CIVIL SERVICE EMPLOYEES ASSOCIATION

LEAP

LABOR EDUCATION ACTION PROGRAM

Examination Preparation Booklet

Office Record Keeping

Booklet No. 26

CSEA

CIVIL SERVICE EMPLOYEES ASSOCIATION, INC.
LOCAL 1000, AFSCME, AFL-CIO
Danny Donohue, President

Booklet #26

Office Record Keeping

The CSEA Examination Preparation Booklet Series is designed to help members prepare for New York State and local government civil service examinations. This booklet is designed for practice purposes only and its content may not conform to that of any particular civil service examination.

Introduction

Purpose

This booklet is designed to help you prepare for specific New York State civil service exams. The 42 practice questions that follow are examples of the kinds of questions you're likely to encounter in several actual exams designed to test your record keeping ability. The actual test questions may be formatted differently from what you see here, but they will require the same basic skills. To do well on these questions, you need to pay close attention to details. You also need to understand basic arithmetic, ***but you do not need to be a math genius!*** You are allowed to use a calculator to answer these questions.

Study Guide Contents

The first part of this study guide is composed of 42 multiple choice questions. An answer key is located on page 25, followed by explanations of the correct answers, beginning on page 26.

How to Use This Booklet

Complete a group of questions and then review your answers in the back of the booklet. Keep in mind that test makers often like to pose questions that force you to read very carefully. For example, one section of this book gives you data for two years but asks you questions about only one. Unless you read these questions carefully, you may misinterpret them and choose the wrong answer.

Recommendation

It is very important to bring a calculator to exams that include questions on record keeping. Even if you are confident of your math ability, it is easy to make mistakes when doing calculations by hand.

Read each question twice to make sure you understand it. Don't rush. There is usually more than enough time to answer these questions.

Good luck!

Use the tables on this page and the next page to answer questions 1 through 6.

Length of Residence for Eight Local Villages

		Length of Residence (years)				
Village		Less than 2	2–5	6–9	10–14	15 or more
Alberta	Homeowners	253	765	1,054	1,209	675
	Non-Homeowners	112	320	250	243	129
Burton	Homeowners	333	876	1,567	1,437	995
	Non-Homeowners	123	453	359	408	135
Carlisle	Homeowners	118	547	740	1,008	602
	Non-Homeowners	95	208	231	379	246
Denton	Homeowners	597	682	1,398	1,067	921
	Non-Homeowners	405	451	549	371	269
Enfield	Homeowners	104	361	502	470	327
	Non-Homeowners	62	138	251	243	69
Fairfield	Homeowners	741	1,587	1,344	1,209	826
	Non-Homeowners	505	872	783	350	230
Garrett	Homeowners	202	481	690	732	678
	Non-Homeowners	116	222	250	302	124
Hadley	Homeowners	293	707	1,084	1332	689
	Non-Homeowners	117	323	251	343	195

Length of Residence – Hope and Midland Counties

Hope County

	Length of Residence (years)		
Village	5 or less	6–9	10 or more
Hadley	1,440	1,335	2,559
Carlisle			
Enfield			
Denton	A		
TOTAL			

Midland County

	Length of Residence (years)		
Village	5 or less	6–9	10 or more
Garrett	1,021	940	1,836
Fairfield			
Alberta			B
Burton			
TOTAL			

For each of the following questions, select the letter (a, b, c, d) that represents the best choice of the four possible answers.

Use the tables on the previous two pages to answer questions 1 through 6.

1. What is the value of A?
   a. 1,002
   b. 2,135
   c. 1,279
   d. 856

2. Which of the following villages has the greatest number of residents who have lived in the village for 10 years or longer?
   a. Hadley
   b. Burton
   c. Enfield
   d. Fairfield

3. What is the value of B?
   a. 1,452
   b. 2256
   c. 2,615
   d. 804

4. What percentage of the residents of Hadley have lived there for five years or less?
   a. 27
   b. 33
   c. 45
   d. It is not possible to tell from the data given in the tables

5. Which village in Hope County has the most homeowners?
   a. Fairfield
   b. Hadley
   c. Denton
   d. Carlisle

6. Which of the following villages has the fewest homeowners who have lived there for nine years or less?
   a. Hadley
   b. Fairfield
   c. Enfield
   d. Alberta

Use the information on this page and the next page to answer questions 7 through 12.

