select a property investment with a lower yield. **(3)**

(iv) Explain briefly to Dawn the rules a REIT must follow when distributing income and the taxation consequences. **(3)**

Total marks available for this question: 40

NOTE ON MODEL ANSWERS
The model answers given are those which would achieve maximum marks. However, there are alternative answers to some question parts which would also gain high marks. For the sake of clarity and brevity not all of these alternative answers are shown. An oblique (/) indicates an equally acceptable alternative answer.

Model answer for Question 1

(a) (i) Working Capital Ratio
87/63 = 1.38

Liquidity Ratio
(87-31)/63 = 0.89

(ii) Working Capital Ratio
- Working capital ratio has increased.
- Current assets have increased by more/decreased by less than current liabilities.
- Company is growing/has reduced (short-term) debts.

Liquidity Ratio
- Liquidity ratio has decreased.
- Stock/inventory has increased as a proportion of current assets.
- Oil company stockpiling oil.
- Waiting for price to rise/due to low oil price.

(b) (i) Negative operating cash flow
- Operating costs are higher than the revenue generated/company is making a loss from operating activities/each unit sold.
- Would lead to liquidation.
- In the long term/if persists.

(ii) Negative working capital
- Current liabilities are higher than current assets.
- Financing from creditors to meet day to day needs.
- Solvency unaffected subject to ongoing credit line/cannot pay bills if credit line dries up.

(c) **(i)**
- Expenditure/costs will drop.
- Profitability will increase.
- Buy in bulk now/hedge against a rise in the oil price.

(ii) *Candidates would have gained full marks for any three of the following:*
- Reduce costs/staff numbers/salaries.
- Reduce production/oil output/mothball unprofitable sites.
- Put on hold exploration/investment.
- Hedge against further falls.

(d) **(i)** **Fixed exchange rate:**
- Pegged to another currency/gold.
- Set by the government/central bank.

Floating exchange rate:
- Exchange rate varies/is not fixed.
- According to market forces/demand and supply.

(ii) *Candidates would have gained full marks for any four of the following:*
- Decreasing UK interest rates in comparison to other countries.
- Declining productivity/GDP faster than money supply.
- Increasing money supply faster than productivity.
- Higher relative inflation than other countries.
- Current account deficit/negative balance of payments.
- Capital account surplus.

(iii)
- The price of cars sold abroad would be cheaper in local currency terms.
- Giving them a price advantage/more competitive.
- Increasing sales/turnover/demand.
- Profits increase/potential share price rises.
- Down side – cost of importing raw material to make cars will increase.

(iv)
- It would rise.
- Imports more expensive/cost of imported raw materials increase/cost push inflation.
- Aggregate demand increases/higher exports/demand pull inflation.

(e) **(i)**
- Largest 100 companies.
- Weighted by market capitalisation.
- That are listed in the UK in £ or Euros on SETS.
- That meet rules/requirements pass nationality, free float and liquidity tests.
- Constituents determined quarterly.

(ii) £8,800 - 5,000 = £3,800
£3,800 x 32.5% = £1,235
£8,800 - £1235 = £7,565

$$\frac{7{,}565 + (343{,}000 - 355{,}440)}{355{,}440} \times 100 = \frac{-4{,}875}{355{,}440} \times 100 = -1.37\%$$

(iii) *Candidates would have gained full marks for any four of the following:*
- Geoff's portfolio has outperformed the FTSE 100.
- Ignoring dividends/on a capital basis.
- Loss was reduced by inclusion of dividends/FTSE 100 does not include dividends.
- Individual company/share performance/stock selection was better.
- Geoff's portfolio has taken more risk to achieve its return.
- Sector/company composition different/only 10 shares.

(iv)
- FTSE 100 does not reflect dividends/Geoff's portfolio received dividends.
- Index takes no account of tax/charges.
- Different composition/diversification/Geoff's portfolio only has 10 shares/FTSE 100 significantly more.

(f) **(i)** *Candidates would have gained full marks for any ten of the following:*

- Full replication.
- Hold each constituent of the index.
- In accordance with its index weighting.

- Stratified sampling.
- Representative sample of stocks.
- From each sector.

