

INSTITUTE OF ACTUARIES OF INDIA
EXAMINATIONS

30th March 2021

Subject CP3 – Communication Practice

Time allowed: 3 Hours 30 Minutes (09.30 – 13.00 Hours)

Total Marks: 100

You are an Actuary working for a financial advisory firm. Retirement planning is one of the services that you offer. There is no state pension and employers offer defined contribution pension schemes. The Government has been encouraging savings towards pension by introducing the National Pension Scheme which allows individuals to save towards their retirement. There are also products which are offered by Life Insurance Companies which cater towards savings for retirements. The current regime permits individuals to withdraw one third of their pension corpus tax free at age 60, with the balance having to be utilised to compulsorily buy an annuity.

Interest rates in the country have been decreasing over the years and have reached about 4% p.a. This has led to a situation of annuities becoming very expensive and retiring customers perceiving annuities as offering very poor value. The Government has amended the rules to now permit customers to opt for an “income drawdown” product instead of an annuity.

Both annuity and the income drawdown would be taxable at the marginal tax rate of the individual.

You are now working on building calculators and simulators so that customers can understand the implications of the decisions they make with regards to commuting or not commuting a part of the pension lump sum and buying an annuity, or using an income drawdown approach.

Your firm publishes a weekly newsletter called “Personal finance knowledge series” for its customers which focuses on all topics relating to personal finance including products that are available in the market. In the previous week the newsletter talked about the product options available to individuals for saving towards retirement. You have been requested to write for the next newsletter. This should focus on the products available at the time of retirement to a customer who has a pension corpus from any of the products like the National Pension Scheme, or one of the pension products offered by a Life Insurance Company or has a lump sum from the Defined Contribution scheme. Your team has done some preliminary work which has been provided as Background information.

Q. 1) Your newsletter should explain the options available to the customer on how the customer can access the pension amount on retiring. The language has to be simple as a vast majority of your customers are not expected to be very “financially literate” and could benefit from advice. While there are no specific restrictions on the length of the newsletter, from past experience you know that typically the ones which are of about 2 pages are the ones which are most appreciated. Your newsletter should cover the following

- a) The option available to the customers of commuting a part of the pension corpus and the approach to the balance of the corpus
- b) The context in which the drawdown product has been introduced
- c) The advantages and disadvantages of investing in an annuity or of using the drawdown approach, covering aspects of variability of fund, the transfer or lack of transfer of longevity risk and investment return risk
- d) Any limitations of the analysis

[90]

Q. 2) How did you ensure your writing was appropriate for the lay public? What did you think were important factors which retiring individuals should be considering when making a decision of this nature and how did you bring out these aspects?

[4]

- Q. 3)** Give examples of jargon that you avoided but used with explanations. [4]
- Q. 4)** How did you effectively present the results of the analysis carried out by your team? [2]

Background information

Excerpts from the brochures of a Life Insurance Company which is a leading annuity seller and has introduced the income drawdown approach are provided in Annexure 1.

The example of the annuity and the drawdown option of the hypothetical client which your team has worked on is provided in Annexure 2. The tax treatment is the same across the options and customers would not be at any particular disadvantage in choosing one option over the other.

Annexure 1

Excerpt of brochure on annuity product

Immediate Life Annuity Option

Choose the annuity amount or the purchase price.

The annuity will be payable in arrears as per payment frequency chosen for as long as the annuitant is alive. On death of the annuitant, the annuity payments will cease and no further benefits will be payable

Excerpt of brochure on income drawdown

Income drawdown option

Take money from your pension as and when you want it.

The balance of the money would still be invested in the pension fund.

You can set up a systematic withdrawal option which allows you to drawdown a particular amount every month.

In both the options the balance of fund would be invested in a fund or funds of your choice and may go up or down in value.

You can change your mind anytime and buy an annuity with the balance amount.

Annexure 2

Your team has calculated different scenarios for a hypothetical client Ms. Bee aged 60 years who has Rs. 25 lakhs in her pension corpus and is planning on retiring soon.