The table on the following page shows information you would need to use in ordering office supplies. The table uses the following terms:

item	The name of the item to be ordered
quantity	The minimum number that can be ordered. For example, the quantity listed for pencils is 20. Even if you needed 25 pencils, you would have to order 40 because you must order them in quantities of 20.
beginning amt	The amount on hand at the beginning of the month.
amt received	The amount received during the month.
ending amt	The amount on hand at the end of the month.
amt used	The amount used during the month. You can use the following equation to calculate this amount: amt used = beginning amt + amt received – ending amt
amt to order	The amount to order. You assume that you will need at least as much of each item as you used in the previous month. You can use the following equation to calculate this amount: amt to order = amt used – ending amt If you end up with a negative number, this means that you have more of an item on hand than you used in the previous month. You don't need to order any of this item. Remember to check the "quantity" column when you determine the amount to order. You may be required to order more of an item than you need. For example, if you needed 25 pencils, you would have to order 40 because you must order them in quantities of 20.
unit price	The price for each unit of an item.
total price	The total price for the order. You can use the following equation to calculate this amount: total price = amt to order × unit price

item	quantity	beginning amt	amt received	ending amt	amt used	amt to order	unit price	total price
pencils	20	15	20	5	30	40	.08	3.20
pens	12	20	12	18			.12	
paper clips	3 boxes	2 boxes	3 boxes	2 boxes			.62	
copy paper	5 reams	10 reams	5 reams	6 reams			4.25	
file folders	2 boxes	2 boxes	2 boxes	1 box			6.29	
legal pads	10	24	20	10			.75	
3-ring binders	12	8	12	6			3.29	

For each of the following questions, select the letter (a, b, c, d) that represents the best choice of the four possible answers.

Use the table above and the definitions on the previous page to answer questions 7 through 12.

7. How many reams of copy paper were used during the month?
   a. 6
   b. 5
   c. 9
   d. 11

8. How many pens should you order?
    a. 12
    b. 6
    c. 0
    d. 24

9. What will be the total price of the legal pads you order?
    a. $24.00
    b. $7.50
    c. $15.00
    d. $22.50

10. Which of the following will you spend the second most money on?
    a. paper clips
    b. legal pads
    c. pencils
    d. copy paper

11. How many 3-ring binders should you order?
    a. 8
    b. 12
    c. 24
    d. 0

12. What will be the total price of the file folders you order?
    a. $6.29
    b. $12.58
    c. $18.87
    d. $25.16

Use the tables on this page and the next page to answer questions 13 through 18.

Department of Human Resources: Payroll, Benefits, and Other Employee Expenses

	1999				2000			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Salaries	92,044	93,542	91,023	94,667	95,134	95,332	94,104	94,890
Other Compensation	23,987	18,908	22,865	25,679	25,098	22,128	26,458	27,876
Health Insurance								
Medical	7,258	7,634	7,813	7,499	8,029	8,101	7,832	8,001
Dental	1,256	1,357	1,200	1,300	1,492	1,503	1,302	1,398
Vision	1,011	1,129	987	1,201	1,298	1,302	1,176	1,222
Life Insurance	728	765	736	799	803	823	768	777
Training	708	744	675	770	781	801	748	750
Travel and Living								
Transportation	1,109	1,204	1,409	1,908	1,268	1,459	1,109	1,398
Lodging	998	875	909	1,011	911	1,201	891	895
Meals	303	405	565	890	504	876	539	580
Pensions	758	795	728	829	833	853	798	807

Department of Human Resources:
Payroll, Benefits, and Other Employee Expenses

	1999	
	1st Half	2nd half
Salaries and Other Compensation		A
Health Insurance Medical Dental Vision		
Life Insurance		
Travel and Living		
Pensions		

For each of the following questions, select the letter (a, b, c, d) that represents the best choice of the four possible answers.