- Optimisation.
- Uses computer modelling technique/algorithms.

- Synthetic.
- With a market counterparty.
- Uses a swap/derivatives.

(ii) **Advantages**

- Passive management/less involvement/less administration.
- Improved diversity/Geoff has less than 15-20 shares.
- Tracker will further reduce non-systematic/specific risk/lower risk.
- Easier to monitor performance.
- Changes within tracker attract no Capital Gains Tax.

Disadvantages

- Less control/cannot vote at AGM.
- Potential capital gains tax at 20% on sale of shares.
- Selling costs/commission on existing portfolio.
- Tracker cannot outperform the index.
- Ongoing charges/cost of tracker.

Model answer for Question 2

(a) **(i)** (11,700/12) x 5 = 4,875
11,700 + 4,875 = 16,575

(ii) 3.45 x 11,700 = 40,365
1.80 x 4,875 = 8,775
49,140
49,140 / 16,575 = 2.96

Alternative
5 x 1.80 = 9
12 x 3.45 = 41.4
9 + 41.4 = 50.4
$\frac{50.4}{17} = 2.96$

(iii)
- To finance a specific acquisition/expansion/investment.
- To reduce debt.
- To strengthen balance sheet.

(b) *Candidates would have gained full marks for any four of the following:*
- Placing/placement.
- Private offer to large/institutions/sophisticated investors.
- Open offer to existing shareholders.
- Similar to a rights issue/existing shareholders offered new shares on a pro rata basis at a discount.
- But entitlement cannot be traded/shareholder not compensated if rights lapse.

(c)
- Sell the rights in the market/market value.
- Allow the offer to lapse/take no action.

(d) **(i)** 2,000 x 15 = 30,000
2,000 + (2,000/5 x 2) = 2,800
30,000/2,800 = 10.71

Alternative:
$\frac{15 \times 5}{5 + 2} = \frac{75}{7} = 10.71$

(ii) *Candidates would have gained full marks for any two of the following:*
- Bring its share price down to a more marketable level.
- Restructure (reduce) company reserves/increase share capital more in line with companies worth.
- As an alternative to paying a dividend.

(e) **(i)**
- Standard investment approach/company specific.
- Segmenting clients into risk categories/client objectives.
- Model portfolio/asset allocations.
- Based on investment theory/Stochastic modelling.
- Rebalanced/periodically reviewed.

(ii) **Advantages:**
- Eliminates portfolio drift.
- Removes adviser/behavioural bias.
- Matches/keeps in line with attitude to risk.

Disadvantages:
- One size fits all/not bespoke.
- Additional taxation (and potentially cost) due to higher portfolio turnover.
- Assumptions/past data underpinning model portfolios may be wrong (correlations/performance etc).

(f) *Candidates would have gained full marks for any four of the following:*
- Advisory need client approval to act.
- Discretionary can act on without client approval within agreed mandate.
- Costs/fees.
- Speed of action.
- Administration.
- Regulation.

Model answer for Question 3

(a) **(i)** £163,000 - £140,000 = £23,000

£23,000 - £11,100 = £11,900

£11,900 x 0.28 = £3,332

£163,000 - £119,000 - £3,332 = £40,668

(ii)
- Solicitor/conveyancing fees/Chaps fees.
- Estate agents fees.
- Mortgage redemption fee/admin charge.

(b)
- Interest rate risk.
- Mortgage cost increasing.

- Market/capital/valuation risk/physical damage.
- Property/capital values falling.

- Liquidity risk.
- May be unable to sell when required.

- Income/tenant risk.
- Void periods/tenant default/reducing rent.

(c) *Candidates would have gained full marks for any six of the following:*
- Hold cash to pay investors wishing to sell fund/liquidity purposes.
- A new property purchase is pending.
- Or just sold a property.
- Rental Income yet to be distributed.
- In demand/recent influx of money.
- Tactical positioning/manager's view.

- Cash produces very small return.
- Reduces performance in rising market or vice versa.

(d) *Candidates would have gained full marks for any five of the following:*

Advantages
- Diversification.
- Professional management.
- Less administration.
- Liquidity.
- Partial sale.
- Smaller/regular investments.

