AMERICAN SOCIETY OF PENSION PROFESSIONALS & ACTUARIES
JOINT BOARD FOR THE ENROLLMENT OF ACTUARIES
SOCIETY OF ACTUARIES

Enrolled Actuaries Pension Examination, Segment B

EA-2, Segment B

Date: Tuesday, May 12, 2009
Time: 1:00 p.m. – 3:30 p.m.

INSTRUCTIONS TO CANDIDATES

1. Write your candidate number here ____________. Your name must not appear.

2. Do not break the seal of this book until the supervisor tells you to do so.

3. Special conditions generally applicable to all questions on this examination are inserted in the front of this book.

4. All questions should be answered in accordance with laws, rules and regulations in effect as of December 31, 2008.

5. This examination consists of 44 multiple-choice questions worth a total of 100 points. Questions 1-20 are True and False and are worth 1 point each. Questions 21-44 are of varying value. The point value for each question is shown in parentheses at the beginning of each question.

6. Your score will be based on the point values for the questions that you answer correctly. No credit will be given for omitted answers and no credit will be lost for wrong answers; hence, you should answer all questions even those for which you have to guess. Answer choices C, D, and E will be considered incorrect answers on True-False questions.

7. A separate answer sheet is inside the front cover of this book. During the time allotted for this examination, record all your answers on side 2 of the answer sheet. NO ADDITIONAL TIME WILL BE ALLOWED FOR THIS PURPOSE. No credit will be given for anything indicated in the examination book but not transferred to the answer sheet. Failure to stop writing or coding your answer sheet after time is called will result in the disqualification of your answer sheet or further disciplinary action.

8. Five answer choices are given with each question, each answer choice being identified by a key letter (A to E). For each question, blacken the oval on the answer sheet which corresponds to the key letter of the answer choice that you select.

9. Use a soft-lead pencil to mark the answer sheet. To facilitate correct mechanical scoring, be sure that, for each question, your pencil mark is dark and completely fills only the intended oval. Make no stray marks on the answer sheet. If you have to erase, do so completely.

10. Do not spend too much time on any one question. If a question seems too difficult, leave it and go on.

11. 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.

12. Clearly indicated answer choices in the test book can be an aid in grading examinations in the unlikely event of a lost answer sheet.

13. Use the blank portions of each page for your scratch work. Extra blank pages are provided at the back of the examination book.

14. When the supervisor tells you to do so, break the seal on the book and remove the answer sheet.

    On side 1 of the answer sheet, space is provided to write and to code candidate information. Complete Blocks A through G as follows:

    (a) in Block A, print your name and the name of this test center;

    (b) in Block B, print your last name, first name and middle initial and code your name by blackening the ovals (one in each column) corresponding to the letters of your name; for each empty box, blacken the small rectangle immediately above the "A" oval;

    (c) write your candidate number in Block C (as it appears on your ticket of admission for this examination) and write the number of this test center in Block D (the supervisor will supply the number);

    (d) code your candidate number and center number by blackening the five ovals (one in each column) corresponding to the five digits of your candidate number and the three ovals (one in each column) corresponding to the three digits of the test center number, respectively. Please be sure that your candidate number and the test center number are coded correctly;

    (e) in Block E, code the examination that you are taking by blackening the oval to the left of "Course EA-2, Segment B."

    (f) in Block F, blacken the appropriate oval to indicate whether you are using a calculator; and

    (g) in Block G, sign your name and write today's date. If the answer sheet is not signed, it will not be graded.

    On side 2 of your answer sheet, space is provided at the top for the number of this examination book. Enter the examination book number, from the upper right-hand corner of this examination book, in the four boxes at the top of side 2 marked "BOOKLET NUMBER."

15. After the examination, the supervisor will collect this book and the answer sheet separately. DO NOT ENCLOSE THE ANSWER SHEET IN THE BOOK. All books and answer sheets must be returned. THE QUESTIONS ARE CONFIDENTIAL AND MAY NOT BE TAKEN FROM THE EXAMINATION ROOM.