13. What is the value of A?
    a. 185,586
    b. 185,690
    c. 234,234
    d. 228,481

14. In the second half of 1999, what percentage of the amount spent on health insurance was spent on dental insurance?
    a. 12.0%
    b. 13.0%
    c. 12.5%
    d. 25.0%

15. How much did the cost of life insurance increase from the first half of 1999 to the second half?

    a. 14

    b. 34

    c. 8

    d. 42

16. Which of the following did the Department spend the least on in the second half of 1999?

    a. Travel and living

    b. Life insurance

    c. Pensions

    d. Dental insurance

17. By what percentage did the cost of salaries increase from the first half to the second half of 1999?

    a. 104%

    b. 5.6%

    c. .056%

    d. 4%

18. Which of the following categories had lower expenses in the second half than in the first half of 1999?

    a. Pensions

    b. Travel and Living

    c. Life Insurance

    d. Training

Use the tables on this page to answer questions 19 through 24.

Total Enrollment in Elective Courses

Course	9th grade	10th grade	11th grade	12th grade
French				
French I	110	34	5	3
French II	34	98	45	20
French III	0	23	81	57
Spanish				
Spanish I	115	39	7	8
Spanish II	38	99	52	42
Spanish III	0	26	89	50
Technology				
Wood	12	46	45	23
Auto	8	78	63	56
Electricity	0	37	34	22
Art				
Drawing and Painting	11	33	34	24
Sculpture	13	25	22	24
Computer Science				
Intro to Computer Science	0	45	51	45
Designing Web Pages	0	49	82	64
Driver's Education	0	6	205	183

Total Enrollment in Elective Courses

	Technology	Art	Driver's Education	French	Spanish	Computer Science
9th grade	20	24	0	144	153	0
10th grade						
11th grade				A		
12th grade						

For each of the following questions, select the letter (a, b, c, d) that represents the best choice of the four possible answers.

19. Which grade has the largest enrollment in art courses?
    a. 9th
    b. 10th
    c. 11th
    d. 12th

20. In 10th grade, what percentage of total enrollment in elective courses is represented by enrollment in foreign languages?
    a. 33
    b. 52
    c. 50
    d. 28

21. What percentage of 12th graders who are enrolled in French classes are taking French II?
    a. 57
    b. 20
    c. 25
    d. 10

22. What is the value of A?
    a. 152
    b. 5
    c. 144
    d. 131

23. Which elective has the greatest enrollment of 11th graders?
    a. Spanish
    b. Driver's Education
    c. Technology
    d. Art

24. In which grade do the fewest students take Spanish?
    a. 9th
    b. 10th
    c. 11th
    d. 12th

Use the tables on this page to answer questions 25 through 30.

Contract Schedule for Current Program Year

Contract Number	RFP* Issued	Proposals Due	Award Date	Start Date
A271-001	April 3	May 20	July 2	August 1
A217-002	April 3	May 20	June 21	July 18
B001-451	April 3	June 18	July 1	July 28
C319-030	May 12	July 1	July 20	August 12
C671-009	May 21	July 20	August 8	August 30
D987-022	June 12	August 8	August 20	September 1
D998-001	July 1	September 1	September 10	September 15
F762-009	July 20	September 18	October 5	October 20

*RFP = Request for Proposals

Contract Schedule for Current Program Year

	April	May	June	July	August	September	October
RFP Issued	A271-001 A217-002 B001-451	C319-030 C671-009	D987-022	D998-001 F762-009			
Proposals Due		A271-001 A217-002					
Award Date			A217-002				
Start Date				A217-002 B001-451			

For each of the following questions, select the letter (a, b, c, d) that represents the best choice of the four possible answers.

25. Which of the following contracts has an award date in July?
    a. A217-002
    b. D987-022
    c. A271-001
    d. C671-009

26. Of the contracts that have a start date in August, how many have proposals due in May?
    a. 1
    b. 2
    c. 3
    d. 0

27. For which contracts are proposals due in July?
    a. A271-001 and A217-002
    b. D998-001 and F762-009
    c. B001-451
    d. C319-030 and C671-009

28. Which contract with an award date in July has the earliest scheduled start date?
    a. A217-002
    b. B001-451
    c. A271-001
    d. C319-030

29. How much time is there between the "RFP Issued" and the "Proposals Due" dates for contract D998-001?

    a. 1 month

    b. 2 months

    c. 3 months

    d. none of the above

30. What percentage of contracts have an award date in August?

    a. 20

    b. 25

    c. 33

    d. 12.5

Use the tables on this page and the next page to answer questions 31 through 36.

