

AMERICAN SOCIETY OF ENROLLED ACTUARIES
JOINT BOARD FOR THE ENROLLMENT OF ACTUARIES
SOCIETY OF ACTUARIES

Enrolled Actuaries Pension Examination, Segment L

EA-2, Segment L

Date: Thursday, May 12, 2022

INSTRUCTIONS TO CANDIDATES

1. Special conditions generally applicable to all questions on this examination are found in a separate .PDF on the computer screen.
2. All questions should be answered in accordance with laws, rules and regulations in effect as of November 30, 2021.
3. This examination consists of 46 True/False or multiple-choice questions worth a total of 100 points. The point value for each question is shown in parentheses at the beginning of each question.
4. 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.
5. Do not spend too much time on any one question. If a question seems too difficult, leave it and go on.
6. 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 computer screen.
7. Use the scratch paper booklets provided by Prometric for your scratch work. Extra scratch paper booklets are available if you run out of scratch paper in the booklet provided to you.

Answer Key EA-2L Spring 2022
March 1, 2022

Question	Answer		Question	Answer
1	B		31	C
2	A		32	C
3	B		33	A
4	B		34	E
5	A		35	E
6	B		36	B
7	A		37	B
8	A		38	E
9	B		39	B
10	B		40	A
11	B		41	B
12	B		42	B
13	A		43	D
14	A		44	B
15	A		45	C
16	B		46	B
17	A			
18	B			
19	A			
20	A			
21	B			
22	C			
23	C			
24	E			
25	C			
26	D			
27	B			
28	E			
29	D			
30	D			

Data for Question 1 (1 point)

Consider the following statement:

If the actuarial valuation report is not available when the ERISA section 4010 filing is due, the filer may submit both the filing and the report by an alternative (later) due date of 15 days after the plan's Form 5500 is due.

Question 1

Is the above statement true or false?

- (A) True
- (B) False

Data for Question 2 (1 point)

Selected data for a plan:

HCEs benefiting	3
Total non-excludable HCEs	3
NHCEs benefiting	6
Total non-excludable NHCEs	17

All benefits are considered meaningful.

Consider the following statement:

The plan satisfies the minimum participation requirements of IRC section 401(a)(26).

Question 2

Is the above statement true or false?

- (A) True
- (B) False

Data for Question 3 (1 point)

On 1/1/2018, a traditional defined benefit plan is converted to a statutory hybrid (cash balance) plan. The accrued benefit is based on $A+B$, where A is the accrued benefit as of 12/31/2017 and B is the accrued benefit based on the cash balance account after 12/31/2017. The traditional defined benefit plan had a 6-year graded vesting schedule under IRC 416.

Participant Smith was hired on 1/1/2017 and terminated employment on 12/31/2019.

Consider the following statement:

Smith was 40% vested in his accrued benefit as of 12/31/2019.

Question 3

Is the above statement true or false?

- (A) True
- (B) False

Data for Question 4 (1 point)

Consider the following statement:

A plan is required to use a normal retirement age between 62 and 65, inclusive, but may also require a participant to reach the 5th anniversary of plan entry.

Question 4

Is the above statement true or false?

(A) True

(B) False

Data for Question 5 (1 point)

Consider the following statement:

The required beginning date (RBD) for a plan under IRC section 401(a)(9) for a 5% owner may be earlier than the RBD for a similarly situated participant who is not a 5% owner.

Question 5

Is the above statement true or false?

- (A) True
- (B) False

Data for Question 6 (1 point)

Type of plan: Statutory hybrid (cash balance)

The plan has a variable interest crediting rate.

Consider the following statement:

The interest crediting rate for all periods ending after the plan's termination date is the average of the interest crediting rates for the 3-year period ending on the plan termination date.

Question 6

Is the above statement true or false?

- (A) True
- (B) False

Data for Question 7 (1 point)

A plan was established on 1/1/2018 with participant counts as of the following dates:

<u>Date</u>	<u>Participant count</u>
1/1/2018	150
12/31/2018	125
12/31/2019	110
12/31/2020	95

Consider the following statement:

The plan may opt out of the Small Plan Lookback Rule for the 2021 premium payment year without seeking permission from the PBGC.