EA-2B Spring 2009
Answer Key

Question	Solution
1	A
2	B
3	B
4	A
5	A
6	A
7	A
8	A
9	A
10	B
11	A
12	B
13	A
14	B
15	B
16	A
17	A
18	A
19	B
20	B
21	A
22	A

Question	Solution
23	C
24	B
25	D
26	C
27	A
28	B
29	B
30	C
31	E
32	A
33	A
34	A
35	E
36	B
37	C
38	D
39	B
40	D
41	D
42	C
43	E
44	C

****BEGINNING OF EXAMINATION****

Data for Question 1 (1 point)

Data for participant Smith:

Date of birth	1/1/1945
Date of hire	1/1/2007
Hours worked during 2007	1,000
Hours worked during 2008	1,000

Selected plan provisions:

Normal retirement age 64

Vesting schedule

Years of service	Percent vested
Fewer than 3	0%
3 or more	100%

Consider the following statement:

Smith is 100% vested at 1/1/2009.

Question 1

Is the above statement true or false?

(A) True

(B) False

Data for Question 2 (1 point)

An employer sends out a 204(h) notice to all 750 active participants via an email message 45 days prior to the effective date of the amendment with a request for a computer generated notification that the message was received and opened. Participants at one location do not use email as an integral part of their duties, so it is not until 10 days later that all employees have received and opened the email message.

Consider the following statement:

No excise tax applies because the employer emailed the 204(h) notice in time to all employees and took appropriate and necessary measures reasonably calculated to ensure that the method for providing the 204(h) notice would result in actual receipt of the notice.

Question 2

Is the above statement true or false?

(A) True

(B) False

Data for Question 3 (1 point)

An employer adopts a plan on 12/9/2009, effective 1/1/2009.

A plan credits a year of vesting service for participants who work at least 1,000 hours in a calendar year.

Service prior to the establishment of the plan is excluded for vesting.

Consider the following statement:

Plan participants who work 1,000 or more hours during the 2009 calendar year earn no vesting service credits in 2009.

Question 3

Is the above statement true or false?

(A) True

(B) False

Data for Question 4 (1 point)

Consider the following statement:

There is no statutory maximum limit on the number of fiduciaries a plan may have.

Question 4

Is the above statement true or false?

(A) True

(B) False

Data for Question 5 (1 point)

Smith, a non-owner participant, continues employment in the calendar year following the year he attains age 70½ and is not receiving benefit payments.

Consider the following statement:

When Smith retires, his benefit must be actuarially increased, even if he received a timely "suspension of benefits" notice.

Question 5

Is the above statement true or false?

(A) True

(B) False

Data for Question 6 (1 point)

A plan provides for the following benefit formula:

> 2.0% of compensation for each of the first 5 years of service, plus
> 1.5% of compensation for each of the next 10 years of service, plus
> 2.0% of compensation for each of the next 5 years of service, plus
> 1.5% of compensation for all additional years of service.

Consider the following statement:

Assuming all other relevant factors satisfy the safe harbor, the benefits provided under the plan are non-discriminatory in amount under IRC section 401(a)(4).

Question 6

Is the above statement true or false?

(A) True

(B) False

Data for Question 7 (1 point)

Normal retirement age: Latest date allowable under the law.

Data for participant Smith:

Date of birth	1/1/1946
Date of hire	1/1/2008
Date of plan entry	1/1/2009

Consider the following statement:

Smith's normal retirement date is 1/1/2014.

Question 7

Is the above statement true or false?

(A) True

(B) False

Data for Question 8 (1 point)

A plan administrator issued a Notice of Intent to Terminate a plan in a standard termination with a proposed termination date of 12/31/2008.

The final distribution of assets in the standard termination is made on 10/31/2009.

Consider the following statement:

The plan does not owe a PBGC variable rate premium for the 2009 plan year.

Question 8

Is the above statement true or false?

(A) True

(B) False

Data for Question 9 (1 point)

A plan has been frozen since the 2004 plan year and no additional plan benefits have accrued since 2004.

The Adjusted Funding Target Attainment Percentage (AFTAP) for the 2009 plan year is 58%.

