

INSTITUTE AND FACULTY OF ACTUARIES EXAMINATION

March 2016

Subject CA3 – Communications

Paper 2

Time allowed: 2 hours

INSTRUCTIONS TO THE CANDIDATE

1. *The work you submit MUST be saved in Microsoft PowerPoint 2007 format, e.g. using the pptx file extension.*
2. *You have two hours to prepare and upload your exam attempt.*
3. *You may print one copy of your slides in preparation for giving the presentation tomorrow. You are not permitted to make any further copies of your presentation.*
4. *Copies of Formulae and Tables and core reading for subjects CT1–CT8 inclusive and CA1 will be available electronically during the exam. These documents are for your use during the exam period only and not for general use. No other material can be referred to.*
5. *In addition to this paper you should have available your own electronic calculator from the approved list, <http://www.actuaries.org.uk/studying/prepare-your-exams/authorised-calculators>*
6. *You are not permitted to use the internet to help you during the exam.*
7. *You are required to work through the exam assignment without assistance from another person. You are reminded that by undertaking this exam you are bound by the Institute and Faculty of Actuaries' Examinations Rules and Regulations. By submitting your files you are confirming that all material is entirely your own work and you wish this to be taken into account for this assessment. Only the first submission will be accepted.*
8. *Save your work regularly. Saving your work is your responsibility so failure to do so will not be a significant mitigating circumstance.*
9. *At the end of the exam, save your presentation and follow the upload instructions that have been provided. All related material that you have printed including slides, notes, etc. must be confidentially stored until we have informed you to delete/destroy them once the exam is over. Do NOT log off the application until you receive confirmation of receipt from the Online Education Team.*
10. *If you encounter any difficulties please email online_exams@actuaries.org.uk or call the Online Education Team on +44 (0)1865 268255.*
11. *Professional behaviour is mandatory and no material relating to the exam may be disclosed or discussed with others, nor used in a further attempt at the exam. Failure to comply with this will be deemed to be a breach of the examination regulations and may result in disciplinary action.*

PLEASE NOTE THAT THE CONTENT OF THIS PAPER IS CONFIDENTIAL AND STUDENTS ARE NOT TO DISCUSS OR REVEAL THE CONTENTS UNDER ANY CIRCUMSTANCES.

You work as a nearly qualified actuary for ABC Consultants Limited. Your manager (Simon) is organising a training day for trustees of defined contribution (DC) pension schemes. The training day is aimed at newly appointed trustees and will include sessions on investment, risk management, current developments for DC schemes, annuities, trustees' responsibilities and administration. Simon would like you to present one of the sessions and has suggested that you take the ten minute slot before lunch. Simon is on holiday at the moment but has sent you instructions on what your session should include.

Prepare your presentation lasting no longer than 10 minutes based on Simon's instructions below.

Lucy

Thank you for volunteering to present one of the sessions for the Trustees' training day next week. As you are aware we are including a range of different sessions to provide new trustees with information on the various aspects relevant to DC pension schemes.

*One of the trustees at a previous training day mentioned that he read something in the press about a "simple rule" for investment growth. He wondered if there were some "simple rules" that could be applied to annuity purchase. **I think "simple rules" for annuity purchase would make a good topic for your session.***

Your presentation should provide brief details on what an annuity is and the different types of annuity that are available. The trustees should be made aware of the main factors that affect the price of an annuity. This should help in making it clear that any "simple rules" that you are proposing are fairly crude and should be used with caution. Individuals should be advised to take independent financial advice when buying annuities especially where larger sums are involved.

Please include three simple rules that Trustees could use. One of the "rules" should be based on a single life annuity with 5 year guarantee at age 60. This would provide a simple way for an individual to work out what income their fund would be able to buy. I suggest you provide an illustration on how annuity prices vary with age and then show how this leads to your "simple rule". The other two "simple rules" need to consider the key factors affecting annuity prices. A junior actuarial student from our team has provided details of current annuity rates for you to use below together with some information on the ages and types of annuities that are most popular.

The feedback we had from the sessions we ran a few months ago was that there was a lot of complicated material in the topics covered so remember to keep your points simple.

Thanks
Simon

Note:

A "simple rule" is a principle with broad application that is not intended to be strictly accurate or reliable for every situation. It is an easily learned and easily applied procedure for approximately calculating or recalling some value. (Eg for a saving account that had a guaranteed interest rate of 5% a year a "simple rule" could be that your money doubles every 15 years (based on $1.05^{14.2067} = 2$).)

Current annuity rates (£) – based on notes below:

Income payable for life						
Age (last birthday in years = x)	55	60	65	70	75	80
Single life, level, no guarantee	4,630	5,178	5,858	6,696	7,907	9,591
Single life, level, 5 year guarantee	4,624	5,025	5,842	6,641	7,773	9,429
Single life, RPI, 5 year guarantee	2,244	2,670	3,276	4,043	5,427	6,583
Single life, 3% escalation, 5 year guarantee	2,968	3,345	4,045	4,838	5,829	7,071
Joint life 50%, level, no guarantee	4,375	4,843	5,392	6,070	7,029	8,526
Joint life 50%, 3% escalation, no guarantee	2,739	3,142	3,652	4,231	5,132	6,225

Notes:

Annuity rates are based on a capital city (other locations could be higher or lower) using a purchase price of £100,000. Income is gross per year (before deduction of tax) and payable monthly in advance for the whole of the annuitant's life. No medical enhancements are included in these annuities. The annuity table is only a guide as annuity prices change frequently. Figures shown have been adjusted for Unisex annuity rates on a gender neutral basis and joint life rates assume both individuals are the same age.

Having had a look at our statistics the most popular age for buying an annuity is age 60. However a sizable proportion of individuals also buy an annuity at age 70. The most popular annuities purchased are “single life, level, 5 year guarantee” and “single life, 3% escalation, 5 year guarantee”.

All of the figures and information provided is correct for the purposes of the question.

You are not expected to comment on gilt yields, differences in annuity rates that may be available from different providers, changes in longevity, how the fund available may impact on the annuity rate that may be available.

END OF PAPER