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P61 – Life, critical illness and disability underwriting

Diploma in Insurance

April 2019 Examination Guide

SPECIAL NOTICE

Candidates entered for the October 2019 examination should study this Examination Guide carefully in order to prepare themselves for the examination.

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

P61 – Life, critical illness and disability underwriting

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IMPORTANT GUIDANCE FOR CANDIDATES

Introduction

The purpose of this Examination Guide is to help you understand how examiners seek to assess the knowledge and skill of candidates. You can then use this understanding to help you demonstrate to the examiners that you meet the required levels of knowledge and skill to merit a pass in this unit.

Before the examination

Study the syllabus carefully

This is available online at www.cii.co.uk. 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.

Read widely

It is vital that your knowledge is widened beyond the scope of one book. *It is quite unrealistic to expect that the study of a single study text 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. 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 obtain free copies of the most recent Examination Guides online at www.cii.co.uk.

Know the structure of the examination

Assessment is by means of a three hour paper.

Part 1 consists of 14 compulsory questions, worth a total 140 marks.

Part 2 consists of 2 questions selected from 3, worth a total of 60 marks.

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

Read the current Diploma in Insurance Information for Candidates

Details of administrative arrangements and the regulations which form the basis of your examination entry are to be found in the current Qualifications Brochure, which is *essential reading* for all candidates. It is available online at www.cii.co.uk.

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, so a long answer is a waste of time.
- Conversely, if a question has 12 marks allocated, a couple of lines will not be an adequate answer.
- 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 fully understand the question that has been asked 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 given. 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.

EXAMINER COMMENTS

Question 1

Few candidates gained high marks on this question as most candidates did not know that the systems used for staging malignant melanoma are different from that used in most tumours.

Question 2

Many candidates' answers would have benefitted from knowing that Parkinson's disease is essentially a degenerative disease which is progressive, and treatment does not achieve a cure but simply suppresses symptoms in a gradually deteriorating situation. Therefore, from an insurance point of view, it is important to gain some idea of the rate that the disease is progressing.

Question 3

Many candidates did not perform well on this question as they knew little about abdominal aortic aneurysm. It is a frequent cause of death in older male subjects if it is undiagnosed before it ruptures.

Question 4

The majority of candidates knew about migraine however, the aura of an attack was mentioned by only a few. In part (b), candidates needed to be aware that if the symptoms were of recent origin then the possibility of some alternative diagnosis such as intra-cranial disease should be ruled out.

Question 5

To answer this question correctly candidates needed to know that polycystic ovary syndrome can be part of metabolic syndrome and therefore the underwriter should look for other elements of this syndrome such as diabetes, hypertension and hypercholesterolaemia.

Question 6

This question was reasonably well answered by the majority of candidates.

Question 7

It is important for candidates to understand that cataract, in most cases, can be operated upon with restoration of normal vision and is of no consequence to underwriters subsequently. Many candidates correctly mentioned that nystagmus is an abnormal movement of the eyes, but few said it could be an indication of serious intra-cranial disease.

Question 8

Few candidates gained high marks on this question. The important point is that the general practitioner's (GP) report should be strictly factual and not concerned with opinion. The idea that the report should not in any way compromise the GP relationship with the patient was not mentioned enough.

Question 9

This question was not well answered by the majority of candidates. The descriptions of symptoms and underlying causes were not very good. The important point is that in most cases all underwriting is declined except when the cause of the condition can be treated, for example, by surgery for valvular heart disease.

Question 10

This was a standard question and the candidates that have dealt with employee group schemes performed well.

Question 11

This question was reasonably well answered by the majority of candidates.

Question 12

Some candidates focused their answers on polyposis coli which was not required to answer the question. It is important to look for evidence of follow up which was not often mentioned.

Question 13

This question tested the knowledge of the white cells of the blood found in a blood sample. Most candidates found this difficult to answer however, a detailed knowledge was not required to gain high marks.