Consider the following statement:

The plan may make payments in excess of the monthly amount paid under a single life annuity for the 2009 plan year.

Question 9

Is the above statement true or false?

(A) True

(B) False

Data for Question 10 (1 point)

A plan defines its Qualified Joint and Survivor Annuity as a joint and 66 ⅔% survivor annuity.

Consider the following statement:

For distributions made during the 2009 plan year, the Qualified Optional Survivor Annuity could be a joint and 50% survivor annuity.

Question 10

Is the above statement true or false?

(A) True

(B) False

Data for Question 11 (1 point)

Consider the following statement for a multiemployer plan that is in critical status:

As part of the plan's rehabilitation plan, the plan may reduce early retirement benefits not yet in pay status.

Question 11

Is the above statement true or false?

(A) True

(B) False

Data for Question 12 (1 point)

A plan is terminating effective 12/31/2009 with excess assets.

The plan sponsor wishes to transfer a portion of the excess assets to a qualified replacement plan.

Consider the following statement:

In order for the 20% excise tax rate to apply, all of the active participants of the terminating plan must be active participants under the qualified replacement plan.

Question 12

Is the above statement true or false?

(A) True

(B) False

Data for Question 13 (1 point)

Smith, the 100% owner of Company A, assigns his duties as plan trustee to his secretary. To compensate the secretary for the extra responsibility, Smith authorizes the plan to pay the secretary $100 each month from plan assets.

Smith's secretary is a full-time employee and is not related to Smith.

Consider the following statement:

Smith has engaged in a prohibited transaction with respect to the plan.

Question 13

Is the above statement true or false?

(A) True

(B) False

Data for Question 14 (1 point)

Consider the following statement for a plan with over 100 participants:

The annual funding notice required under ERISA section 101(f) must be provided to all participants and beneficiaries of a plan at the same time the Form 5500 is filed.

Question 14

Is the above statement true or false?

(A) True

(B) False

Data for Question 15 (1 point)

Consider the following statement:

All active participants who are employed on the date on which pension benefit statements are required to be furnished under ERISA must receive a benefit statement.

Question 15

Is the above statement true or false?

(A) True

(B) False

Data for Question 16 (1 point)

Plans A, B and C are maintained by three companies that constitute a controlled group.

	Plan year end	Company fiscal year end
Plan A	6/30/2009	9/30/2009
Plan B	10/31/2009	10/31/2009
Plan C	3/31/2009	9/30/2009

Consider the following statement:

The information year for plans A, B, and C for ERISA section 4010 reporting purposes is the 2009 calendar year.

Question 16

Is the above statement true or false?

(A) True

(B) False

Data for Question 17 (1 point)

Consider the following statement:

An enrolled actuary who signs a 2008 Schedule SB is required to answer questions asked by the plan administrator relating to the actuarial assumptions used.

Question 17

Is the above statement true or false?

(A) True

(B) False

Data for Question 18 (1 point)

Consider the following statement:

An employee who is a non-resident alien and who receives no earned income from sources within the U.S. is treated as an excludable employee for purposes of IRC section 410(b).

Question 18

Is the above statement true or false?

(A) True

(B) False

Data for Question 19 (1 point)

A plan’s effective date is 1/1/2009.

Consider the following statement:

With respect to IRC section 436, the plan will not be subject to the provisions regarding benefit increases, accelerated benefit payments, or benefit accruals until 1/1/2014.

Question 19

Is the above statement true or false?

(A) True

(B) False

Data for Question 20 (1 point)

Consider the following statement:

Calculations of withdrawal liability for a contributing employer to a multiemployer pension plan must use the same actuarial assumptions as the most recently filed Schedule MB for the plan.

Question 20

Is the above statement true or false?

(A) True

(B) False

Data for Question 21 (5 points)

Type of Plan: Multiemployer.

Employer A is participating in a multiemployer pension plan.