Question 7

Is the above statement true or false?

- (A) True
- (B) False

Data for Question 8 (1 point)

Consider the following statement:

If a plan corrects an underpaid PBGC premium payment before the PBGC sends a written notice that there is (or may be) a premium delinquency, the late payment penalty cap is 25% of the late amount.

Question 8

Is the above statement true or false?

- (A) True
- (B) False

Data for Question 9 (1 point)

An application is filed with the PBGC requesting a distress termination of a single employer plan.

The application includes a Notice of Intent to Terminate with a proposed 6/30/2021 date of plan termination.

Data for retired participant Smith as of 6/1/2021:

Age	65
Monthly benefit	\$10,000

Consider the following statement:

Smith must continue to be paid his full monthly benefit after 6/30/2021.

Question 9

Is the above statement true or false?

- (A) True
- (B) False

Data for Question 10 (1 point)

A multiemployer plan primarily covers employees in the building and construction industry.

All of the employees for whom Employer A has an obligation to contribute under the plan perform work in this industry.

Employer A completes a project, and as a result, ceases to have further obligation to contribute to the plan.

Employer A no longer does any future work in the jurisdiction of this prior collective bargaining agreement.

Consider the following statement:

Employer A has experienced a complete withdrawal from the plan.

Question 10

Is the above statement true or false?

- (A) True
- (B) False

Data for Question 11 (1 point)

A multiemployer plan is certified in seriously endangered status.

A notification of this status is provided timely to all plan participants.

The plan has an unreduced early retirement provision for all active participants who meet the eligibility requirements.

As required, the plan sponsor has provided the bargaining parties choices for funding improvement plan schedules.

Consider the following statement:

One of the funding improvement plan schedules is permitted to change this unreduced early retirement provision and apply an actuarial reduction to the total accrued benefit of all eligible participants who have not retired as of the date the participant notice was provided.

Question 11

Is the above statement true or false?

(A) True

(B) False

Data for Question 12 (2 points)

A plan completed a standard termination.

A qualified replacement plan is established.

100% of the active participants in the terminated plan remain as active participants in the replacement plan.

Maximum amount available for the employer reversion: \$100,000

Amount of direct transfer from the terminated plan to the qualified replacement plan:
\$50,000

Consider the following statement:

A 50% excise tax is imposed upon the employer reversion.

Question 12

Is the above statement true or false?

- (A) True
- (B) False

Data for Question 13 (1 point)

The sole participant and trustee of a plan used 49% of plan assets to purchase real estate from an unrelated third party and pays rent to the plan at the market rate in exchange for use of the real estate for nonbusiness purposes. The participant is the 100% owner of the company that sponsors the plan.

Consider the following statement:

A prohibited transaction has occurred.

Question 13

Is the above statement true or false?

- (A) True
- (B) False

Data for Question 14 (1 point)

Consider the following statement:

Except as mandated by law, the enrolled actuary shall ensure that the actuarial assumptions are reasonable individually and in combination, and that the actuarial cost method and the actuarial method of valuation of assets are appropriate.

Question 14

Is the above statement true or false?

- (A) True
- (B) False

Data for Question 15 (1 point)

Consider the following statement:

An enrolled actuary who signs a Form 5500 Schedule SB is required to answer questions from the plan administrator related to the actuarial assumptions shown on the Schedule SB.

Question 15

Is the above statement true or false?

- (A) True
- (B) False

Data for Question 16 (1 point)

The 2022 AFTAP was certified as 76.25% on January 1, 2022. Participant Smith terminated employment in 2021 and is entitled to a lump sum distribution in 2022. The present value of Smith's vested accrued benefit is less than \$5,000 at all times throughout 2022.

Consider the following statement:

Smith may not receive a 100% lump sum distribution in 2022.

Question 16

Is the above statement true or false?

- (A) True
- (B) False

Data for Question 17 (2 points)

A plan was amended to increase benefits effective 1/1/2021.