The team has taken the most competitive quote of annuity which is currently available in the market. The scenarios have been created with and without commutation of one-third of pension corpus. Further scenarios of monthly income have been created with purchase of annuity and

purchase of the income drawdown plan. For the drawdown approach your team has calculated the number of years the funds would last if an equivalent amount was withdrawn from the fund. In choosing these returns you have assumed that customers would choose to invest in short duration debt assets with some exposure to risky asset classes like corporate bonds and equity. Most of the pension fund managers in the country charge a 50 bps of fund management fee and your team has assumed the same in its projections.

Therefore funds have been projected at returns of 3%, 4% and 5% p.a.

The life expectancy for a female aged 60 is 25 years.

The annuity quote is as below.

	Annuity for life	
Purchase price (Rs.)	2,500,000	1,675,000
Annuity p.a. (Rs.)	164,286	110,072

Scenarios assuming that the customer does not exercise the commutation option					
Returns assumed			3%	4%	5%
Year	Fund at the beginning	Amount intended to be withdrawn annually	Fund at the end of the year after withdrawal	Fund at the end of the year after withdrawal	Fund at the end of the year after withdrawal
1	2,500,000	150,000	2,412,125	2,437,000	2,461,875
2		150,000	2,322,066	2,371,808	2,422,044
3		150,000	2,229,770	2,304,347	2,380,430
4		150,000	2,135,179	2,234,538	2,336,955
5		150,000	2,038,239	2,162,300	2,291,533
6		150,000	1,938,889	2,087,548	2,244,079
7		150,000	1,837,070	2,010,194	2,194,502
8		150,000	1,732,721	1,930,149	2,142,706
9		150,000	1,625,780	1,847,318	2,088,592
10		150,000	1,516,180	1,761,605	2,032,057
11		150,000	1,403,857	1,672,909	1,972,991
12		150,000	1,288,743	1,581,126	1,911,282
13		150,000	1,170,768	1,486,149	1,846,812
14		150,000	1,049,862	1,387,867	1,779,457
15		150,000	925,951	1,286,165	1,709,088
16		150,000	798,961	1,180,924	1,635,570
17		150,000	668,815	1,072,020	1,558,761
18		150,000	535,435	959,326	1,478,516
19		150,000	398,741	842,711	1,394,679
20		150,000	258,649	722,037	1,307,091
21		150,000	115,077	597,164	1,215,584
22		150,000	(32,063)	467,945	1,119,981
23		150,000		334,230	1,020,100
24		150,000		195,861	915,750
25		150,000		52,677	806,730
26		150,000		(95,490)	692,831
27		150,000			573,835
28		150,000			449,514
29		150,000			319,630
30		150,000			183,933
31		150,000			42,164
32		150,000			(105,949)

Scenarios assuming that the customer exercises the commutation option					
Returns assumed			3%	4%	5%
Year	Fund at the beginning	Amount intended to be withdrawn annually	Fund at the end of the year after withdrawal	Fund at the end of the year after withdrawal	Fund at the end of the year after withdrawal
1	1,675,000	110,000	1,606,624	1,623,290	1,639,956
2		110,000	1,536,548	1,569,780	1,603,344
3		110,000	1,464,732	1,514,409	1,565,094
4		110,000	1,391,130	1,457,110	1,525,132
5		110,000	1,315,700	1,397,818	1,483,382
6		110,000	1,238,395	1,336,462	1,439,763
7		110,000	1,159,169	1,272,971	1,394,192
8		110,000	1,077,974	1,207,270	1,346,582
9		110,000	994,762	1,139,283	1,296,842
10		110,000	909,482	1,068,930	1,244,876
11		110,000	822,082	996,129	1,190,584
12		110,000	732,511	920,794	1,133,862
13		110,000	640,714	842,838	1,074,603
14		110,000	546,636	762,169	1,012,691
15		110,000	450,220	678,692	948,009
16		110,000	351,408	592,310	880,433
17		110,000	250,140	502,923	809,832
18		110,000	146,356	410,425	736,072
19		110,000	39,993	314,707	659,011
20		110,000	(69,013)	215,659	578,502
21		110,000		113,164	494,390
22		110,000		7,102	406,514
23		110,000		(102,651)	314,705
24		110,000			218,788
25		110,000			118,579
26		110,000			13,886
27		110,000			(95,493)
