$\qquad$
Time $\qquad$
Rank $\qquad$

# ADVANCED SPREADSHEET APPLICATIONS (07) 

Sponsored by the American Institute for Certified Public Accountants.
AICPA

## Regional- 2010

$\qquad$ (715)

Failure to adhere to any of the following rules will result in disqualification:

1. Contestant must hand in this test booklet and all printouts. Failure to do so will result in disqualification.
2. No equipment, supplies, or materials other than those specified for this event are allowed in the testing area. No previous BPA tests and/or sample tests or facsimile (handwritten, photocopied, or keyed) are allowed in the testing area.
3. Electronic devices will be monitored according to ACT standards.

No more than ten (10) minutes orientation
No more than 90 minutes testing time
No more than ten (10) minutes wrap-up

Property of Business Professionals of America.
May be reproduced only for use in the Business Professionals of America
Workplace Skills Assessment Program regional competition.

## GENERAL INSTRUCTIONS

1. Put your contestant number and printout number in the right section of the footer on each printout. Your name or initials should NOT appear on any work you submit.
2. If you finish before the end of the testing time, notify the proctor. Time may be a factor in determining the winner in the event of a tie.
3. When turning in your contest, the jobs should be arranged in printout order.
ADVANCED SPREADSHEET APPLICATIONS

REGIONAL 2010

PAGE 3 of 5
PRINTOUT 1
Contestant \# in the right section of the footer ..... 5
Landscape orientation ..... 5
Arial, 11 point font ..... 5
Title in Comic Sans, 14 points, centered, and bolded ..... 10
Blank space between title and column headings ..... 5
Columns wide enough to show all information (5 pts. each) ..... 40
Column headings centered, underlined (5 points each) ..... 80
Columns B, C, D, F, H in wrap text ..... 25
Gridlines visible ..... 5
Data centered in Columns C, E (5 points each) ..... 10
Sort alphabetically by bank name ..... 5
Typos ( 0 errors 40 points, 1 error 36 points, 2 errors 28 points, 3 or more errors 0 ..... 40
points)
TOTAL PRINTOUT 1 ..... 235
PRINTOUT 2
Contents of all columns visible (5 points each) ..... 40
Data in Column H centered ..... 5
Answers in Column D, F, G are correct (5 points each) ..... 135
Label "Highest Savings Earnings" in A14 ..... 5
Label "Highest CD Earnings" in A15 ..... 5
Answer in D14 correct ..... 5
Answer in H 15 correct ..... 5
TOTAL PRINTOUT 2 ..... 200
PRINTOUT 3
"Shay's Fund" is chart title ..... 5
Column chart used ..... 10
Legend to right ..... 10
All X axis information viewable ..... 10
Chart on separate sheet ..... 5
Contestant \# in the right section of the footer ..... 10
TOTAL PRINTOUT 3 ..... 50
PRINTOUT 4
All formulas visible in cells (5 points each) ..... 25
=Max used for D14 ..... 10
=Max used for H15 ..... 10
=FV used for Column D calculation (10 points each) ..... 90
$=$ SUM or $=\left(E^{*} F\right)$ used for Column G (5 points each) ..... 45
$=$ Sum or $=(F+G)$ for Column H (5 points each) ..... 45
Data fits on one page ..... 5
TOTAL PRINTOUT 4 ..... 230
TOTAL ..... 715

## ADVANCED SPREADSHEET APPLICATIONS <br> REGIONAL 2010 <br> PAGE 4 of 5

Your cousin Shay wants to add equipment to the city park for use by special needs children such as her younger brother and sister. She would like to begin making regular deposits into a savings account or to purchase a one-year CD. She has gathered information from local banks but needs your help organizing the information into a spreadsheet to determine which one will get her to her goal more quickly. She wants to determine how much can be earned in a 12 month period.

Job 1

- Change the font to Arial, 11 points
- Change orientation to landscape
- Create the spreadsheet below leaving a blank row before adding the column headings
- Name the spreadsheet "Shay's Fund"; change the title font to Comic Sans, 14 points, and bold
- Center the title across the spreadsheet
- Center and underline the column headings; use wrap text
- Center the data in Columns C and E
- Sort the spreadsheet according to the bank name in alphabetical order
- Print the spreadsheet with gridlines and column and row headings showing-PRINTOUT 1

|  | A | B | C | D | E | F | G | H |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Shay's Fund |  |  |  |  |  |  |  |
| 2 | Bank | Deposit <br> Amount | Savings Rate | Savings <br> Earnings | CD Rate | Minimum CD Deposit | CD Earnings | Total CD <br> Earnings |
| 3 | Travian | \$625.00 | 1.98\% |  | 2.57\% | \$2,500.00 |  |  |
| 4 | Delton | \$625.00 | 1.49\% |  | 2.23\% | \$2,500.00 |  |  |
| 5 | Manna | \$625.00 | 1.68\% |  | 2.10\% | \$2,500.00 |  |  |
| 6 | Beltway | \$625.00 | 1.19\% |  | 1.98\% | \$2,500.00 |  |  |
| 7 | Season | \$625.00 | 0.49\% |  | 1.70\% | \$2,500.00 |  |  |
| 8 | Arness | \$625.00 | 0.30\% |  | 1.90\% | \$2,500.00 |  |  |
| 9 | Harris | \$625.00 | 1.04\% |  | 1.78\% | \$2,500.00 |  |  |
| 10 | Coronado | \$625.00 | 0.78\% |  | 1.50\% | \$2,500.00 |  |  |
| 11 | Davis | \$625.00 | 0.39\% |  | 1.33\% | \$2,500.00 |  |  |