The plan has no funding balances.

Selected information as of 1/1/2021:

2021 AFTAP before amendment	83.00%
Funding target before amendment	\$665,000
Increase in funding target due to amendment	45,000
IRC section 436 contribution discounted to valuation date	18,000

Consider the following statement:

The amendment can take effect once the IRC section 436 contribution is made.

Question 17

Is the above statement true or false?

- (A) True
- (B) False

Data for Question 18 (1 point)

Selected data for participant Smith:

Date of birth	12/31/1957
Date of hire	1/1/2015
Date of plan entry	1/1/2016
Date of termination	12/31/2021
Date of retirement	12/31/2021

Consider the following statement:

Smith's annual IRC section 415 dollar limit payable as a single life annuity at retirement is \$161,000.

Question 18

Is the above statement true or false?

- (A) True
- (B) False

Data for Question 19 (1 point)

A participant, age 62, enters a plan on 1/1/2021. The plan requires participants to work at least 1,000 hours to accrue a benefit.

Consider the following statement:

The IRC section 415 maximum dollar limit at age 65 applicable to the participant is the same at 1/1/2021 and 12/31/2021.

Question 19

Is the above statement true or false?

- (A) True
- (B) False

Data for Question 20 (1 point)

A plan provides the following vesting schedule:

<u>Years of service</u>	<u>Nonforfeitable percentage</u>
2	20%
3	40%
4	60%
5+	100%

Consider the following statement:

This plan satisfies the top-heavy vesting requirements of IRC section 416.

Question 20

Is the above statement true or false?

- (A) True
- (B) False

Data for Question 21 (2 points)

Consider the following statements:

- I. Illustrative examples are required to be provided in an ERISA section 204(h) notice where the benefit formula is changing from a traditional defined benefit formula to a statutory hybrid (cash balance) formula.
- II. For an amendment that freezes benefit accruals for 305 active plan participants, ERISA section 204(h) notices must be provided at least 15 days before the effective date of the amendment.
- III. In the case of a multiemployer plan, each participating employer is responsible for reporting and paying their portion of the excise tax resulting from failure to provide the proper ERISA section 204(h) notices.

Question 21

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 22 (2 Points)

A plan amendment that reduces future benefit accruals is adopted on 11/1/2020 and effective on 12/1/2020.

Selected plan information on 11/1/2020 and 12/1/2020:

Active participants in the plan	85
Non-active participants in the plan	40

There are 28 participants affected by the plan amendment.

Consider the following statements:

- I. An ERISA section 204(h) notice is required for all active participants in the plan.
- II. An ERISA section 204(h) notice is only required for participants affected by the amendment.
- III. The ERISA section 204(h) notice must be provided to participants by 11/15/2020.

Question 22

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 23 (3 points)

A plan sponsor must file PBGC Form 4010 for the most recent information year. The plan has the following liabilities and participant count at the beginning of the applicable plan year.

Present value of vested plan benefits	\$185,000,000
Present value of total plan benefits	206,000,000
Number of participants	600

The interest rates used to value the plan's liabilities are as follows:

For years 1-20:	1.62%
For years 21 and later:	1.40%

$\$X$ = the expense load to be included in the PBGC Form 4010 submission.

Question 23

In what range is $\$X$?

- (A) Less than \$894,000
- (B) \$894,000 but less than \$936,000
- (C) \$936,000 but less than \$978,000
- (D) \$978,000 but less than \$1,020,000
- (E) \$1,020,000 or more

Data for Question 24 (3 points)

As of 1/1/2022, employees participate in either one of two different defined benefit plans:

Plan A is a defined benefit plan for non-union employees hired before 1/1/2020.

Plan B is a defined benefit plan for all union employees.

Non-union employees hired after 12/31/2019 are not eligible to participate in either defined benefit plan.