Voting in Recent School Board Elections
For the Five Towns in the Sheridan School District

Town	1997	1998	1999	2000
Carson				
number registered	3,212	3,451	3,309	3,202
number voting	2,102	2,307	2,361	2,209
Meadowbrook				
number registered	9,084	9,876	9,651	9,002
number voting	4,985	5,001	5,110	4,568
East Bay				
number registered	1,800	1,890	1,901	1,925
number voting	987	901	928	950
Bolivar				
number registered	3,971	3,871	3,999	3,764
number voting	2,085	1,904	2,095	1,903
Lansing				
number registered	4,954	4,871	4,980	4,999
number voting	2,451	2,223	2,502	2,604

Voting in Recent School Board Elections
For the Five Towns in the Sheridan School District

Town	Number Registered	Number Voting
Bolivar		
1998	3,871	1,904
1999	3,999	2,095
2000	3,764	1,903
Carson		
1998		
1999		
2000		
East Bay		
1998		
1999		
2000		
Lansing		
1998		
1999		
2000		
Meadowbrook		
1998		
1999		
2000		
TOTAL		
1998		
1999		A
2000		

For each of the following questions, select the letter (a, b, c, d) that represents the best choice of the four possible answers.

31. What percentage of registered voters in the town of Carson voted in 1999?
    a. 60.0%
    b. 69.0%
    c. 58.4%
    d. 71.4%

32. What was the total number of registered voters for the five towns in 1999?
    a. 12,996
    b. 36,836
    c. 23,840
    d. 23,945

33. What was the average number voting in Lansing from 1998 through 2000?
    a. 4,950
    b. 2,443
    c. 4,951
    d. 2,445

34. How many registered voters did the town of Meadowbrook lose from 1998 to 2000?
    a. 649
    b. 874
    c. 542
    d. 8,975

35. What was the percentage change in the number registered in East Bay from 1997 to 1998?

    a. 5%

    b. 50%

    c. 90%

    d. -5%

36. What is the value of A?

    a. 23,945

    b. 12,234

    c. 12,336

    d. 12,996

Use the tables on this page and the next page to answer questions 37 through 42.

Distribution of Health-Related Brochures

Subject	Budget Code	Number of Brochures Distributed			
		Public Schools	Hospitals	Public Clinics	Youth Centers
Smoking	891				
1999		5,900	3,200	6,500	6,500
2000		5,900	4,000	7,000	7,000
Drug Abuse	234				
1999		8,700	3,900	7,000	8,000
2000		9,000	4,200	7,000	8,000
Alcohol Abuse	980				
1999		6,200	5,300	5,800	6,200
2000		5,000	5,000	5,000	5,000
STDs*	215				
1999		4,200	6,900	8,000	3,900
2000		5,200	7,100	8,000	4,000
Seat Belt Use	357				
1999		2,000	3,600	4,200	2,200
2000		3,000	4,000	4,000	3,000
Drunk Driving	980				
1999		6,200	5,300	5,800	6,200
2000		6,500	5,800	5,800	7,000
High Blood Pressure	375				
1999		0	8,000	8,000	0
2000		0	9,000	9,000	0

*STDs = Sexually transmitted diseases

Distribution of Health-Related Brochures, 1999–2000

Subject	Number of Brochures Distributed				
	Hospitals	Public Clinics	Youth Centers	Public Schools	Total
Drug Abuse	8,100	14,000	16,000	17,700	55,800
Seat Belt Use					
STDs				A	
Smoking		B			
Alcohol Abuse					
Drunk Driving					
High Blood Pressure					C

For each of the following questions, select the letter (a, b, c, d) that represents the best choice of the four possible answers.

37. What is the value of A?

    a. 215

    b. 4,200

    c. 5,200

    d. 9,400

38. How many publications were charged to budget code 357 during 1999 and 2000?

    a. 12,000

    b. 16,000

    c. 34,000

    d. 26,000

39. What is the value of B?

    a. 5,900

    b. 11,800

    c. 13,500

    d. 6,500

40. How many publications were charged to budget code 980 during 1999 and 2000?

    a. 92,100

    b. 48,600

    c. 23,500

    d. 43,500

41. What is the value of C?

    a. 16,000

    b. 34,000

    c. 17,000

    d. 34,375

42. How many more publications on smoking were distributed in 2000 than in 1999?

    a. 1,000

    b. 800

    c. 500

    d. 1,800

Answer Key

1. b	15. d	29. b
2. b	16. b	30. b
3. b	17. c	31. d
4. a	18. d	32. c
5. c	19. b	33. b
6. c	20. c	34. b
7. c	21. c	35. a
8. c	22. d	36. d
9. d	23. b	37. d
10. d	24. d	38. d
11. b	25. c	39. c
12. b	26. a	40. a
13. c	27. d	41. b
14. c	28. b	42. d

