
SOCIETY OF ACTUARIES
Retirement Benefits Canada – Company/Sponsor Perspective

Exam CSP-RC

AFTERNOON SESSION

Date: Friday, May 1, 2009

Time: 1:30 p.m. – 4:45 p.m.

INSTRUCTIONS TO CANDIDATES

General Instructions

1. This afternoon session consists of 6 questions numbered 7 through 12 for a total of 60 points. The points for each question are indicated at the beginning of the question. Questions 8 and 9 pertain to the Case Study, which is enclosed inside the front cover of this exam booklet.
2. Failure to stop writing after time is called will result in the disqualification of your answers or further disciplinary action.
3. While every attempt is made to avoid defective questions, sometimes they do occur. If you believe a question is defective, the supervisor or proctor cannot give you any guidance beyond the instructions on the exam booklet.
2. Write on only one side of a sheet. Start each question on a fresh sheet. On each sheet, write the number of the question that you are answering. Do not answer more than one question on a single sheet.
3. The answer should be confined to the question as set.
4. When you are asked to calculate, show all your work including any applicable formulas.
5. When you finish, insert all your written-answer sheets into the Essay Answer Envelope. Be sure to hand in all your answer sheets since they cannot be accepted later. Seal the envelope and write your candidate number in the space provided on the outside of the envelope. Check the appropriate box to indicate morning or afternoon session for Exam CSP-RC.

Written-Answer Instructions

1. Write your candidate number at the top of each sheet. Your name must not appear.
6. Be sure your written-answer envelope is signed because if it is not, your examination will not be graded.

Tournez le cahier d'examen pour la version française.

CASE STUDY INSTRUCTIONS

The case study will be used as a basis for some examination questions. Be sure to answer the question asked by referring to the case study. For example, when asked for advantages of a particular plan design to a company referenced in the case study, your response should be limited to that company. Other advantages should not be listed, as they are extraneous to the question and will result in no additional credit. Further, if they conflict with the applicable advantages, no credit will be given.

****BEGINNING OF EXAMINATION****
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AFTERNOON SESSION

7. (8 points) The CFO of XYZ Industries wishes to:

- Increase the CICA 3461 discount rate and expected return on asset assumptions to be used to determine pension expense for the year; and
- Significantly increase the equity allocation in the pension fund investment policy.

From a financial economics perspective, analyze, in respect of plan participants, the CFO and shareholders, the implications of following the CFO's recommendation.

Question 8 pertains to the Case Study

8. (11 points) The government of Gevrey is introducing a new social security program effective January 1, 2009. The main provisions of the program are as follows:

- All workers must participate in the new program.
- Retirement benefits will be payable commencing at age 65.
- The retirement benefit will be calculated as 0.5% of a worker's best 5-year average covered earnings times years of covered service.
- Covered earnings will be limited to \$50,000 per year.
- A year of covered service will be credited for each year in which a contribution is paid.
- Covered service will commence on January 1, 2009. A maximum of 40 years of service will be covered.
- The system will be funded by contributions of 8% of covered earnings, split equally between employers and employees. These contributions will be tax-deductible to the employer and the employee.

You have been provided with the following information on two newly hired NOC employees:

	Employee A	Employee B
Type of employee	Full time Salaried	Seasonal
Projected covered service at age 65	35	35
Projected earnings at age 65	\$180,000	\$40,000
Projected best average earnings at age 65	\$170,000	\$38,000
Projected DC account balance at age 65	\$0	\$100,000
a_{65}	11.0	11.0

- (a) Describe the factors that would need to be considered in developing a target replacement ratio for a retirement program.
- (b) Evaluate the adequacy of Employee A's retirement income benefit.
- (c) Compare and contrast the risks to which Employee A and Employee B are exposed.

Question 9 pertains to the Case Study

- 9.** (11 points) The government of Gevrey is considering creating an insolvency insurance program that will guarantee the benefits provided by a defined benefit ERP in case of plan insolvency on employer bankruptcy.
- (a) Based on existing insolvency insurance programs in place around the world, evaluate the key considerations in designing such a program for Gevrey.
 - (b) Assess the impact of implementing a program similar to the PBGF in Ontario on NOC, NOC's DB ERP's, DB ERP plan members and taxpayers.
- 10.** (11 points) ABC Company sponsors an Ontario-registered defined benefit pension plan which was partially wound up ten years ago. At the time of the partial wind up,
- Basic benefits were distributed in respect of the partial wind up members who elected the commuted value transfer option.
 - The plan was in a surplus position.
 - No surplus was distributed.

The Financial Services Commission of Ontario (FSCO) has ordered that ABC Company complete the partial wind up process pursuant to the *Monsanto* decision.

Address the funding, accounting, investment, administration and legal implications of FSCO's order.

- 11.** (a) (2 points) Describe the main features of Canada's Tax-free Savings Account (TFSA).
- (b) (7 points) Evaluate, from the employee's perspective, the relative advantages and risks of a Group TFSA, as compared to a Group Registered Retirement Savings Plan (RRSP).

12. (10 points) ABC Company is considering implementing one of the following two Flexible Pension Plan designs:

- Front-end Flexible Plan
- Back-end Flexible Plan

Assess how each of these plan designs help mitigate risks for both the employer and the plan member.

****END OF EXAMINATION**
AFTERNOON SESSION**