Information pertaining to employees and participation data for the employer as of 1/1/2022:

	<u>Plan A</u>	<u>Plan B</u>	<u>Non-union employees hired after 12/31/2019</u>	<u>Totals</u>
HCEs	15	0	5	20
NHCEs	<u>120</u>	<u>200</u>	<u>15</u>	<u>335</u>
Totals	135	200	20	355

As of 1/1/2022, all employees are at least 21 years old and have at least one year of service.

$X\%$ = Plan A's ratio percentage under IRC Section 410(b) as of 1/1/2022.

Question 24

In what range is $X\%$?

- (A) Less than 42%
- (B) 42% but less than 67%
- (C) 67% but less than 92%
- (D) 92% but less than 117%
- (E) 117% or more

Data for Question 25 (5 points)

Type of plan: Statutory hybrid (cash balance)

Selected plan provisions:

Normal retirement age	65
Normal form of benefit	Life annuity
Timing of pay credits	End of year
Interest crediting rate	4.0%
Plan actuarial equivalence rate	4.0%

Nondiscrimination testing methods and assumptions:

Testing method	Benefits basis
Measurement period	Current plan year
Testing age	65
Snapshot date	12/31/2021
Standard interest rate	8.5%

Selected factors:

$\ddot{a}_{65}^{(12)}$ at 4.0%	12.87
$\ddot{a}_{65}^{(12)}$ at 8.5%	9.03

Selected participant data for Smith and Jones:

	<u>Smith</u>	<u>Jones</u>
Age on 12/31/2021	56	45
2021 compensation	\$250,000	\$30,000
2021 pay credit	160,000	X

$\$X$ = the minimum pay credit needed for Jones to have the same normal accrual rate as Smith.

Question 25

In what range is $\$X$?

- (A) Less than \$8,000
- (B) \$8,000 but less than \$12,000
- (C) \$12,000 but less than \$16,000
- (D) \$16,000 but less than \$20,000
- (E) \$20,000 or more

Data for Question 26 (4 points)

Selected plan provisions:

Benefit formula	\$50 per month for each year of service
Pre-retirement death benefit	Present value of accrued benefit
Actuarial equivalence	5% and 2021 applicable mortality table with no preretirement mortality

Plan provides for suspension of benefits upon reaching normal retirement age. The plan reduces benefit accruals each year by any actuarial increases each year.

Selected annuity factors using the plan's definition of actuarial equivalence:

$\ddot{a}_{65}^{(12)}$	12.58
$\ddot{a}_{66}^{(12)}$	12.28
$\ddot{a}_{67}^{(12)}$	11.98
$\ddot{a}_{68}^{(12)}$	11.67

Selected participant data:

	<u>Smith</u>	<u>Jones</u>
Date of birth	1/1/1955	1/1/1953
Date of hire	1/1/2001	1/1/2001
Date of retirement	1/1/2021	1/1/2021
Benefit suspension notice status	Provided timely	Not provided
Monthly benefit at retirement	$\$X$	$\$Y$

Question 26

In what range is $\$X + \Y ?

- (A) Less than \$1,930
- (B) \$1,930 but less than \$1,980
- (C) \$1,980 but less than \$2,030
- (D) \$2,030 but less than \$2,080
- (E) \$2,080 or more

Data for Question 27 (4 points)

Selected plan provisions:

Normal retirement benefit	1.5% of final 3-year average compensation for each year of service
Early retirement eligibility	Age 60 with 10 years of service
Early retirement benefit	Accrued benefit reduced 6% per year prior to age 65

Plan conversion factors at all ages:

<u>Optional forms of payment:</u>	<u>Plan conversion factor from life annuity</u>
Joint and 50% survivor annuity	0.88
Joint and 75% survivor annuity (QJSA)	0.85
Joint and 100% survivor annuity	0.82

Selected data for participant Smith:

Date of birth	1/1/1960
Spouse's date of birth	1/1/1965
Date of hire	1/1/1986
Participant's date of death	1/1/2022
Compensation for each year	\$92,000

At the time of Smith's death, Smith had been married to his spouse for more than one year.

Question 27

In what range is the minimum annual qualified pre-retirement survivor benefit payable to Smith's spouse at the earliest commencement date?