Answers and Explanations

1. The answer is choice b. Questions about record keeping often ask you to transfer numbers from one table to another. Sometimes you need to add two or more numbers and enter the result in another table. To answer this question, you need to add four numbers from the table on page 2:

Homeowners in Denton who have lived there for less than two years	597
Non-homeowners in Denton who have lived there for less than two years	405
Homeowners in Denton who have lived there for two to five years	682
Non-homeowners in Denton who have lived there for two to five years	451
	2,135

   To answer questions like this, you need to understand the tables you are given, and you need to think carefully about what you are being asked to do.

2. The answer is choice b. To answer this question, you need to use two columns in the table on page 2: the column headed "10–14" and the column headed "15 or more." For each of the four villages given as possible answers, find the total number of homeowners and non-homeowners in these two columns.

	10–14		15 or more		Total
Hadley					
Homeowners	1332		689		
Non-Homeowners	343		195		
	1675	+	884	=	2559
Burton					
Homeowners	1437		995		
Non-Homeowners	408		135		
	1845	+	1130	=	2975
Enfield					
Homeowners	470		327		
Non-Homeowners	243		69		
	713	+	396	=	1109
Fairfield					
Homeowners	1209		826		
Non-Homeowners	350		230		
	1559	+	1056	=	2615

3. The answer is choice b. To answer this question, you need to add four numbers from the table on page 2:

Homeowners in Alberta who have lived there for 10–14 years	1,209
Non-homeowners in Alberta who have lived there for 10–14 years	243
Homeowners in Alberta who have lived there for 15 years or more	675
Non-homeowners in Alberta who have lived there for 15 years or more	129
	2,256

4. The answer is choice a. To answer this question, you need to know two things: the total number of residents in Hadley and the number who have lived there for five years or less. The table on page 3 gives you the information you need. To find the total number of residents, add:

Number who have lived in Hadley five years or less	1,440
Number who have lived in Hadley for 6–9 years	1,335
Number who have lived in Hadley for 10 years or more	2,559
	5,334

. Divide the number who have lived in Hadley for five years or less by the total number of residents (1440 ÷ 5334). The answer will be in decimal format: .27. This is equivalent to 27%.

5. The answer is choice c. Before you answer this question, check to see that all four of the villages given as possible answers are in Hope County (see the table on page 3). In fact, Fairfield is not in Hope County, so you can eliminate it right away as a possible answer. For the three villages that remain, add the number of ***homeowners*** in each column of the table on page 2.

	Less than 2	2–5	6-9	10-14	15 or more	Total
Hadley	293	707	1,084	1,332	689	4,105
Denton	597	682	1,398	1,067	921	4,665
Carlisle	118	547	740	1,008	602	3,015

6. The answer is choice c. To answer this question, you need to look at three columns in the table on page 2:

	Less than 2	2–5	6–9	Total
Hadley	293	707	1,084	2,084
Fairfield	741	1,587	1,344	3,672
Enfield	104	361	502	967
Alberta	253	765	1,054	2,072

Be sure to use only the numbers for homeowners. The town with the fewest homeowners who have lived there for 9 years or less is Enfield.

7. The answer is choice c. To determine the number used, add the beginning amount and the amount received and then subtract the ending amount.

amt used = beginning amt + amt received – ending amt

9 reams = 10 reams + 5 reams – 6 reams

8. The answer is choice c. Only 14 pens were used during the previous month.

amt used = beginning amt + amt received – ending amt

14 = 20 + 12 –18

You have 18 pens on hand, so you have more than enough for the current month. Therefore, you don't have to order any.

9. The answer is choice d. You used 34 pads during the previous month.

amt used = beginning amt + amt received – ending amt

34 = 24 + 20 –10

You have 10 on hand, so you will need to order 24 more.

amt to order = amt used – ending amt

24 = 34 –10

But you are required to order pads in quantities of 10, so you will have to order 30. At $.75 per pad, 30 pads will cost $22.50.

