

## P61

### Diploma in Insurance

#### Unit P61 – Life, critical illness and disability underwriting

April 2016 examination

#### 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 P61 – Life, critical illness and disability underwriting

### Instructions to candidates

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

**Three hours** are allowed for this paper which carries a total of 200 marks, as follows:

Part I	14 compulsory questions	140 marks
Part II	2 questions selected from 3	60 marks

- You should answer **all** questions in Part I and two out of the three questions in Part II.
- You are advised to spend no more than two hours on Part I.
- Read carefully all questions and information provided before starting to answer. Your answer will be marked strictly in accordance with the question set.
- 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.
- 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 each step in any 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.
- Answer each question on a new page. If a question has more than one part, leave six lines blank after each part.

## PART I

## Answer ALL questions in Part I

**Note form is acceptable where this conveys all the necessary information**

1. State **five** features declared by an applicant with asthma which result in a moderate or heavy extra premium for a life policy, explaining briefly why **each** feature may increase the premium. (10)
  
2. An applicant declares she has migraine.
  - (a) State **two** common triggers for an attack of migraine. (2)
  - (b) Describe briefly a typical attack of migraine. (5)
  - (c) Identify a feature of the applicant's account of migraine which would alert you to the need to seek further information. (2)
  - (d) Explain briefly your approach to assessing a case of migraine for life and income protection. (4)
  
3.
  - (a) Define briefly non-Hodgkin's lymphoma (NHL). (2)
  - (b) Describe briefly **two** common ways NHL may first appear. (2)
  - (c) Explain how NHL is 'staged'. (4)
  - (d) State how the precise diagnosis is made. (2)
  - (e) Describe how you would underwrite life cover for an applicant who received treatment for NHL two years ago and is now apparently free from disease. (5)
  
4. Outline **three** circumstances where a signed statement from an applicant may be required following submission of their application and prior to their policy commencing. (6)

5. A hospital blood test report shows there is 'macrocytic megaloblastic anaemia'.
- (a) State what **each** of these **three** terms mean. (6)
  - (b) Explain **two** main reasons why this blood test result might occur. (4)
6. Describe briefly the following psychiatric terms giving an example of **each**:
- (a) A delusion. (3)
  - (b) A hallucination. (3)
  - (c) A somatoform disorder. (3)
7. (a) Define an adenomatous colonic polyp. (4)
- (b) State the important information that needs to be obtained before underwriting an applicant with adenomatous colonic polyps. (6)
- (c) Outline, using the facts obtained in **part (b)** above, how you would underwrite this applicant. (5)
8. State **three** effects caused by having urinary stone disease that may lead to an increased premium for life and disability insurance. (9)
9. Explain briefly **four** important principles of good underwriting to ensure profitability is in line with the pricing assumptions of the actuary. (8)

QUESTIONS CONTINUE OVER THE PAGE

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- 10.** Describe briefly the following non-invasive tests on the heart, stating how they are performed and what information may be obtained.
- (a)** CT or EBCT coronary angiography. **(3)**
  - (b)** Stress echocardiography. **(3)**
  - (c)** Nuclear perfusion imaging. **(3)**
- 11.** Outline **five** major reasons why a person taking cocaine is likely to be declined for all insurance. **(10)**
- 12.** A woman under investigation for infrequent menstrual periods is found to have a high level of prolactin in the blood.
- (a)** State the principal function of prolactin. **(2)**
  - (b)** Outline **three** reasons why prolactin levels may be raised. **(6)**
- 13.**
- (a)** Describe briefly complete atrio/ventricular heart block. **(3)**
  - (b)** State the symptoms a person with this condition may experience. **(3)**
  - (c)** Describe the treatment that may be offered and how it is applied. **(4)**
- 14.**
- (a)** State **two** groups of people in the community who are particularly at risk of developing osteoporosis, explaining briefly why they are more likely to be affected. **(4)**
  - (b)** Describe briefly the underwriting terms you are likely to offer an applicant who has been diagnosed with osteoporosis for life and income protection insurance. **(4)**

## PART II

**Answer TWO of the following THREE questions**  
**Each question is worth 30 marks**

- 15.** A male applicant, aged 45, applies for a whole of life policy with income protection included.

His wife died three years ago and he has four children.

He is a director of a small business designing software and in the last 12 months earned £130,000 with, in addition, a bonus of £18,000.

He already has a mortgage protection policy for £80,000 which has another two years to run.

He has rheumatoid arthritis which, according to his application form, is 'mild'.

- (a)** Explain how you would calculate the maximum sum he could insure:
- (i)** for his whole of life policy; **(4)**
  - (ii)** for income protection. **(4)**
- (b)** State the financial information you would require to assess the risk for both policies, and why you need it. **(8)**
- (c)** State and explain briefly:
- (i)** **five** features of rheumatoid arthritis which would likely result in life cover being heavily rated or declined. **(10)**
  - (ii)** the circumstances in which income protection cover can be considered where there is a history of rheumatoid arthritis. **(4)**

**QUESTIONS CONTINUE OVER THE PAGE**

- 16.** A married couple, a male aged 60 and a female aged 58, are seeking to reduce their Inheritance Tax liability. They have a joint asset value of £4million.

The husband has disclosed on his application form that he has hypertension and has been on treatment for 10 years. Currently he is taking ramipril and simvastatin. His work as an international auditor takes him to various countries, particularly Brazil, India and Nigeria.

His wife discloses she has suffered a depressive illness two years ago but is no longer receiving any treatment. She does not work. They both admit to drinking over 20 units per week. The wife smokes heavily, the husband gave up smoking 5 years ago but prior to that he too smoked heavily.

- (a)** Identify, with reasons, the type of policy they should be advised to apply for. **(6)**
- (b)** Discuss the non-medical risks presented by the husband. **(8)**
- (c)** Describe the medical evidence that would be required to underwrite the husband. **(8)**
- (d)** Explain your approach to assessing the wife's depression. **(8)**



- 17.** A female applicant, aged 42, requires a life policy for 25 years to cover a bank loan of £800,000 for a house purchase. She works for a fashion house and earns £90,000 per annum.

A general practitioner's report showed that two years ago she developed a urinary tract infection and subsequent investigation revealed she had diabetes mellitus. She was advised to lose weight and was given metformin tablets. Later glibenclamide was added, but this combination failed to control her diabetes and about a year after the initial diagnosis she was put on insulin. In addition to insulin she now takes an ACE inhibitor.

A medical examination carried out by a nurse showed a BMI of 27, blood pressure of 145/90 and urine containing a small amount of glucose. Blood tests show a glucose level of 9mmol/l, an HbA1c of 7.1 normal creatinine and normal liver function. Her serum cholesterol was 5.2 mmol/l.

- (a)** Explain how the following forms of diabetes are thought to arise:
- (i)** Type 1. **(5)**
  - (ii)** Type 2. **(5)**
- (b)** Explain the type of diabetes this applicant may have. **(4)**
- (c)** Explain how an underwriter would assess the quality of diabetic control in this applicant. **(8)**
- (d)** Explain why this applicant's urine would be tested. **(3)**
- (e)** Describe the factors that would determine the rating for this applicant. **(5)**

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