- (A) Less than \$19,000
- (B) \$19,000 but less than \$26,000
- (C) \$26,000 but less than \$33,000
- (D) \$33,000 but less than \$40,000
- (E) \$40,000 or more

Data for Question 28 (2 points)

Consider the following statements:

- I. The applicable mortality table and the applicable interest rate as defined in 1.417(e)-1(d)(2) and (3) must be used for all relative value calculations.
- II. The relative value of a group of optional forms having approximately the same value may be disclosed by stating the relative value of any one of the optional forms of benefit in the group.
- III. The relative value of an optional form of payment that has an actuarial present value that is greater than 100% of the actuarial present value of the QJSA must be disclosed numerically.

Question 28

Which, if any, of the above statements 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 29 (2 points)

Consider the following statements:

- I. An employer provides benefits under a statutory hybrid (cash balance) plan for employees of Division A. Employees of Division B accrue benefits under a final average pay plan. 3-year vesting is required for all defined benefit plans of the employer.
- II. An employer sponsors a statutory hybrid (cash balance) plan. The employer does not provide suspension of benefits notices to participants over normal retirement age. The plan is not required to actuarially increase the benefits because it is a statutory hybrid plan.
- III. A statutory hybrid (cash balance) plan provides benefits to only employees of Division C and Division D. Division C is collectively bargained and comprises 75% of the total participants in the plan. Therefore, the plan is a collectively bargained plan for purposes of IRC Section 436.

Question 29

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 30 (3 Points)

A traditional defined benefit plan converted to a statutory hybrid (cash balance) plan on 1/1/2020.

Pay credits are credited annually at the end of the year.

Interest is credited to the cash balance account at the end of the year, based on the cash balance account as of the beginning of the year.

Interest crediting rate: 5%

Selected data for participant Smith:

Age at 12/31/2021	54
Annual accrued benefit as of 12/31/2019	\$1,425
Pay credit for 2020	1,900
Pay credit for 2021	2,100

\ddot{a}_{65} : 13.0378

Question 30

In what range is Smith's annual accrued benefit at 12/31/2021?

- (A) Less than \$1,449
- (B) \$1,449 but less than \$1,701
- (C) \$1,701 but less than \$1,953
- (D) \$1,953 but less than \$2,205
- (E) \$2,205 or more

Data for Question 31 (4 points)

Selected information as of 1/1/2020:

Receivable contribution for the 2020 plan year paid on 1/15/2021	\$2,500,000
Effective interest rate for the 2020 plan year	4.51%

Selected information as of 1/1/2021:

Funding balances	\$1,500,000
Market value of assets (without receivable contributions)	47,000,000
Actuarial value of assets (without receivable contributions)	49,000,000

	<u>2021 PBGC segment rates</u>	<u>2021 non-stabilized segment rates</u>
Present value of vested benefits	\$53,000,000	\$55,500,000
Present value of non-vested benefits	2,900,000	3,000,000
Total present value of benefits	55,900,000	58,500,000

Participant counts as of 12/31/2020:

Active	360
Terminated vested	80
Retirees in pay status	70
QDRO alternate payees of active participants	<u>15</u>
Total	525

The plan sponsor has paid PBGC premiums using the alternative method every year beginning with the 2017 premium payment year.

$\$X$ = the smallest premium that the plan sponsor can pay for the 2021 premium payment year.

Question 31

In what range is $\$X$?

- (A) Less than \$237,000
- (B) \$237,000 but less than \$279,000
- (C) \$279,000 but less than \$321,000
- (D) \$321,000 but less than \$363,000
- (E) \$363,000 or more

Data for Question 32 (4 points)

Plan A made an election to use the Alternative Premium Funding Target in 2011.

Plan B is created as a result of a non-*de minimis* spinoff from Plan A on 3/1/2021.

Other than Plan A's election in 2011, there have been no other premium methodology elections by either plan.

