

2014

Data for Question 21 (4 points)

Plan year: 1/1/2015.

Selected information as of 1/1/2015:

Minimum required contribution	\$820,000
Required quarterly installment	150,000
Effective interest rate	5.0%

All contributions made for the 2015 plan year:

<u>Date</u>	<u>Amount</u>
7/15/2015	\$300,000
10/15/2015	150,000
1/15/2016	150,000
9/15/2016	\$X

\$X is the smallest amount that satisfies the minimum funding standard as of 9/15/2016.

Question 21

In what range is **\$X**?

- (A) Less than \$243,000
- (B) \$243,000 but less than \$253,000
- (C) \$253,000 but less than \$263,000
- (D) \$263,000 but less than \$273,000
- (E) \$273,000 or more

2014

Data for Question 33 (3 points)

Selected valuation results:

	<u>1/1/2014</u>	<u>1/1/2015</u>
Minimum required contribution	\$500,000	\$600,000
Effective interest rate	7.0%	6.0%
Funding shortfall	Yes	No
Funding balances	None	None

A 2015 plan year contribution of \$50,000 was made on 2/15/2015.

\$X is the smallest amount necessary to satisfy the first quarterly contribution installment on 4/15/2015.

Question 33

In what range is **\$X**?

- (A) Less than \$74,000
- (B) \$74,000 but less than \$74,500
- (C) \$74,500 but less than \$75,000
- (D) \$75,000 but less than \$75,500
- (E) \$75,500 or more

2014

Data for Question 49 (4 points)

Valuation date: 1/1/2015.

Effective interest rate: 7.0%.

Funding target attainment percentage for the 2015 plan year: 90%.

Required quarterly installment due 4/15/2015: \$300,000.

Contribution paid on 2/1/2015 in the form of liquid assets: \$250,000.

Value of the plan's liquid assets as of 3/31/2015 (prior to adjustment): \$900,000.

Disbursements paid from the trust over the past 12 months ending 3/31/2015:

Payments for monthly benefits	\$265,000
Payments for administrative expenses	22,000
Payments for lump sums	250,000
Purchase of annuities	200,000

The plan had more than 100 participants on each day during 2014.

$\$X$ is the liquidity shortfall as of 3/31/2015.

Question 49

In what range is $\$X$?

- (A) Less than \$35,000
- (B) \$35,000 but less than \$70,000
- (C) \$70,000 but less than \$105,000
- (D) \$105,000 but less than \$140,000
- (E) \$140,000 or more

2015

Data for Question 2 (3 points)

Valuation date: 1/1/2016.

Prefunding balance as of 1/1/2016: \$0.

Selected valuation results:

	<u>1/1/2015</u>	<u>1/1/2016</u>
Minimum required contribution	\$525,000	\$550,000
Funding shortfall	10,000	

Effective interest rate for 2016: 6.0%.

The sole contribution for the 2016 plan year, made on 6/1/2016: \$600,000.

$\$X$ is the prefunding balance as of 1/1/2017.

Question 2

In what range is $\$X$?

- (A) Less than \$34,500
- (B) \$34,500 but less than \$35,500
- (C) \$35,500 but less than \$36,500
- (D) \$36,500 but less than \$37,500
- (E) \$37,500 or more

2015

Data for Question 18 (5 points)

A plan had more than 100 participants on each day during the preceding plan year.

Selected information:

	<u>1/1/2015</u>	<u>1/1/2016</u>
Prefunding balance	\$10,000	\$0
Actuarial (market) value of assets	420,000	445,000
Funding target	680,000	700,000
Minimum required contribution	96,000	120,000

Benefit payments and expenses paid from trust:

	<u>Expenses</u>	<u>Lump sum payments</u>	<u>Annuity payments</u>
From 1/1/2015 to 3/31/2015	\$900	\$2,000	\$15,000
From 4/1/2015 to 6/30/2015	700	5,000	27,000
From 7/1/2015 to 9/30/2015	1,300	6,000	29,000
From 10/1/2015 to 12/31/2015	4,000	6,000	31,000
<u>From 1/1/2016 to 3/31/2016</u>	<u>800</u>	<u>6,000</u>	<u>2,000</u>
Total 1/1/2015 to 3/31/2016	\$7,700	\$25,000	\$104,000

Benefits under the plan have been continuously frozen since 2002.

Annuities with a purchase price of \$200,000 were purchased between 10/1/2015 and 12/31/2015.

Value of the plan's liquid assets as of 3/31/2016: \$505,000.

\$X is the smallest amount that must be contributed for the 2016 plan year on 4/15/2016 to satisfy the quarterly contribution, including any liquidity shortfall.

Question 18

In what range is **\$X**?

- (A) Less than \$25,000
- (B) \$25,000 but less than \$35,000
- (C) \$35,000 but less than \$45,000
- (D) \$45,000 but less than \$55,000
- (E) \$55,000 or more

2015

Data for Question 24 (3 points)

Selected information for the 2016 plan year:

Funding standard carryover balance	\$25,000
Prefunding balance	520,000
Required quarterly installments	200,000
Effective interest rate	5.0%

On each quarterly due date, the plan sponsor elected to use funding balances to meet the quarterly requirements to the extent possible.

$\$X$ is the smallest contribution as of 10/15/2016 to satisfy the 10/15/2016 required quarterly installment.

Question 24

In what range is $\$X$?

- (A) Less than \$45,000
- (B) \$45,000 but less than \$55,000
- (C) \$55,000 but less than \$65,000
- (D) \$65,000 but less than \$75,000
- (E) \$75,000 or more

2015

Data for Question 44 (1 point)

Consider the following statement:

If there was no funding shortfall in 2015, there is no liquidity requirement for 2016.

Question 44

Is the above statement true or false?

- (A) True
- (B) False

2015

Data for Question 53 (3 points)

Valuation date: 1/1/2016.

Funding standard carryover balance as of 1/1/2016: \$12,000.

Prefunding balance as of 1/1/2016: \$600,000.

Selected information:

	<u>1/1/2015</u>	<u>1/1/2016</u>
Minimum required contribution	\$630,000	\$645,000
Funding shortfall	500,000	450,000
Effective interest rate		6.5%

The plan sponsor makes the first contribution for the 2016 plan year of \$10,000 on 4/15/2016.

\$X is the smallest amount of prefunding balance as of 1/1/2016 that can be elected on 4/15/2016 to satisfy the remaining amount of the first quarterly installment required for the 2016 plan year.

Question 53

In what range is **\$X**?

- (A) Less than \$110,000
- (B) \$110,000 but less than \$122,500
- (C) \$122,500 but less than \$135,000
- (D) \$135,000 but less than \$147,500
- (E) \$147,500 or more