Question 14

Candidates' answers would have benefitted from a better knowledge of pancreatitis and understanding the possible severity of a disease with a significant mortality.

Question 15

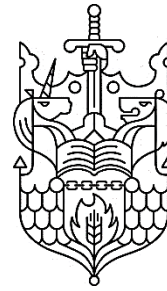
Most candidates produced a reasonable answer to this question however, some barely mentioned the possibility of alcohol excess. No candidates pointed out that the applicant was young to have developed coronary heart disease requiring a stent necessitating a search for underlying causes such as hypercholesterolaemia, undiagnosed diabetes or pre-diabetes, smoking or hypertension.

Question 16

Answers to this question were often confused between intrinsic and extrinsic asthma with the difference in prognosis this implies. Candidates needed to make more reference to pulmonary function studies which can be useful in assessing the outlook of the applicant.

Question 17

The majority of candidates made a reasonable attempt at addressing the problem of whether this applicant really had multiple sclerosis (MS) and the parts of the question dealing with MS were quite well answered. Many candidates concentrated on the risk of her foreign travel and did not mention the risk of her being on an offshore oil rig in the UK most of time.



Chartered
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P61

Diploma in Insurance

Unit P61 – Life, critical illness and disability underwriting

April 2019 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 several 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. (a) Describe briefly the factors to take into account when underwriting an applicant for life insurance, with a history of malignant melanoma removed from their leg. (3)
- (b) Describe the system employed in staging melanoma of the skin and how it is used to make a life underwriting decision. (6)
2. (a) State **four** features which may be found in a person who has Parkinson's disease. (4)
- (b) Outline the underlying cause of Parkinson's disease. (3)
- (c) Explain your approach to underwriting an applicant for life, critical illness and income protection insurance, who has just started treatment for Parkinson's disease. (8)
3. (a) Describe briefly the medical approach used to detect abdominal aortic aneurysm in the general population, and the clinical methods used to reduce the risk of death where abdominal aortic aneurysm is present. (4)
- (b) State your approach to underwriting an applicant for life insurance who has had surgery for abdominal aortic aneurysm. (4)
4. An applicant for life and income protection insurance discloses she has migraine.
 - (a) Describe briefly a typical attack of migraine. (3)
 - (b) Identify a feature in the applicant's history which would alert you to requesting more information. (2)
 - (c) Explain briefly your approach to underwriting this applicant. (3)

5. A young woman has polycystic ovarian syndrome (PCOS).
- (a) List **four** signs or symptoms of PCOS she may have. (4)
- (b) State the test results which need to be available in the medical evidence to underwrite this applicant and explain briefly why they are necessary. (4)
6. Discuss the main factors to consider when an applicant for life and income protection insurance discloses drug abuse. (12)
7. Describe briefly the main features of **each** of the following and comment on the implications for life and income protection insurance:
- (a) Cataract. (4)
- (b) Nystagmus. (4)
- (c) Papilloedema. (4)
8. In accordance with the agreement between the Association of British Insurers and British Medical Association, certain pieces of information should **not** appear on general practitioner's reports.
- (a) Explain briefly why information should be withheld. (2)
- (b) List **four** types of information covered by the agreement. (4)
9. (a) Explain briefly a major symptom and **two** underlying causes of:
- (i) heart failure involving the right side of the heart; (6)
- (ii) heart failure involving the left side of the heart. (6)
- (b) Outline your approach to underwriting an applicant for life insurance who has had treatment for heart failure. (3)