10. The answer is choice d. To answer this question, you need to fill in the missing numbers in the table for each of the possible answers.

item	quantity	beginning amt	amt received	ending amt	amt used	amt to order	unit price	total price
pencils	20	15	20	5	30	40	.08	3.20
paper clips	3 boxes	2 boxes	3 boxes	2 boxes	3 boxes	3 boxes	.62	1.86
copy paper	5 reams	10 reams	5 reams	6 reams	9 reams	5 reams	4.25	21.25
legal pads	10	24	20	10	34	30	.75	22,50

You will spend the most on legal pads ($22.50) and the second most on copy paper ($21.25).

11. The answer is choice b. You used 14 binders during the previous month.

amt used = beginning amt + amt received – ending amt

$$14 = 8 + 12 - 6$$

You have 6 on hand, so you will need 8 more.

amt to order = amt used – ending amt

$$8 = 14 - 6$$

But the minimum number you can order is 12.

12. The answer is choice b. You used 3 boxes of file folders during the month.

amt used = beginning amt + amt received – ending amt

$$3 = 2 + 2 - 1$$

You have 1 box on hand, so you will need 2 more.

amt to order = amt used – ending amt

$$2 = 3 - 1$$

At $6.29 per box, 2 boxes will cost $12.58.

13. The answer is choice c. The question asks you to find the value of A, which is the amount spent on salaries and compensation in the second half of 1999. To find the answer, you need to add four numbers:

amount spent on salaries in the third quarter:	91,023
amount spent on other compensation in the third quarter:	22,865
amount spent on salaries in the fourth quarter:	94,667
amount spent on other compensation in the fourth quarter:	25,679
	234,234

To answer this question and all the other questions in this section, you need to use only the data for 1999. The table on page 9 also gives you data for 2000, but you do not need to use it. Test developers often include unnecessary information such as this to see if you are reading the questions carefully.

14. The answer is choice c. To find the answer, you need to find the total amount spent on health insurance in the second half of 1999.

	3rd Quarter	4th Quarter
Medical	7,813	7,499
Dental	1,200	1,300
Vision	987	1,201
TOTAL	10,000	10,000

The total amount spent on all health insurance in the second half is $20,000 ($10,000 in the third quarter plus $10,000 in the fourth quarter).

To find the amount spent on dental insurance in the second half, add the amount from the third quarter and the amount from the fourth quarter:

$$12{,}000 + 1{,}300 = 2{,}500$$

Divide the amount spent on dental insurance by the total spent on health insurance:

$$2{,}500 / 20{,}000 = .125$$

Expressed as a percentage, .125 = 12.5%.

15. The answer is choice d.

To find the amount spent on life insurance in the first half of 1999, add the amount spent in the first quarter and the amount spent in the second quarter:

$$728 + 765 = 1493$$

To find the amount spent on life insurance in the second half of 1999, add the amount spent in the third quarter and the amount spent in the fourth quarter:

$$736 + 799 = 1535$$

To find the increase, subtract the amount spent in the first half from the amount spent in the second half:

$$1535 - 1493 = 42$$

16. The answer is choice b. To answer this question, you have to notice that the travel and living category includes three things: transportation, lodging, and meals. To find the amounts spent in the second half, add the amounts spent in the third and fourth quarters.

	3rd Quarter	4th Quarter	Total for 2nd half
Health Insurance			
Medical			
Dental	1,200	1,300	2,500
Vision			
Life Insurance	736	799	1,535
Travel and Living			
Transportation	1,409	1,908	3,317
Lodging	909	1,011	1,920
Meals	565	890	1,455
			6,692
Pensions	728	829	1,557

17. The answer is choice c.

To find the total spent on salaries in the first half of 1999, you need to add the amount spent in the first quarter and the amount spent in the second quarter:

amount spent on salaries in the first quarter:	92,044
amount spent on salaries in the second quarter:	93,542
	185,586

To find the total spent on salaries in the second half of 1999, you need to add the amount spent in the third quarter and the amount spent in the fourth quarter:

amount spent on salaries in the third quarter:	91,023
amount spent on salaries in the fourth quarter:	94,667
	185,690

To find the increase in the cost of salaries, subtract the amount spent in the first half from the amount spent in the second half:

$$185{,}690 - 185{,}586 = 104$$

To find the percentage increase, divide the difference, 104, by the amount spent in the first half:

$$104 \div 185{,}586 = .00056$$

Expressed as a percent, .00056 = .056%

18. The answer is choice d. To find the answer, you need to find the amount spent in each half for the four possible answers.