Total participant counts:

<u>Date</u>	<u>Plan A</u>	<u>Plan B</u>
12/31/2020	1,000	N/A
1/1/2021	1,100	N/A
3/1/2021	660	440

Unfunded vested benefits for the 2021 PBGC Variable-rate premium determination:

	<u>Plan A</u>	<u>Plan B</u>
Alternative Method	\$3,000,000	\$1,200,000
Standard Method	5,000,000	2,000,000

$\$X$ = total PBGC premium for Plan A for the premium payment year ending 12/31/2021.

$\$Y$ = total PBGC premium for Plan B for the premium payment year ending 12/31/2021.

Question 32

In what range is $\$X + \Y ?

- (A) Less than \$310,000
- (B) \$310,000 but less than \$325,000
- (C) \$325,000 but less than \$340,000
- (D) \$340,000 but less than \$355,000
- (E) \$355,000 or more

Data for Question 33 (4 points)

Selected plan information:

Benefit formula X% of highest 3-year average compensation for each year of service

Schedule of benefit formulas:

<u>Effective date</u>	<u>Adoption date</u>	<u>X%</u>
1/1/2001	11/1/2001	2.0%
1/1/2018	12/31/2017	2.5%
1/1/2019	6/1/2019	3.0%

Early retirement eligibility Age 60 and 20 years of service
Early retirement reduction None
Date of plan termination 12/31/2021

Selected data for participant Smith as of 12/31/2021:

Age 63
Years of service 20
Compensation for each year before 2018 \$75,000

<u>Year</u>	<u>Compensation</u>
2018	\$80,000
2019	110,000
2020	120,000
2021	130,000

Smith retires on 12/31/2021, the plan termination date.

Question 33

In what range is the PBGC guaranteed monthly benefit payable to Smith?

- (A) Less than \$4,900
- (B) \$4,900 but less than \$5,100
- (C) \$5,100 but less than \$5,300
- (D) \$5,300 but less than \$5,500
- (E) \$5,500 or more

Data for Question 34 (2 points)

A multiemployer plan is certified to be in Critical status on 3/15/2022 for the 2022 plan year.

The plan sponsor adopts a rehabilitation plan on the latest allowable date.

The rehabilitation plan consists of two schedules that meet all the necessary requirements and allow for timely emergence from critical status.

The plan sponsor provides these schedules to the bargaining parties on the latest allowable date.

Question 34

In what range is the latest date that these schedules can be provided to the bargaining parties?

- (A) Earlier than 11/1/2022
- (B) 11/1/2022 but before 11/16/2022
- (C) 11/16/2022 but before 12/1/2022
- (D) 12/1/2022 but before 12/16/2022
- (E) 12/16/2022 or later

Data for Question 35 (3 points)

An employer borrows \$200,000 from a plan on 4/1/2020. This is a prohibited transaction.

The employer makes interest payments of \$6,000 on 12/31/2020 and \$12,000 on 12/31/2021.

No other payments have been made.

The market rate of interest for 2020 and 2021 is 5% each year.

$\$X$ = the IRC section 4975 excise tax, if any, due for the taxable periods in 2020 and 2021. $\$X$ excludes any additional tax for failure to correct.

Question 35

In what range is $\$X$?

- (A) Less than \$2,800
- (B) \$2,800 but less than \$3,200
- (C) \$3,200 but less than \$3,600
- (D) \$3,600 but less than \$4,000
- (E) \$4,000 or more

Data for Question 36 (2 points)

Consider the following statements:

- I. A prohibited transaction has occurred when a 50% direct owner, who is not a plan participant, takes a \$50,000 loan from the plan.
- II. The spouse of a 10% shareholder of a corporation sponsoring a plan is considered a disqualified person.
- III. With respect to a prohibited transaction, the taxable period begins on the date the transaction occurs and ends on the date the transaction has been deemed prohibited.

Question 36

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 37 (2 points)

A plan lends \$100,000 to the plan sponsor on 7/1/2021. This is a prohibited transaction.

The plan sponsor pays \$101,000 back to the plan on 8/1/2021.

The market rate of interest for 2021 is 6%.

$\$X$ = the excise tax, if any, owed for 2021.

Question 37

In what range is $\$X$?