10. (a) State the information you would require from an employer who wants to set up an employee group scheme for life, critical illness and income protection insurance. (8)
- (b) State the conditions that must be fulfilled when the employee group scheme begins. (3)
11. (a) Describe briefly the symptoms of a panic attack. (4)
- (b) Explain briefly the risks of an applicant for life and income protection insurance who has disclosed a history of panic attacks. (5)
12. An applicant for life and critical illness insurance discloses a history of two adenomatous polyps removed at colonoscopy.
- (a) Define a colonic adenomatous polyp. (2)
- (b) State the information which needs to be available in the medical evidence to underwrite this applicant and explain briefly why it is necessary. (3)
- (c) State your likely underwriting decision based on the information required in **part (b)** above. (4)
13. Outline **one** function of **each** of the following found in a blood sample:
- (a) Polymorphonuclear neutrophil leucocyte. (2)
- (b) Plasma cell. (2)
- (c) 'T' cell lymphocyte. (2)
- (d) Platelet. (2)
14. (a) Describe briefly a typical attack of pancreatitis. (3)
- (b) State **two** common causes of pancreatitis. (4)
- (c) Explain briefly the likely underwriting terms for an applicant for life insurance who discloses two attacks of pancreatitis in the last two years. (3)

PART II

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

15. A male applicant, aged 40, requests a 15 year term life policy for £2,000,000.

He is the Chief Executive Officer of a long-established company supplying hotels in the UK and Europe which at present is struggling to make a profit.

He has managed to raise a loan of £2,000,000 from a reputable lender. In the event of death within the term this lender would be the beneficiary.

A general practitioner's report revealed that three years ago he developed chest pains. A coronary angiogram was abnormal and resulted in the insertion of a single stent. His body mass index at that time was 28 and there are no more recent measurements. He gave up smoking at the same time and he drinks approximately 25 units of alcohol a week.

- (a) State the financial information you would need to obtain to enable you to assess this application, and why **each** piece of information is necessary. (10)
- (b) Identify the additional medical information that would enable you to assess the application. (11)
- (c) Explain how the information obtained in **part (b)** above would help you to assess the risk. (9)

16. A female applicant, aged 37, applies for a life policy with critical illness to cover a loan for a house purchase for £250,000. She also wants income protection insurance for £25,000 per annum. She is a manager in a furniture shop and earns £50,000 per annum. She discloses she has asthma. She does not smoke or drink alcohol.

- (a) Outline the risk factors that would help you understand the severity of her asthma. (14)
- (b) Explain how the risk factors obtained in **part (a)** above would influence your assessment of this applicant and the likely acceptance terms. (16)

- 17.** A female applicant, aged 35, who earns £55,000 per annum, is a member of a paramedical team working for an international offshore oil company. She is applying for a life policy for £300,000 with critical illness and total and permanent disability.

Her work is mainly in the UK but for approximately three months a year she has to visit company installations in the Middle East and Nigeria.

Two years ago, she complained of some weakness in her legs and unsteadiness when walking. These symptoms lasted about three weeks, during which she was unable to work, and then gradually the symptoms subsided. She was seen by a neurologist but was not followed up. She does not smoke or drink alcohol.

- (a)** State the medical information you would need to underwrite this applicant, explaining why this information is necessary. **(4)**
- (b)** State **three** tests that are commonly performed in the investigation of a case of suspected multiple sclerosis, and for **each** test describe briefly what abnormality may be found. **(6)**
- (c)** Discuss the risk factors associated with her occupation. **(10)**
- (d)** Explain, giving reasons, the likely acceptance terms for life, critical illness and total and permanent disability. **(10)**