(e) (i) ABC Direct Property OEIC

45/1400 = 3.21%

Regional Land REIT

3.8/70 = 5.43%

(ii) *Candidates would have gained full marks for any two of the following:*

- Trading at discount to net asset value increases income/vice versa.
- Borrowing provides excess returns that can be paid as income.
- Different tax treatment.

(iii) *Candidates would have gained full marks for any three of the following:*

- Longer/better term(s) of lease/increasing rent reviews.
- Underlying covenant/quality of tenant.
- Property quality/location/potential for capital growth.
- Development opportunities.

(iv)

- Must distribute 90% of its property rental business profits.
- Income and capital gains of the property rental business are exempt from Corporation Tax.
- Distributions are taxed as income in the hands of the investors.

All questions in the April 2017 paper will be based on English law and practice applicable in the tax year 2016/2017, unless stated otherwise and should be answered accordingly.

The 2016/2017 Tax Tables which follow are those applicable to the October 2016 and the April 2017 examinations. The published Tax Tables can also be found online on the CII website: www.cii.co.uk.

INCOME TAX

RATES OF TAX	2015/2016	2016/2017
Starting rate for savings*	0%	0%
Basic rate	20%	20%
Higher rate	40%	40%
Additional rate	45%	45%
Starting-rate limit	£5,000*	£5,000*
Threshold of taxable income above which higher rate applies	£31,785	£32,000
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

**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) *§*	£10,600	£11,000
Personal Allowance (if born between 6 April 1938 and 5 April 1948) *§*	£10,600	£11,000
Personal Allowance (if born before 6 April 1938) *§*	£10,660	£11,000
Married/civil partners (minimum) at 10% *†*	£3,220	£3,220
Married/civil partners at 10% *†*	£8,355	£8,355
Transferable tax allowance for married couples/civil partners	£1,060	£1,100
Income limit for age-related allowances *§*	£27,700	£27,700
Blind Person's Allowance	£2,290	£2,290
Enterprise Investment Scheme relief limit on £1,000,000 max	30%	30%
Seed Enterprise Investment relief limit on £100,000 max	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)	£2,780	£2,780
- family element	£545	£545
Threshold for tapered withdrawal of CTC	£16,105	£16,105

NATIONAL INSURANCE CONTRIBUTIONS

Class 1 Employee	Weekly	Monthly	Yearly
Lower Earnings Limit (LEL)	£112	£486	£5,824
Primary threshold	£155	£672	£8,060
Upper Earnings Limit (UEL)	£827	£3,583	£43,000

Total earnings £ per week	CLASS 1 EMPLOYEE CONTRIBUTIONS
Up to 155.00*	Nil
155.01 – 827.00	12%
Above 827.00	2%

**This is the primary threshold below which no NI contributions are payable. However, the lower earnings limit is £112 per week. This £112 to £155 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
Below 156.00**	Nil
156.01 – 827.00	13.8%
Excess over 827.00	13.8%

*** Secondary earnings threshold.*

Class 2 (self-employed)	Flat rate per week £2.80 where profits exceed £5,965 per annum.
Class 3 (voluntary)	Flat rate per week £14.10.
Class 4 (self-employed)	9% on profits between £8,060 - £43,000. 2% on profits above £43,000.

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
2014/2015	£1,250,000	£40,000
2015/2016	£1,250,000	£40,000 *§*
2016/2017	£1,000,000	£40,000

ANNUAL ALLOWANCE CHARGE

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

MONEY PURCHASE ANNUAL ALLOWANCE	2015/2016	2016/2017
	£10,000*	£10,000*

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.