- (A) Less than \$100
- (B) \$100 but less than \$600
- (C) \$600 but less than \$1,100
- (D) \$1,100 but less than \$1,600
- (E) \$1,600 or more

Data for Question 38 (2 points)

Consider the following statements with respect to the standards of performance of actuarial services:

- I. An enrolled actuary may not in any way use or participate in the use of any form of public communication or private solicitation related to the performance of actuarial services.
- II. In general, an enrolled actuary must, at the request of a client, promptly return any and all records of the client that are necessary for the client to comply with his or her legal obligations and may not retain copies of the records returned to a client if the client so desires.
- III. A conflict of interest exists if the enrolled actuary's representation of one client will be directly adverse to another client.

Question 38

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 39 (4 points)

An employer sponsors 2 plans.

Both plans were effective 1/1/2010.

On 3/15/2021, the enrolled actuary for the plans certifies the AFTAPs as of 1/1/2021.

On 7/1/2021, the plan sponsor amends the plans to increase benefits.

The plans have no funding balances.

Selected information as of 1/1/2021:

	<u>Plan A</u>	<u>Plan B</u>
Actuarial (market) value of assets	\$3,160,000	\$950,000
Funding target before plan amendment	4,100,000	1,120,000
Increase in funding target due to the plan amendment	800,000	200,000
Effective interest rate	6.00%	6.00%

Neither plan has purchased annuities for NHCEs in the prior two years.

The plan sponsor makes IRC section 436 contributions on 7/1/2021 to both plans to allow both amendments to take effect. There are no other contributions made during 2021.

$\$X$ = IRC section 436 contribution for Plan A.

$\$Y$ = IRC section 436 contribution for Plan B.

Question 39

In what range is $\$X + \Y ?

- (A) Less than \$910,000
- (B) \$910,000 but less than \$940,000
- (C) \$940,000 but less than \$970,000
- (D) \$970,000 but less than \$1,000,000
- (E) \$1,000,000 or more

Data for Question 40 (3 points)

The plan allows unlimited lump sum payments.

2020 AFTAP certified on 1/1/2020: 85.00%

Selected plan data as of 1/1/2021:

Funding standard carryover balance	\$40,000
Prefunding balance	100,000
Actuarial value of assets	1,250,000

No contributions were made between 1/1/2021 and 4/1/2021.

No elections to reduce or increase the funding balances were made between 1/1/2021 and 4/1/2021.

There have never been annuity purchases from the plan.

$\$X$ = reduction as of 4/1/2021 of the 1/1/2021 prefunding balance due to the deemed election to reduce the funding balance.

Question 40

In what range is $\$X$?

- (A) Less than \$35,000
- (B) \$35,000 but less than \$50,000
- (C) \$50,000 but less than \$65,000
- (D) \$65,000 but less than \$80,000
- (E) \$80,000 or more

Data for Question 41 (4 points)

Selected plan information:

Plan actuarial equivalence: 2021 applicable mortality table and 5% interest

Selected data for participant Smith as of 12/31/2021:

Years of service	6
Years of participation	5
Normal retirement age	62
Current age	61

<u>Year</u>	<u>Compensation</u>
2019	\$280,000
2020	285,000
2021	290,000

There is no forfeiture of benefits on pre-retirement death.

Factors at selected ages using plan actuarial equivalence:

<u>Age</u>	<u>$\ddot{a}_x^{(12)}$</u>
61	13.71
62	13.43
65	12.58

$\$X$ = the maximum permitted annual benefit that can be paid to Smith as of 12/31/2021 in the form of a single life annuity.

Question 41

In what range is $\$X$?

- (A) Less than \$106,000
- (B) \$106,000 but less than \$124,000
- (C) \$124,000 but less than \$142,000
- (D) \$142,000 but less than \$160,000
- (E) \$160,000 or more

Data for Question 42 (4 points)

Plan effective date: 1/1/2016

Actuarial equivalence: Applicable mortality table and 5% interest

The plan has less than 100 participants.

The plan does not suspend benefits.