TEST SPECIFICATION

| April 2019 Examination – P61 Life, critical illness and disability underwriting | |
|--|---|
| Question | Syllabus learning outcome(s) being examined |
| 1 | 2 – Understand the features of the major systems of the body and the underwriting approach to disorders and diseases |
| 2 | 2 – Understand the features of the major systems of the body and the underwriting approach to disorders and diseases |
| 3 | 2 – Understand the features of the major systems of the body and the underwriting approach to disorders and diseases |
| 4 | 2 – Understand the features of the major systems of the body and the underwriting approach to disorders and diseases |
| 5 | 2 – Understand the features of the major systems of the body and the underwriting approach to disorders and diseases |
| 6 | 2 – Understand the features of the major systems of the body and the underwriting approach to disorders and diseases |
| 7 | 2 – Understand the features of the major systems of the body and the underwriting approach to disorders and diseases |
| 8 | 1 – Understand the mechanics of life and disability underwriting |
| 9 | 2 – Understand the features of the major systems of the body and the underwriting approach to disorders and diseases |
| 10 | 1 – Understand the mechanics of life and disability underwriting 3 – Understand non-medical risk factors |
| 11 | 2 – Understand the features of the major systems of the body and the underwriting approach to disorders and diseases |
| 12 | 2 – Understand the features of the major systems of the body and the underwriting approach to disorders and diseases |
| 13 | 4 – Understand the impact of legal and regulatory considerations |
| 14 | 2 – Understand the features of the major systems of the body and the underwriting approach to disorders and diseases |
| 15 | 1 – Understand the mechanics of life and disability underwriting 2 – Understand the features of the major systems of the body and the underwriting approach to disorders and diseases 3 – Understand non-medical risk factors |
| 16 | 1 – Understand the mechanics of life and disability underwriting 2 – Understand the features of the major systems of the body and the underwriting approach to disorders and diseases |
| 17 | 1 – Understand the mechanics of life and disability underwriting 2 – Understand the features of the major systems of the body and the underwriting approach to disorders and diseases 3 – Understand non-medical risk factors |

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)
- Establish the date of surgery.
 - Make sure there is no evidence of recurrence since surgery.
 - Establish the stage of the disease at the time of surgery.
- (b)
- Stage 0 – Melanoma in situ. Good prognosis and normal rates.
 - Stage 1 – Up to 1mm thick with ulceration or 2mm thick without ulceration.
 - Stage 2 – Up to 2mm thick with ulceration. For stages 1 and 2 postpone for one year from surgery followed by a cash extra for two or three years.
 - Stage 3 – Spread to one or more local lymph nodes. Postpone for at least three years from surgery and then reconsider.
 - Stage 4 – Spread to distant organs – Decline.

Model answer for Question 2

- (a) *Any four of the following:*
- A characteristic tremor.
 - Walking with small shuffling steps.
 - Stiffness and paucity of movements.
 - Lack of facial expression.
 - Infrequent blinking.
 - Dementia in the later stages.
- (b) The cells of the substantia nigra in the brain degenerate and become resistant to dopamine. The cause may be unknown. Sometimes there appears to be a genetic basis.
- (c)
- Underwriting depends on the severity of the symptoms at the time of underwriting and the rate of progress of the Parkinson's disease up to that point.
 - Applicants with a rapidly progressing disease and with advanced symptoms should be declined for all insurance.
 - Milder cases with little disability and a slowly progressive disease, responding well to treatment, could be considered for a life policy with a moderate extra premium.
 - In most cases, disability would be declined, and an exclusion applied for critical illness.

Model answer for Question 3

- (a) Routine screening of older men, who are the highest risk group, using ultrasound to detect aneurysms at an early, presymptomatic stage. A careful follow up using ultrasound to detect progressive enlargement of an aneurysm.

Cases are selected for surgery when the risk of rupture becomes greater than the risk of surgery. This point is usually reached when the diameter of the aneurysm reaches about 5.5 cm, though with improvements in surgical technique surgery may be undertaken sooner.

- (b) Post-operative applicants may be acceptable for life, only with a medium to high premium, provided: follow up is satisfactory; blood pressure is normal and renal function is normal.

Model answer for Question 4

- (a) A migraine attack is often brought on by a particular food e.g. chocolate or alcohol or by stress. The first sign of an attack is the aura. It may be visual with flashing lights or hemianopia but sometimes other features e.g. numbness or dysphasia. This phase may last 15–30 minutes. A headache often unilateral follows and may be accompanied by nausea, vomiting and photophobia. These symptoms may last for several hours or even days.
- (b) If the disorder is of very recent origin, then further evidence may be required to confirm the diagnosis. It can mimic other more serious neurological diseases.
- (c) This applicant would have standard rates for life. For income protection, frequent attacks may incapacitate a sufferer and seriously interfere with work. The underwriter must be cautious, examine the work record and consider applying an exclusion, a rating or extending the deferred period. A severe case could be declined.