Job 2

- In Column D, using quarterly compounding, calculate the "Savings Earnings" at each of the banks (hint: use future value function)
- In Column G, calculate the "CD Earnings "
- In Column H, calculate the "Total CD Earnings"
- In A14, enter the label "Highest Savings Earnings"
- In D14, calculate the highest "Savings Earnings"
- IN A15, enter the label "Highest CD Earnings"
- In H15, calculate the highest "Total CD Earnings"
- Print the spreadsheet-PRINTOUT 2


## ADVANCED SPREADSHEET APPLICATIONS

REGIONAL 2010
PAGE 5 of 5

## Job 3

- Create a column chart of Columns A, D, H
- Use the same title for the chart as the spreadsheet
- Use a legend placed to the right
- Place on a new sheet
- Enter your contestant number in right section of the footer
- Print the spreadsheet-PRINTOUT 3

Job 4

- Reveal formulas
- Autofit columns to their contents and make sure spreadsheet fits on one page
- Print the spreadsheet-PRINTOUT 4


## ADVANCED SPREADSHEET APPLICATIONS (07)

## Regional- 2010

## KEY

## Total Points

## Judges/Graders:

Please double-check and verify all scores!

Property of Business Professionals of America.
May be reproduced only for use in the Business Professionals of America
Workplace Skills Assessment Program competition.


## SCORING

Graders: Points are all or nothing. If an item is not complete, the contestant gets zero points. Some items are counted partially - specific instructions are given.

| Count off for typos only on the first printout. | Points <br> Possible |
| :--- | ---: |
| PRINTOUT 1 | 5 |
| Contestant \# in the right section of the footer | 5 |
| Landscape orientation | 5 |
| Arial, 11 point font | 10 |
| Title in Comic Sans, 14 points, centered, and bolded | 5 |
| Blank space between title and column headings | 40 |
| Columns wide enough to show all information (5 pts. each) | 80 |
| Column headings centered, underlined (5 points each) | 25 |
| Columns B, C, D, F, H in wrap text | 5 |
| Gridlines visible | 10 |
| Data centered in Columns C, E (5 points each) | 5 |
| Sort alphabetically by bank name | 40 |
| Typos (0 errors 40 points, 1 error 36 points, 2 errors 28 points, 3 or more errors 0 |  |
| points) | 235 |
| TOTAL PRINTOUT 1 |  |

## PRINTOUT 2

Contents of all columns visible (5 points each) 40
Data in Column H centered 5

Answers in Column D, F, G are correct (5 points each) 135
Label "Highest Savings Earnings" in A14
Label "Highest CD Earnings" in A15
Answer in D14 correct
Answer in H15 correct
5

TOTAL PRINTOUT 200

## PRINTOUT 3

"Shay's Fund" is chart title $\quad 5$
Column chart used 10
Legend to right 10
All $X$ axis information viewable 10
Chart on separate sheet 5
Contestant \# in the right section of the footer 10
TOTAL PRINTOUT 3 50

## PRINTOUT 4

All formulas visible in cells (5 points each) 25
$=$ Max used for D14 10
=Max used for H15 10
$=F V$ used for Column D calculation (10 points each) 90
$=$ SUM or $=\left(E^{*} F\right)$ used for Column G (5 points each) 45
$=$ Sum or $=(F+G)$ for Column H (5 points each) 45
Data fits on one page 5
TOTAL PRINTOUT $4 \quad 230$


## PRINTOUT 1

|  | A | B | C | D | E | F | G | H |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Shay's Fund |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |
| 3 | Bank | Deposit Amount | Savings Rate | Savings <br> Earnings | CD Rate | Minimum CD Deposit | CD Earnings | Total CD Earnings |
| 4 | Arness | \$625.00 | 0.30\% |  | 1.90\% | \$2,500.00 |  |  |
| 5 | Beltway | \$625.00 | 1.19\% |  | 1.98\% | \$2,500.00 |  |  |
| 6 | Coronado | \$625.00 | 0.78\% |  | 1.50\% | \$2,500.00 |  |  |
| 7 | Davis | \$625.00 | 0.39\% |  | 1.33\% | \$2,500.00 |  |  |
| 8 | Delton | \$625.00 | 1.49\% |  | 2.23\% | \$2,500.00 |  |  |
| 9 | Harris | \$625.00 | 1.04\% |  | 1.78\% | \$2,500.00 |  |  |
| 10 | Manna | \$625.00 | 1.68\% |  | 2.10\% | \$2,500.00 |  |  |
| 11 | Season | \$625.00 | 0.49\% |  | 1.70\% | \$2,500.00 |  |  |
| 12 | Travian | \$625.00 | 1.98\% |  | 2.57\% | \$2,500.00 |  |  |