§ increased to £80,000 from 6 April - 8 July 2015. If not used, can be carried forward to 9 July 2015 - 5 April 2016, subject to a maximum of £40,000.
** transitional rules apply to the calculation for pre/post 8 July 2015 position.*

CAPITAL GAINS TAX

EXEMPTIONS	2015/2016	2016/2017
Individuals, estates etc	£11,100	£11,100
Trusts generally	£5,550	£5,550
Chattels proceeds (restricted to five thirds of proceeds exceeding limit)	£6,000	£6,000

TAX RATES		
Individuals:		
Up to basic rate limit	18%	10%
Above basic rate limit	28%	20%
Surcharge for residential property and carried interest	0%	8%
Trustees and Personal Representatives	28%	20%
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 TRANSFERS	2015/2016	2016/2017
Transfers made on death after 5 April 2015		
- Up to £325,000	Nil	Nil
- Excess over £325,000	40%	40%
Transfers made after 5 April 2015		
- Lifetime transfers to and from certain trusts	20%	20%

A lower rate of 36% applies where at least 10% of deceased's net estate is left to a registered charity.

MAIN EXEMPTIONS

	2015/2016	2016/2017
Transfers to		
- UK-domiciled spouse/civil partner	No limit	No limit
- non-UK-domiciled spouse/civil partner (from UK-domiciled spouse)	£325,000	£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_2) emissions. There is no reduction for high business mileage users.

For 2016/2017:

- The percentage charge is 7% of the car's list price for CO_2 emissions of 50g/km or less.
  - For cars with CO_2 emissions of 51g/km to 75g/km the percentage is 11%.
  - For cars with CO_2 emissions of 76g/km to 94g/km the percentage is 15%.
- Cars with CO_2 emissions of 95g/km have a percentage charge of 16% and thereafter the charge increases by 1% for every complete 5g/km to a maximum of 37% (emissions of 200g/km and above).

There is an additional 3% supplement for diesel cars not meeting Euro IV emission standards. However, the maximum charge remains 37% of the car's list price.

Car fuel The benefit is calculated as the CO_2 emissions % relevant to the car and that % applied to a set figure (£22,200 for 2016/2017) e.g. car emission 100g/km = 17% on car benefit scale. 17% of £22,200 = £3,774.

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 contribution's (Class 1A) of 13.8%.

PRIVATE VEHICLES USED FOR WORK

	2015/2016 Rates	**2016/2017 Rates**
Cars		
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
Motor Cycles	24p per mile	24p per mile
Bicycles	20p per mile	20p per mile

MAIN CAPITAL AND OTHER ALLOWANCES

	2015/2016	2016/2017
Plant & machinery (excluding cars) 100% annual investment allowance (first year)	£500,000	£200,000
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%

Motor cars: Expenditure on or after 01 April 2016 (Corporation Tax) or 06 April 2016 (Income Tax)

CO_2 emissions of g/km:	75 or less*	76-130	131 or more
Capital allowance:	100% first year	18% reducing balance	8% reducing balance

**If new*

CORPORATION TAX

	2015/2016	2016/2017
Standard rate	20%	20%
Small companies rate	20%	N/A
Small companies limit	£300,000	N/A
Effective marginal rate	20%	N/A
Upper marginal limit	£1,500,000	N/A

VALUE ADDED TAX

	2015/2016	2016/2017
Standard rate	20%	20%
Annual registration threshold	£82,000	£83,000
Deregistration threshold	£80,000	£81,000

MAIN SOCIAL SECURITY BENEFITS

		2015/2016	2016/2017
		£	£
Child Benefit	First child	20.70	20.70
	Subsequent children	13.70	13.70
	Guardian's allowance	16.55	16.55
Employment and Support Allowance	Assessment Phase		
	Age 16 – 24	Up to 57.90	Up to 57.90
	Aged 25 or over	Up to 73.10	Up to 73.10
	Main Phase		
	Work Related Activity Group	Up to 102.15	Up to 102.15
	Support Group	Up to 109.30	Up to 109.30
Attendance Allowance	Lower rate	55.10	55.10
	Higher rate	82.30	82.30
Retirement Pension	Single	115.95	119.30
	Married	185.45	190.80
Single Tier State Pension	Single	N/A	£155.65
Pension Credit	Single person standard minimum guarantee	151.20	155.60
	Married couple standard minimum guarantee	230.85	237.55
	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		112.55	112.55
Jobseekers Allowance	Age 18 - 24	57.90	57.90
	Age 25 or over	73.10	73.10
Statutory Maternity, Paternity and Adoption Pay		139.58	139.58