Model answer for Question 5

- (a)
- Obesity.
 - Hirsutism and acne.
 - Erratic or absent menses.
 - Infertility.
- (b)
- Blood pressure.
 - Lipid analysis.
 - Haemoglobin A1c.

Polycystic ovarian syndrome may be a manifestation of metabolic syndrome.

Model answer for Question 6

- How long ago was the drug abuse? A remote history without recurrence would be low risk.
- Have the social circumstances improved making a recurrence unlikely e.g. having a permanent job, a family and owning property?
- The drugs used. Cocaine and opiates would increase the risk.
- The route of administration. Parenteral drugs carry a long-term risk of human immunodeficiency virus (HIV) and hepatitis.
- Are there any accompanying risks such as depression, alcohol and heavy smoking which could increase the risk of recurrence?
- There is a possibility of misrepresentation so confirmatory evidence should be sought.

Model answer for Question 7

- (a)
- Cataract is a clouding of the lens of the eye. It is more common in older people and diabetics. It is usually bilateral but may be unilateral after trauma to an eye. It is easily treated by removal of the lens and substituting it with a plastic one.
 - Cataract would not attract an extra rating for life as such but rate for any underlying condition e.g. diabetes.
 - For income protection, if severely affected, exclude or postpone until surgery, thereafter standard rates.
- (b)
- Nystagmus is rhythmical flickering movements of the eyes. Often horizontal but occasionally rotational.
 - Nystagmus is usually indicative of disease in the cerebellum or its connections e.g. multiple sclerosis or disease in the vestibular apparatus.
 - Underwriting would depend on the underlying cause.
- (c)
- Papilloedema is a swelling of the optic disc when seen through an ophthalmoscope.
 - Papilloedema may occur from any cause of raised intracranial pressure e.g. intracranial tumour or haemorrhage.
 - Papilloedema may be seen in optic myelitis particularly in multiple sclerosis when there is gross disturbance of vision.
 - Insurance is for the underlying cause.

Model answer for Question 8

- (a) Information should be withheld to ensure the doctor/patient relationship is protected.
- (b)
- Doctor's opinions.
 - Negative tests for human immunodeficiency virus (HIV) and hepatitis.
 - Sexual history.
 - Predictive genetic testing.

Model answer for Question 9

- (a) (i)
- Inadequate pumping action of the right ventricle gives rise to back pressure in the veins entering the right side of the heart. This in turn results in build-up of oedema first in the legs and then the lower parts of the body.
 - Chronic obstructive pulmonary disease increases the pressure required to pump blood through the lungs and throws an extra load on the right side of the heart which eventually fails.
 - Pulmonary valve stenosis again causes increase in workload to force adequate blood through a narrowed orifice resulting in eventual right-sided failure.
- (ii)
- When the left ventricle fails, there is increased back pressure on the pulmonary circulation and the predominant symptom is attacks of breathlessness, particularly when lying flat at night.
 - Severe coronary artery disease may cause sufficient muscle damage to weaken the walls of the ventricle and cause it to fail.
 - Aortic valve disease, stenosis or regurgitation, throws an extra strain on the left ventricle which will fail.
- (b) An applicant in heart failure should be declined or postponed. In those applicants where the failure can be treated by eliminating the underlying condition, for example by surgery on a diseased valve or by acute recoverable disease of heart muscle, then terms may be offered after a postponement and satisfactory cardiological follow up.

Model answer for Question 10

- (a)
- The number of employees working in the company and the number who will join the employee group scheme. At least 90% of employees must join.
 - The business of the company including any specific hazards.
 - The split between manual and non-manual workers.
 - The geographical distribution of the workforce.
 - The level of benefits to be provided 'free' to all members with no underwriting.
 - If the benefit is calculated as a proportion of salary, then the salaries of the workforce must be known.
 - Arrangements must be made for those employees whose claims exceed the 'free' cover limit.
 - Claims experience on any previous employee group schemes.
- (b)
- All members of the employee group scheme must be at work on the commencement day.
 - No member of the employee group scheme has been off work due to sickness for more than two weeks in the previous six months.
 - All new employees must join the employee group scheme.