Employer A's contribution base units and total withdrawal liability are as follows:

Plan year	Employer A's contribution base units	Employer A's withdrawal liability as of end of year
1998	100,000	$1,000,000
1999	40,000	1,050,000
2000	100,000	1,100,000
2001	60,000	1,200,000
2002	75,000	1,300,000
2003	29,000	1,400,000
2004	31,000	2,000,000
2005	26,000	3,000,000
2006	24,000	3,500,000
2007	24,000	3,800,000
2008	25,000	4,000,000
2009	24,000	4,500,000

No employer, including the one for whom this data is provided, has ever had a complete or partial withdrawal from the plan. There is no de minimis application or application of the 20-year payment cap or the dollar limitation on withdrawal liability.

The plan is not deemed to be in "critical" status.

Question 21

In what range is Employer A's liability for a partial withdrawal?

(A) Less than $1,820,000

(B) $1,820,000 but less than $1,970,000

(C) $1,970,000 but less than $2,120,000

(D) $2,120,000 but less than $2,270,000

(E) $2,270,000 or more

Data for Question 22 (3 points)

Type of plan: Multiemployer.

Normal retirement benefit: $55 per month for each year of benefit service.

Data for active participant Smith as of 12/31/2009:

Date of birth	1/1/1945
Date of hire	1/1/1976

The plan has never been insolvent.

Question 22

In what range is the maximum benefit guaranteed by the PBGC for participant Smith as of 12/31/2009?

(A) Less than $1,250

(B) $1,250 but less than $1,450

(C) $1,450 but less than $1,650

(D) $1,650 but less than $1,850

(E) $1,850 or more

Data for Question 23 (3 points)

Data as of 1/1/2010:

Market value of plan assets	$800,000
Actuarial value of plan assets	850,000
Funding target (vested benefits) for PBGC premium purposes	1,020,000
Active participants	10
Terminated vested participants	3
Retired participants	5

All participants are fully vested.

On 1/1/2010, there are six employees who are not eligible to participate in the plan.

Assume the basic PBGC flat premium rate is $36 per participant in 2010.

Question 23

In what range is the required PBGC premium for 2010?

(A) Less than $2,015

(B) $2,015 but less than $2,190

(C) $2,190 but less than $2,365

(D) $2,365 but less than $2,540

(E) $2,540 or greater

Data for Question 24 (2 points)

On a PBGC termination basis, Plan X is underfunded by $30,000,000.

The plan sponsor ceases operations at a facility resulting in the separation from employment of 7,000 participants from Plan X.

Participant counts immediately preceding the cessation of operations:

Active participants	15,000
Retired participants	10,000
Terminated vested participants	5,000
Total	30,000

Question 24

In what range is the amount of employer liability under the PBGC's rules for cessation of operations at a facility?

(A) Less than $7,500,000

(B) $7,500,000 but less than $15,000,000

(C) $15,000,000 but less than $22,500,000

(D) $22,500,000 but less than $30,000,000

(E) $30,000,000 or more

Data for Question 25 (5 points)

Data for Company A and multiemployer Plan X, in which Company A is a participating member:

Year	Assets, Plan X, 12/31	Vested benefits, Plan X, 12/31	Contributions, Company A	Total contributions, Plan X
2000			$360,000	$4,000,000
2001			360,000	4,000,000
2002			360,000	4,000,000
2003			380,000	4,200,000
2004			360,000	4,200,000
2005			420,000	4,200,000
2006	$40,000,000	$40,000,000	420,000	4,000,000
2007	38,000,000	40,500,000	420,000	4,100,000
2008	36,000,000	37,500,000	440,000	4,200,000
2009	40,000,000	43,000,000	460,000	4,400,000

Withdrawal liability method: Rolling-five.

There were no unfunded vested benefits in any year before 2006.

Company A withdraws from the plan on 3/1/2010.

The plan is not deemed to be in “critical” status.

No employer, including the one for whom this data is provided, has ever had a complete or partial withdrawal from the plan.

Question 25

In what range is Company A’s withdrawal liability computed as a result of its 3/1/2010 withdrawal?

(A) Less than $297,000

(B) $297,000 but less than $303,000

(C) $303,000 but less than $309,000

(D) $309,000 but less than $315,000

(E) $315,000 or more

Data for Question 26 (3 points)

Plan A effective date: 1/1/2000.