## PRINTOUT 2

| Shay's Fund |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Deposit | Savings | Savings |  | Minimum CD | CD | Total CD |
| Bank | Amount | Rate | Earnings | CD Rate | Deposit | Earnings | Earnings |
| Arness | \$625.00 | 0.30\% | \$2,502.81 | 1.90\% | \$2,500.00 | \$47.50 | \$2,547.50 |
| Beltway | \$625.00 | 1.19\% | \$2,511.18 | 1.98\% | \$2,500.00 | \$49.50 | \$2,549.50 |
| Coronado | \$625.00 | 0.78\% | \$2,507.32 | 1.50\% | \$2,500.00 | \$37.50 | \$2,537.50 |
| Davis | \$625.00 | 0.39\% | \$2,503.66 | 1.33\% | \$2,500.00 | \$33.25 | \$2,533.25 |
| Delton | \$625.00 | 1.49\% | \$2,514.00 | 2.23\% | \$2,500.00 | \$55.75 | \$2,555.75 |
| Harris | \$625.00 | 1.04\% | \$2,509.77 | 1.78\% | \$2,500.00 | \$44.50 | \$2,544.50 |
| Manna | \$625.00 | 1.68\% | \$2,515.79 | 2.10\% | \$2,500.00 | \$52.50 | \$2,552.50 |
| Season | \$625.00 | 0.49\% | \$2,504.60 | 1.70\% | \$2,500.00 | \$42.50 | \$2,542.50 |
| Travian | \$625.00 | 1.98\% | \$2,518.62 | 2.57\% | \$2,500.00 | \$64.25 | \$2,564.25 |
| Highest Savings Earnings |  |  | \$2,518.62 |  |  |  |  |
| Highest CD Earnings |  |  |  |  |  |  | \$2,564.25 |

ADVANCED SPREADSHEET APPLICATIONS
KEY
REGIONAL 2010
PAGE 4 of 4
PRINTOUT 3


PRINTOUT 4

|  | A | B | C | D | E | F | G | H |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Shay's Fund |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |
| 3 | Bank | Deposit Amount | Savings Rate | Savings Earnings | CD Rate | Minimum CD Deposit | CD Earnings | Total CD Earnings |
| 4 | Arness | 625 | 0.003 | =FV(C4/4,4,-B4) | 0.019 | 2500 | $=$ SUM (E4*F4) | =SUM (F4:G4) |
| 5 | Beltway | 625 | 0.0119 | =FV(C5/4,4,-B5) | 0.0198 | 2500 | =SUM (E5*F5) | =SUM (F5:G5) |
| 6 | Coronado | 625 | 0.0078 | $=\mathrm{FV}(\mathrm{C} 6 / 4,4,-\mathrm{B6})$ | 0.015 | 2500 | =SUM (E6*F6) | =SUM (F6:G6) |
| 7 | Davis | 625 | 0.0039 | =FV(C7/4,4,-B7) | 0.0133 | 2500 | =SUM (E7*F7) | =SUM (F7:G7) |
| 8 | Delton | 625 | 0.0149 | =FV(C8/4,4,-B8) | 0.0223 | 2500 | =SUM (E8*F8) | =SUM (F8:G8) |
| 9 | Harris | 625 | 0.0104 | =FV(C9/4,4,-B9) | 0.0178 | 2500 | =SUM (E9*F9) | $=$ SUM (F9:G9) |
| 10 | Manna | 625 | 0.0168 | =FV(C10/4,4,-B10) | 0.021 | 2500 | =SUM (E10*F10) | =SUM (F10:G10) |
| 11 | Season | 625 | 0.0049 | $=\mathrm{FV}(\mathrm{C} 11 / 4,4,-\mathrm{B11})$ | 0.017 | 2500 | =SUM (E11*F11) | $=$ SUM (F11:G11) |
| 12 | Travian | 625 | 0.0198 | $=\mathrm{FV}(\mathrm{C} 12 / 4,4,-\mathrm{B} 12)$ | 0.0257 | 2500 | =SUM (E12*F12) | $=$ SUM (F12:G12) |
| 13 |  |  |  |  |  |  |  |  |
| 14 | Highest Savings Earnings |  |  | =MAX(D4:D12) |  |  |  |  |
| 15 | Highest CD Earnings |  |  |  |  |  |  | $=\mathrm{MAX}(\mathrm{H} 4: \mathrm{H} 12)$ |