Model answer for Question 11

- (a) A panic attack occurs where feelings of anxiety overwhelm a person who then develops physical symptoms of sweating, tachycardia and may be observed to over-breathe. There are also cognitive symptoms and possibly a loss of control. The whole episode usually lasts 10 to 15 minutes.
- (b)
- The outlook depends on the frequency and severity of symptoms.
 - Treatment with cognitive behavioural therapy with or without drugs is successful in many cases and produces improvement in many more.
 - Up to 20% of sufferers remain resistant to treatment and these cases may become depressed. This may inhibit ability to work or even lead to suicide.
 - In a minority of cases there may be drug or alcohol mis-use.

Model answer for Question 12

- (a) A colonic adenomatous polyp is a pre-malignant growth arising in the wall of the colon and projecting into the lumen.
- (b) The number of polyps needs to be checked and confirmed. The biopsies need to be checked to make sure they are benign. Arrangements should be made for the applicant to be followed up.
- (c) If then standard rates could be given for life. Since the condition is pre-malignant, either a moderate rating or an exclusion should be applied for critical illness.

Model answer for Question 13

- (a) Ingestion and destruction of invading bacteria.
- (b) Produce antibodies to invading bacteria.
- (c) Destroy abnormal cells e.g. those containing virus particles and sometimes cancer cells.
- (d) Clump together to seal off damaged blood vessels and reduce bleeding.

Model answer for Question 14

- (a) A typical attack of pancreatitis would result in abdominal pain and vomiting which may lead, in a severe case, to collapse, organ failure and death.
- (b)
- A disorder of the bile duct which is very close to the pancreas may trigger acute pancreatitis.
 - Heavy alcohol consumption is commonly associated with pancreatitis.
- (c)
- If attacks of pancreatitis are caused by alcohol, then decline.
 - Acute attacks followed by successful treatment may be acceptable with a small extra premium.
 - If chronic pancreatitis is present, then decline.

Model answer for Question 15

- (a)**
- Financial information would be obtained from the applicant's company accountant and from the applicant.
 - A financial questionnaire would be issued.
 - Company accounts over the last three years would give an impression of the viability of the company and the likelihood of the premiums being paid.
 - A business plan giving an indication of how the new loan would be used would give a projection of the company's viability.
 - A copy of the loan agreement to establish the terms and conditions of the loan.
 - The company accountant would reveal any other loans, financial commitments or insurance policies undertaken by the management which might put payment of premiums on the new policy at risk.
- (b)**
- A medical examination would be essential.
 - What is the applicant's general appearance?
 - Does the applicant drink alcohol and if so, how many units?
 - Does the applicant smoke?
 - What is the applicant's weight and distribution of weight?
 - There should be a urine test for protein and glucose.
 - Electrocardiogram – any abnormality would probably require referral back to the cardiologist.
 - Liver function tests including gamma glutamyl transferase. This enzyme may be raised in any liver disease but is commonly seen with liver damage from alcohol.
 - Check cholesterol.
 - Haemoglobin A1c test to check blood glucose.
 - A cotinine test to confirm smoker status.
 - Report from cardiologist to confirm general practitioner report and provide information on follow up.
- (c)**
- The main risks for this applicant are vascular disease and possibly alcohol.
 - He is quite young to have developed coronary disease to the point of needing a stent and it is important to look for specific underlying reasons for it.
 - Untreated hypercholesterolaemia, undiagnosed type 2 diabetes (or pre-diabetes) obesity, evidence of abnormal liver function tests and persistent smoking would all accelerate his vascular disease, increase the risk and may result in declinature.
 - His policy is a 15 year life only policy which should be taken into account.