Plan A provides a benefit that is salary related.

Plan A has never purchased annuities.

Selected valuation results as of 1/1/2009:

Actuarial (market) value of assets	$800,000
Funding target	985,000
Carryover balance	0
Pre-funding balance	0

The plan sponsor intends to amend the plan on 1/1/2009 to increase benefits.

Plan A's actuary determines that the value on 1/1/2009 of the increase in the funding target due to the amendment is $20,000.

Y = the minimum contribution for 2009 payable on 1/1/2009 that is sufficient to allow the amendment to take effect.

Question 26

In what range is Y?

(A) $0

(B) $1 but less than $3,500

(C) $3,500 but less than $11,500

(D) $11,500 but less than $19,500

(E) $19,500 or more

Data for Question 27 (4 points)

Plan termination date: 12/31/2009.

Normal retirement benefit:

Effective 2/1/2003 (adopted 12/1/2002)	\$65 per month for each year of service
Effective 2/1/2006 (adopted 12/1/2005)	\$80 per month for each year of service
Effective 2/1/2009 (adopted 12/1/2009)	\$95 per month for each year of service

Data for non-owner participant Smith:

Date of birth	1/1/1948
Date of hire	1/1/1972
Date of benefit commencement	12/31/2009
Form of payment	Life annuity
Highest 5-year average compensation	\$45,000

Early retirement reduction factor: None at age 62
5% per year reduction for each year below age 62

The plan sponsor has not declared bankruptcy.

Question 27

In what range is Smith's monthly PBGC guaranteed benefit as of 12/31/2009?

(A) Less than \$2,775

(B) \$2,775 but less than \$2,800

(C) \$2,800 but less than \$2,825

(D) \$2,825 but less than \$2,850

(E) \$2,850 or more

Data for Question 28 (4 points)

The plan sponsor has chosen to value liabilities under IRC section 430 using segment interest rates without transition and with a 4-month look back.

There are 250 employees, 215 of whom are participants in the plan. In addition, there are 155 retirees and 170 vested terminated employees and 20 alternate payees of current participants under QDROs.

The PBGC flat rate premium for 2009 is $34.

Selected valuation results as of 1/1/2009:

Funding target determined using segment rates	September 2008 segment rates with 24-month averaging	December 2008 segment rates without averaging
Retirees and beneficiaries receiving payments	$1,120,000	$1,270,000
Terminated participants' vested benefits	1,500,000	1,500,000
Active participants' vested benefits	2,160,000	2,260,000
Active participants' non-vested benefits	300,000	400,000
Total	$5,080,000	$5,430,000
Actuarial value of assets	$2,450,000	
Market value of assets	2,250,000	
Carryover balance	400,000	
Prefunding balance	0	

The plan administrator has not made an election to use the alternate premium funding target for premium purposes.

Question 28

In what range is the total PBGC premium for 2009?

(A) Less than $43,000

(B) $43,000 but less than $44,000

(C) $44,000 but less than $45,000

(D) $45,000 but less than $46,000

(E) $46,000 or more

Data for Question 29 (2 points)

Consider the following statements:

I. An investment by a qualified plan of 5% of its assets in the securities of the plan sponsor is a prohibited transaction.

II. An employee of an employer is a party in interest with respect to a qualified plan sponsored by that employer.

III. The tax on a prohibited transaction may be paid by the plan.

Question 29

Which, if any, of the above statement(s) is (are) true?

(A) I only

(B) II only

(C) III only

(D) I, II, and III

(E) The correct answer is not given by (A), (B), (C), or (D) above.

Data for Question 30 (5 points)

HCE/NHCE status, normal accrual rates and most valuable accrual rates for all employees of Company X in 2008 are provided below:

Employee	Normal accrual rate	Most valuable accrual rate
HCE1	4.00%	4.75%
HCE2	4.75	5.80
HCE3	5.00	5.75
NHCE1	3.00	4.00
NHCE2	4.00	4.25
NHCE3	4.25	4.75
NHCE4	4.75	5.60
NHCE5	4.75	5.60
NHCE6	5.50	5.70
NHCE7	5.50	6.00
NHCE8	5.50	6.00

The plan passes the Average Benefit Percentage Test under IRC section 410(b).