The plan reduces benefit accruals each year by any actuarial increases each year.

Selected data for participant Smith:

Date of birth	12/31/1955
Date of hire	1/1/2015
Date of retirement	12/31/2021
High 3-year average compensation	\$230,000

Selected life annuity factors using the applicable mortality table:

<u>Age</u>	<u>5%</u>	<u>5.5%</u>
65	12.58	12.04
66	12.28	11.77

$\$X$ = Smith's maximum allowable lump sum under IRC section 415, payable at date of retirement.

Question 42

In what range is $\$X$?

- (A) Less than \$1,650,000
- (B) \$1,650,000 but less than \$1,750,000
- (C) \$1,750,000 but less than \$1,850,000
- (D) \$1,850,000 but less than \$1,950,000
- (E) \$1,950,000 or more

Data for Question 43 (3 points)

An employer maintains two plans:

	<u>Plan A</u>	<u>Plan B</u>
Plan type	Defined contribution	Defined benefit
Effective date	1/1/2010	1/1/2021
Valuation date	Last day of plan year	First day of plan year

Key employee Smith is an active participant in both plans.

Selected plan information for Plan A as of 12/31/2021:

	<u>Key employees</u>	<u>Former key employees</u>	<u>Other</u>	<u>Plan total</u>
Value of account balances	\$540,500	\$60,000	\$399,500	\$1,000,000

Selected plan information for Plan B as of the following valuation dates:

	<u>1/1/2021</u>		<u>1/1/2022</u>	
	<u>Key</u>	<u>Plan total</u>	<u>Key</u>	<u>Plan total</u>
Present value of accrued benefits	\$0	\$0	\$85,000	\$101,500
Present value of benefits expected to accrue during the year	80,000	100,000	81,000	101,000

$X\%$ = the top-heavy percentage of Plan B for 2022 plan year.

Question 43

In what range is $X\%$?

- (A) Less than 57.00%
- (B) 57.00% but less than 58.00%
- (C) 58.00% but less than 59.00%
- (D) 59.00% but less than 60.00%
- (E) 60.00% or more

Data for Question 44 (1 point)

Consider the following statement:

In a standard plan termination, the plan sponsor has 180 days from the date the IRS issues a favorable determination letter to distribute all plan benefits.

Question 44

Is the above statement true or false?

- (A) True
- (B) False

Data for Question 45 (2 points)

Plan effective date: 1/1/2005

Normal retirement benefit formula: 1.75% of final 5-year average compensation for each year of service

The plan provides the minimum top-heavy benefit required under IRC section 416.

Data for non-key participant Smith:

Date of hire	1/1/2010
5-year average compensation	\$45,000

The plan was determined to be top-heavy for all years beginning on 1/1/2011.

Question 45

In what range is Smith's annual accrued benefit as of 1/1/2022?

- (A) Less than \$8,900
- (B) \$8,900 but less than \$9,300
- (C) \$9,300 but less than \$9,700
- (D) \$9,700 but less than \$10,100
- (E) \$10,100 or more

Data for Question 46 (4 points)

Type of plan: Multiemployer

Method for withdrawal liability: Presumptive with mandatory *de minimis* rule

The fund had no unfunded vested benefits in any year prior to 2019.

Employer A is the only employer to withdraw from the plan, with a complete withdrawal on 5/1/2022.

The Plan did not elect a withdrawal liability Fresh Start in 2020.

<u>Plan year</u> each year before 2019	<u>12/31 Total unfunded vested benefits</u>	<u>Employer A 12/31 5-year sum of contributions divided by 12/31 5-year sum of contributions for all contributing employers</u>
before 2019	\$0	N/A
2019	210,000	0.20
2020	0	0.25
2021	450,000	0.25
2022	445,000	0.15

Question 46

In what range is the withdrawal liability for Employer A?

- (A) Less than \$98,000
- (B) \$98,000 but less than \$103,000
- (C) \$103,000 but less than \$108,000
- (D) \$108,000 but less than \$113,000
- (E) \$113,000 or more

****END OF EXAMINATION****