Model answer for Question 16

- (a)
- The applicant's age when her asthma commenced.
 - Has it become worse or better as she has grown older?
 - Has she had any hospital admissions and, if so, when was the last one?
 - How much time has she lost from being absent at work?
 - How much treatment has she required?
 - Has she been controlled with inhaled drugs (including steroids) only or has she required courses of oral steroids?
 - Is she completely free from symptoms in between attacks or is she rather wheezy all the time?
 - Is there anything to suggest her asthma is complicated by chest infection with fever and coughing up purulent sputum with the need for antibiotics?
 - Are there any measurements of lung function both during and between the attacks?
 - Has she any known allergies?
- (b)
- If her asthma started in childhood and there has been a tendency to improvement, then she probably has extrinsic asthma which carries a favourable prognosis. This view would be supported if she had specific allergies or other manifestations of allergic disorder such as eczema.
 - Conversely, if her asthma started in recent years and it has resulted in hospital admissions, absence from work and the need for oral steroids, then the outlook is much worse, and it is probable she has intrinsic asthma.
 - Other unfavourable features would be if she were wheezy most of the time and lung function tests did not revert to normal at any time.
 - If she coughed-up purulent sputum persistently this would suggest she has chronic obstructive pulmonary disease superimposed on her asthma and the outlook would be worse.
 - For life, a favourable case would attract a light extra premium or even standard rates. A severe case with multiple hospital admissions and long-term use of oral steroids particularly if there is evidence of chronic lung infection, would attract a heavy extra premium or even a declinature.
 - For critical illness, a light loading would be applied for a mild case or possibly an exclusion of lung disease. A severe case would be declined.
 - For income protection, a very mild case might be taken with a small extra and an extended deferred period to guard against multiple short absences from work. If there is any evidence her work is contributing to her illness, then a declinature should be considered.

Model answer for Question 17

- (a)
- A general practitioner's report would be useful and might give more information about the applicant's episode of weakness.
 - Any hospital reports.
 - Whether follow up was advised.
 - An up-to-date medical examination, preferably by a neurologist.
- (b)
- Visually evoked responses – Electrodes are placed on the back of the head over the visual cortex. Pulses of light are shone into the eye and the time taken for the visual cortex to respond is measured. In a case of multiple sclerosis (MS) where the optic nerves are involved there is delay in conduction of the stimulus which may remain abnormal even though the vision has recovered.
 - Examination of the cerebrospinal fluid removed by lumbar puncture – The fluid in MS shows an abnormal electrophoretic pattern known as oligo-clonal bands. These are immunoglobulins synthesised in the nervous system in MS but not found in the blood plasma.
 - Magnetic resonance imaging – Lesions are seen in the white matter of the brain particularly the deeper parts round the corpus callosum and near the ventricles where they are characteristic.
- (c)
- Her occupational risk includes the job itself and the travel risk.
 - Working on oil rigs has the risk of helicopter flights and exposure to bad weather.
 - The risk of physical injury when on the oil rigs.
 - Psychological risk from irregular hours and highly stressed nature of the work.
 - Detailed information on what is involved in her work should be obtained.
 - Travelling to high risk countries.
 - Hostile climate, poor water supply, unsafe transport.
 - Is the living accommodation secure?
 - Attacks by local bandits, risk of kidnap.
 - Risk of political unrest or war.
 - Long separation from family may lead to depression and risk of excessive alcohol consumption.
- (d) Medical risk
- It must be clear how significant her episode of weakness was.
 - Was she investigated and what were the results?
 - If it appears the episode was not very significant, a diagnosis was either not made or the tests were all negative, then she could probably be accepted at standard rates for life.
 - For critical illness an exclusion for neurological disease could be imposed.

Occupational risk

- The occupational risk coupled with travel to a high risk country is high and might justify a moderate cash extra for the life policy.
- If her work takes her to high risk countries, for as long as three months in the year, it is probable that critical illness and total and permanent disability would be declined.