Question 30

In what range is the absolute value of the difference between the lowest ratio percentage of any rate group and the lowest possible passing percentage under IRC section 401(a)(4)?

(A) Less than 27.5%

(B) 27.5% but less than 35.0%

(C) 35.0% but less than 42.5%

(D) 42.5% but less than 50.0%

(E) 50.0% or more

Data for Question 31 (2 points)

Consider the following statements regarding an amendment significantly reducing benefit accruals:

I. Single employer pension plans with less than 100 participants and multiemployer pension plans are not required to provide a 204(h) notice until 15 days before the effective date of the amendment.

II. The amendment must be adopted before the 204(h) notice is given to participants.

III. If the plan is collectively bargained, a 204(h) notice is not required.

Question 31

Which, if any, of the above statement(s) is (are) true?

(A) None

(B) I and II only

(C) I and III only

(D) II and III only

(E) The correct answer is not given by (A), (B), (C), or (D) above.

Data for Question 32 (2 points)

Consider the following statements:

I. An enrolled actuary may not perform actuarial services if there is a conflict of interest.

II. An enrolled actuary may not perform a calculation in a way that is inconsistent with the current Code and regulations.

III. If the enrolled actuary for the plan finds that the Schedule SB has not been filed, the enrolled actuary need only notify the plan administrator.

Question 32

Which, if any, of the above statement(s) is (are) true?

(A) None

(B) I only

(C) II only

(D) III only

(E) The correct answer is not given by (A), (B), (C), or (D) above

Data for Question 33 (3 points)

Early retirement eligibility:	Age 55.
Early retirement benefit:	Actuarially equivalent benefit.
Vesting schedule:	3 – 7 year graded schedule.

Data for participant Smith:

Date of birth	1/1/1952
Date of hire	1/1/2004
Date of marriage	1/1/2007
Date of death	1/1/2010
Annual accrued benefit on date of death	\$6,000
Actuarially equivalent benefit at age 59	5,100
Actuarially equivalent benefit at age 58	4,950

Selected factors used to convert the life annuity to a joint and 50% survivor annuity:

Age	**Factor**
58	0.94
59	0.92

The plan's death benefit is the minimum qualified pre-retirement annuity under IRC section 417.

Question 33

In what range is the annual benefit payable to Smith's surviving spouse at the earliest commencement date?

(A) Less than \$1,870

(B) \$1,870 but less than \$1,995

(C) \$1,995 but less than \$2,120

(D) \$2,120 but less than \$2,245

(E) \$2,245 or more

Data for Question 34 (5 points)

Plan effective date: 1/1/1990.

Plan termination date: 1/1/2009.

Selected plan provisions:

Early retirement — Later of age 55 or 5 years of service.

Amendment date (adopted and effective)	1/1/2004	1/1/2006	1/1/2008
Monthly accrued benefit per year of service	$24	$28	$32
Early retirement reduction per year prior to normal retirement age	5.0%	4.0%	4.0%

Data for active participant Smith:

Date of birth	1/1/1949
Date of hire	1/1/1998

Expected retirement age pursuant to regulations: 62.

Selected annuity value:

$$_{2|}\ddot{a}_{60}^{(12)} = 8.52$$

The plan sponsor has not declared bankruptcy.

Question 34

In what range is the PBGC Category 3 liability for participant Smith as of 1/1/2009?

(A) Less than $15,000

(B) $15,000 but less than $19,000

(C) $19,000 but less than $23,000

(D) $23,000 but less than $27,000

(E) $27,000 or more

Data for Question 35 (2 points)

Consider the following statements as they relate to the PBGC termination premium requirements:

I. The termination premium does not apply to single-employer plan sponsors whose plans are terminated involuntarily by the PBGC.

II. The termination premium does not apply to single-employer plan sponsors who terminate their plans in distress terminations if the plan sponsor is the subject of a bankruptcy liquidation procedure.

III. If a termination premium is payable, all contributing plan sponsors during the 12-month period ending on the plan termination date are responsible for paying the termination premium.