- To find the amount spent in the first half, add the amount spent in the first quarter and the amount spent in the second quarter.
- To find the amount spent in the second half, add the amount spent in the third quarter and the amount spent in the fourth quarter.
- Remember that travel and living includes three sub-categories: transportation, lodging, and meals.

Subtract the amount for the first half from the amount for the second half to find the change in expenses.

	1st Half	2nd Half	Change
Life Insurance	1,493	1,535	+42
Training	1,452	1,445	–7
Travel and Living	4,894	6,692	+1,798
Pensions	1,553	1,557	+4

19. The answer is choice b. To answer this question, you need to calculate the enrollment in art classes for each grade. There are two art classes listed in the first table: (1) Drawing and Painting and (2) Sculpture. When you add the enrollments in these classes for each grade, you get the following:

    9th grade: 24

    10th grade: 58

    11th grade: 56

    12th grade: 48

    The 10th grade has the largest enrollment in art classes.

20. The answer is choice c. To answer this question, you first need to find the total enrollment of 10th graders in foreign language classes. To find this number, add the following numbers from the first table:

French I	34
French II	98
French III	23
Spanish I	39
Spanish II	99
Spanish III	26
TOTAL	319

    Now you need to find the total enrollment for 10th grades in all elective courses. Add all the numbers in the column headed "10th grade" in the first table. The total is 638. To find the percentage of total enrollment represented by enrollment in foreign languages, divide 319 (enrollment in foreign languages) by 638 (total enrollment in electives). The answer is .5. Expressed as a percent, .5 is 50%.

21. The answer is choice c. Answering this question requires two steps.

    - Calculate the total enrollment for 12th graders in all French classes. To do this, add the number enrolled in French I, French II, and French III. The total is 80.
    - Divide the number of 12th graders enrolled in French II (20) by the total number of 12th graders enrolled in all French classes (80).

    The answer is .25. Expressed as a percent, .25 equals 25%.

22. The answer is choice d. This question asks you to find the value of A, which is the total number of 11th graders enrolled in all French classes. To find the answer add the number of 11th graders enrolled in French I (5), French II (45), and French III (81). (5 + 45 + 81 = 131)

23. The answer is choice b. To answer this question, you need to calculate the total number of 11th graders enrolled in each of the four electives given as possible answers. When you do this calculation, you get the following results:

Spanish:	148
Driver's Education:	205
Technology:	142
Art:	56

24. The answer is choice d. To answer this question, you need to find the total enrollment in Spanish courses for each grade. Use the numbers from the first table.

Course	9th grade	10th grade	11th grade	12th grade
Spanish				
Spanish I	115	39	7	8
Spanish II	38	99	52	42
Spanish III	0	26	89	50
Total	153	164	148	100

25. The answer is choice c. The questions in this section require careful attention to detail. The award dates for the four possible answers are:

A217-002	June 21
D987-022	August 20
A271-001	July 2
C671-009	August 8

Contract A271-001 is the only one with an award date in July.

26. The answer is choice a. Three contracts have start dates in August: A271-001, C319-030, and C671-009. Of these three, only one (A271-001) has a proposal due in May.

27. The answer is choice d. The proposals for both C319-030 and C671-009 are due in July.

- Choice a is incorrect because the proposals for both A271-001 and A217-002 are due in May.
- Choice b is incorrect because the proposals for D998-001 and F672-009 are due in September.
- Choice c is incorrect because the proposal for B001-451 is due in June.

28. The answer is choice b. Three contracts have an award date in July: A271-001, B001-451, and C319-030. Of these three, B001-451 has the earliest scheduled start date. Contract A217-002 has an earlier scheduled start date, but it does not have an award date in July.

29. The answer is choice b. For contract D998-001, the "RFP Issued" date is July 1 and the "Proposals Due" date is September 1. These dates are two months apart.

