

INSTITUTE AND FACULTY OF ACTUARIES

EXAMINATION

Subject CA3 – Communications

Day 1

INSTRUCTIONS TO THE CANDIDATE

1. *You have two hours to prepare the presentation. You must then save the file, print it and hand in a copy.*
2. *Copies of the Formulae and Tables, Core Reading for subjects CT1 to CT8 inclusive and CA1 should be available electronically on your PCs. In addition to this you may refer to your workbook from today. No other material can be brought into the examination room.*
3. *You must not start preparing the presentation until instructed to do so by the supervisor.*
4. *At the end of the examination you should hand in this question paper and any notes made during the examination. You are permitted to take ONE copy of your slide presentation away with you which must be handed in at the end of your presentation tomorrow. You are not permitted to make any further copies of your presentation.*

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

A professional body of financial advisers has recently hired a new Finance Manager. New members join the professional body as student members and become fully qualified members after successfully completing a series of examinations. The minimum eligibility criteria to join the profession are a lower second class degree and at least a grade “B” in A Level Mathematics (or the national equivalent).

The professional body’s main source of income is through members’ annual subscriptions which have remained the same over the last few years. The different categories of membership and the respective subscription rates are as follows:

<i>Category</i>	<i>Current Subscription Rate (per annum)</i>
New students	£125
Part-qualified members	£250
Fully qualified members	£500
Retired members	£300

Part-qualified members are members who have passed at least three examinations and fully qualified members are those who have passed all the examinations. Subscriptions are due at the end of the year for each renewal.

Not all students successfully complete all the examinations to qualify as a financial adviser. Some of the students withdraw from the profession and therefore lapse their membership. Some qualified members change careers and withdraw from the profession too. Members on a career break are treated in the same way as withdrawing members. The only other mode of exit is through death or retirement. Members generally retire at age 65, though some members are known to retire before this age. If members switch membership category, the change in their subscription rate takes effect from the following annual renewal. Renewal takes place on the anniversary of joining the profession.

New students join at an average age of 25 and generally take up to four years to become fully qualified financial advisers. The following membership numbers (at the end of each year) have been provided:

<i>Year</i>	<i>2010</i>	<i>2009</i>	<i>2008</i>	<i>2007</i>	<i>2006</i>
Students including new joiners	1,350	1,970	1,850	2,050	2,010
Part-qualified members	7,300	7,140	5,900	5,750	5,500
Fully qualified members	5,500	5,475	5,450	5,500	5,490
Retired members	3,000	2,950	3,025	3,070	3,030

The Finance Manager is not anticipating an increase in membership numbers, and hence subscription income, over the period 2011 to 2015.

He has been reviewing the cashflow position and requires your assistance with projecting the likely subscription income over the next five years. Following your discussions with him, you have established the following significant outgo over the next few years: £5.8m in 2011, £6.0m in 2012, £6.1m in 2013, £5.75m in 2014 and £5.75m in 2015.

A student in your consultancy has carried out initial membership projections for the period 2011 to 2015 as set out below (numbers shown are at the end of each year):

<i>Year</i>	<i>2015</i>	<i>2014</i>	<i>2013</i>	<i>2012</i>	<i>2011</i>
Students including new joiners	2,165	2,005	1,845	1,685	1,525
Part-qualified members	8,226	8,047	7,868	7,689	7,510
Fully qualified members	5,624	5,603	5,582	5,561	5,540
Retired	3,280	3,222	3,164	3,106	3,048

The underlying assumptions used to project the membership from 2011 to 2015 are:

2011

- number of new entrants to the profession in 2011 is 750
- 200 part-qualified members and 75 new students lapse their membership
- approximately 50 fully qualified members retire
- around 90 part-qualified students qualify
- 500 students are expected to pass at least three examinations and so progress to part-qualified status
- 2 retired members are expected to die

You have been advised that in 2012, the profession anticipates the following membership changes:

2012

- the number of members retiring and lapsing will increase by 20%
- the number of part-qualified students qualifying will also reduce by 10% as a result
- other membership movements will be as in 2011

2013 to 2015

You can assume that the absolute membership movements for each of 2013 to 2015 will be the same as for 2012 and that there are no other membership changes.

The Finance Manager is concerned that the subscription income will not be sufficient to meet the outgo and he may have no choice but to increase the subscription rate. He does not wish to change the subscription rates unless the analysis shows a significant difference from the current rates.

The professional body does not hold any reserves. Any outgo will need to be met from subscription income.

Draft a presentation to the Finance Manager covering the period 2011–2015 explaining how the change in membership and consequent revenue from subscriptions compare to the expected outgo during that period. You should also make suggestions if you think that any changes are needed to the current subscription rates. If you wish to place a present value on the cashflows during the period, then this should be done assuming a discount rate of 5%pa. You may assume that the membership projections carried out by the student are correct. Your presentation should last between 8 to 10 minutes.

END OF PAPER