Question 35

Which, if any, of the above statement(s) is (are) true?

(A) I and II only

(B) I and III only

(C) II and III only

(D) I, II, and III

(E) The correct answer is not given by (A), (B), (C), or (D) above.

Data for Question 36 (5 points)

Plan terminates on 1/1/2011.

Benefit formula prior to 1/1/2007:	2.9% per month of highest consecutive 3-year average compensation for each year of service.
Benefit formula after 12/31/2006:	3.3% per month of highest consecutive 3-year average compensation for each year of service.
Early retirement eligibility:	Age 55 and 20 years of service.
Early retirement reduction:	3% for each year prior to normal retirement date.

Assume the monthly 2011 PBGC maximum insurance benefit under ERISA section 4022 is $4,700.

Data for participant Smith, who retired 12/31/2010:

Date of birth	1/1/1950
Date of hire	1/1/1980
Annual compensation	
1980 through 2005	$90,000 per year
2006	$95,000
2007 and 2008	$105,000 per year
2009 and 2010	$110,000 per year

Selected annuity values (termination assumptions):

$$\ddot{a}_{56}^{(12)} = 14.30 \qquad \ddot{a}_{58}^{(12)} = 13.80 \qquad \ddot{a}_{61}^{(12)} = 13.00 \qquad \ddot{a}_{65}^{(12)} = 11.80$$

The plan sponsor has not declared bankruptcy.

Question 36

In what range is the PBGC Category 3 liability for participant Smith as of 1/1/2011?

(A) Less than $790,000

(B) $790,000 but less than $850,000

(C) $850,000 but less than $910,000

(D) $910,000 but less than $970,000

(E) $970,000 or greater

Data for Question 37 (3 points)

Plan effective date: 1/1/1990.

The plan credits 1 year of vesting service for each plan year with 1,000 hours.

The plan's vesting schedule in all years is the 3-7 year graded schedule.

The plan has the most restrictive method permitted for determining vesting service.

Smith was hired at age 21 and has the following employment history:

	Year	Hours of Service
Hired	1994	1,200
	1995	1,050
Terminated	1996	800
	1997	0
	1998	0
	1999	0
	2000	0
Rehired	2001	400
	2002	950
	2003	1,200
	2004	1,450
Terminated	2005	650
Rehired	2006	250
	2007	950
	2008	1,500
	2009	1,750

Question 37

What is Smith's vesting service at the end of 2009?

(A) 2 years

(B) 3 years

(C) 4 years

(D) 5 years

(E) 6 years

Data for Question 38 (5 points)

A company sponsors two plans, which are aggregated for testing purposes. The aggregated plan is not primarily defined benefit in nature.

Nondiscrimination testing methods and assumptions:

Testing method	Contributions basis
Measurement period	Current plan year
Testing age	65
Testing date	12/31/2009
Standard interest rate	8.5%
$\ddot{a}_{65}^{(12)}$	7.95

Selected 2009 data for all plan participants:

Participant number	HCE Status	Compensation	Equivalent normal allocation rate, defined benefit plan	Normal allocation rate, profit sharing plan
1	Yes	$180,000		
2	Yes	110,000	2.0%	
3	No	50,000	2.8%	
4	No	40,000	3.7%	
5	No	60,000	1.8%	8.7%
6	No	75,000	1.8%	10.5%
7	No	90,000	1.8%	10.5%

Participant 1's date of birth is 12/31/1957. In 2009, his defined benefit accrual is $950 per month, and his profit sharing allocation is $25,000.

The plan document requires that allocation rates in the profit sharing plan for participants 2, 3 and 4 are equal to each other.

Question 38

What is the minimum additional profit sharing allocation necessary to satisfy the minimum aggregate allocation gateway test for 2009?

(A) Less than $5,355

(B) $5,355 but less than $6,555

(C) $6,555 but less than $7,755

(D) $7,755 but less than $8,955

(E) $8,955 or greater

Data for Question 39 (2 points)

Plan provisions:

Participation date: First of the month following satisfaction of the minimum age and service conditions as defined under the most restrictive participation requirements of IRC section 410(a)(1).