30. The answer is choice b. Two contracts have an award date in August: C671-009 and D987-022. There are eight contracts listed on the table. To find the percentage of contracts that have an award date in August, divide 2 by 8. The answer is .25. Expressed as a percent, .25 equals 25%.

31. The answer is choice d. To find the percentage of registered voters in Carson who voted in 1999, divide the number who voted (2,361) by the number of registered voters (3,309). The answer is .714 or 71.4%.

32. The answer is choice c. To find the answer, you need to add the number of registered voters in the five towns in 1999.

Carson	3,309
Meadowbrook	9,651
East Bay	1,901
Bolivar	3,999
Lansing	4,980
TOTAL	23,840

33. The answer is choice b. To find the average number voting for these three years, first add the number voting for each year:

1998:	2,223	
1999:	2,502	
	2000:	2,604
	TOTAL	7,329

To find the average, divide the total (7,329) for all three years by 3. The answer is 2,443.

34. The answer is choice b. To find the answer, subtract the number of registered voters in Meadowbrook in 2000 (9,002) from the number of registered voters in 1998 (9,876). When answering questions such as this, be sure to choose the right town, the right years, and the right data (number registered not number voting).

35. The answer is choice a. This question asks you to find the percentage change in the number of registered voters in East Bay from 1997 to 1998. To find the answer, you first have to find the change in the number of registered voters.

1998:	1,890	
1997:	–1,800	
	TOTAL	90

There were 90 more registered voters in 1998. To find the percentage increase, divide 90 by the number of registered voters in 1997 (1,800). The answer is .05. Expressed as a percent, .05 equals 5%.

36. The answer is choice d. This question asks you to find the value of A, which is the total number voting in the five towns in 1999. To find the answer, go to the column on the first table headed "1999" and add the number voting for the five towns.

Carson	2,361
Meadowbrook	5,110
East Bay	928
Bolivar	2,095
Lansing	2,502
TOTAL	12,996

37. The answer is choice d. This question asks you to find the value of A, which is the number of brochures about STDs distributed to public schools in 1999 and 2000. To find the answer, you need to add these numbers from the first table:

Brochures distributed in 1999:	4,200
Brochures distributed in 2000:	5,200
	9,400

38. The answer is choice d. The publications charged to budget code 357 are in the "Seat Belt Use" row in the first table. To find the answer, you need to add these numbers:

Subject	Public Schools	Hospitals	Public Clinics	Youth Centers	Total
Seat Belt Use					
1999	2,000	3,600	4,200	2,200	12,000
2000	3,000	4,000	4,000	3,000	14,000
					26,000

39. The answer is choice c. This question asks you to find the value of B, which is the number of brochures about smoking distributed to public clinics in 1999 and 2000. To find the answer, you need to add these numbers from the first table:

Brochures distributed in 1999:	6,500
Brochures distributed in 2000:	7,000
	13,500

40. The answer is choice a. Budget code 980 was charged for brochures on two subjects: Alcohol Abuse and Drunk Driving. Find the total number of brochures distributed for both subjects in 1999 and 2000.

Subject	Public Schools	Hospitals	Public Clinics	Youth Centers	Total
Alcohol Abuse					
1999	6,200	5,300	5,800	6,200	23,500
2000	5,000	5,000	5,000	5,000	20,000
Drunk Driving					
1999	6,200	5,300	5,800	6,200	23,500
2000	6,500	5,800	5,800	7,000	25,100
Total					92,100

41. The answer is choice b. This question asks you to find the value of C, which is the total number of brochures distributed on high blood pressure in 1999 and 2000. To find the answer, add the number of brochures on high blood pressure sent to public schools, hospitals, public clinics, and youth centers.

Subject	Public Schools	Hospitals	Public Clinics	Youth Centers	Total
High Blood Pressure					
1999	0	8,000	8,000	0	16,000
2000	0	9,000	9,000	0	18,000
					34,000

42. The answer is choice d. First, find the total number of brochures on smoking distributed for each year.

Subject	Public Schools	Hospitals	Public Clinics	Youth Centers	Total
Smoking					
1999	5,900	3,200	6,500	6,500	22,100
2000	5,900	4,000	7,000	7,000	23,900

To find out how many more publications were distributed in 2000, subtract the total for 1999 from the total for 2000.

Brochures distributed in 2000:	23,900
Brochures distributed in 1999:	22,100
	1,800