Benefit service: 1/12th of a year for each full month as an active participant.

Vesting schedule: 100% after 5 years.

Data for participant Smith:

Date of birth	1/31/1982
Date of hire	10/21/2001
Date of termination	1/31/2009

Question 39

In what range is the number of months of benefit service Smith has earned at termination date?

(A) Fewer than 68

(B) 68 but fewer than 73

(C) 73 but fewer than 78

(D) 78 but fewer than 83

(E) 83 or more

Data for Question 40 (2 points)

Consider the following statements:

I. Both the PBGC termination premiums and the PBGC variable rate premiums can be paid out of plan assets.

II. The PBGC termination premiums are due each year for three years after the termination date.

III. The penalties associated with a late filing of the PBGC premiums are capped at the amount of the premiums due.

Question 40

Which, if any, of the above statement(s) is (are) true?

(A) None

(B) I and II only

(C) I and III only

(D) II and III only

(E) The correct answer is not given by (A), (B), (C), or (D) above.

Data for Question 41 (4 points)

Plan effective date:	1/1/1999.
Effective date of plan amendment increasing benefits:	1/1/2007.
Plan termination date:	1/1/2009.

Data for participant Smith:

Date of birth	1/1/1948
Date of hire	1/1/1975
Date of retirement	1/1/2006
Monthly retirement benefit at retirement	\$2,800
Monthly retirement benefit after increase	\$3,300
Form of payment	15-year certain & continuous

The plan sponsor has not declared bankruptcy.

Question 41

In what range is Smith's PBGC maximum guaranteed benefit?

(A) Less than \$2,550

(B) \$2,550 but less than \$2,700

(C) \$2,700 but less than \$2,850

(D) \$2,850 but less than \$3,000

(E) \$3,000 or more

Data for Question 42 (3 points)

Data for Company A in 2009:

Division	I	II	III	IV	V
Number of Employees	15	42	27	23	?

A plan covers the employees in Divisions I, IV, and V only.

No employees terminated during 2009 and none are statutorily excludable from the plan.

Question 42

What is the minimum number of employees that must be in Division V so that the plan will pass the participation requirement of IRC section 401(a)(26)?

(A) Fewer than 5

(B) 5 or 6

(C) 7 or 8

(D) 9 or 10

(E) 11 or more

Data for Question 43 (3 points)

Plan termination date: 12/31/2008.

Asset distribution date: 6/30/2009.

Selected data as of 6/30/2009:

Market value of assets	\$850,000
Assets used to satisfy all plan liabilities	\$500,000

In accordance with IRC section 4980, the employer elected to establish a qualified replacement plan, and to transfer to that plan the minimum amount necessary to lower the rate of excise tax on the employer reversion.

X = the difference in the amount of the actual excise tax due from the employer and the amount of the excise tax that would have been due had the qualified replacement plan not been established.

Question 43

In what range is X?

(A) Less than \$108,000

(B) \$108,000 but less than \$112,000

(C) \$112,000 but less than \$116,000

(D) \$116,000 but less than \$120,000

(E) \$120,000 or greater

Data for Question 44 (3 points)

Normal retirement age: 65.

Vesting: 3 – 7 year graded.

Normal retirement benefit: 2% of compensation for each year of service.

A standard termination is deemed to have occurred for all participants on 1/1/2009.

As of 1/1/2009 the market value of plan assets is sufficient to cover all benefit liabilities.

Data for all participants as of 1/1/2009:

Employee	Age	Years of service	Compensation for each year of service	Date of termination
Smith	50	3	\$60,000	1/1/2003
Jones	50	2	75,000	1/1/2009

$_{15|}\ddot{a}_{50}^{(12)} = 7.00.$

Question 44

In what range is the total present value of vested benefits after the plan termination for the two participants as of 1/1/2009?

(A) Less than \$10,000

(B) \$10,000 but less than \$20,000

(C) \$20,000 but less than \$30,000

(D) \$30,000 but less than \$40,000

(E) \$40,000 or more

END OF EXAMINATION*