



Educating the leaders of tomorrow

COMPUTER APPS



High School Practice Packet
SPRING - 2022



UIL Computer Applications Practice Packet S22

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~ President Hexco Inc., Linda Tarrant

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COMPUTER APPS PRACTICE PACKET



Computer Apps Practice Packet Contents - 6 Tests
Each test in this packet should include the following

STUDENT MATERIALS	INSTRUCTOR MATERIALS
Tiebreaker Instructions	Scoring Sheet(s)
Tiebreaker Test	Sample Printout(s)
Test	Tiebreaker Score Sheet
2022 Starter Files (as needed)	Tiebreaker WPM key

Practice Packet S22

Test A	Test B
Excel Spreadsheet Printout	Database with Report
Simplified Memo with Chart and Formulas	Export to Word with Labels
Tiebreaker – Left-bound Report	Tiebreaker – Unbound Report

Test C	Test D
Database with Report	Database; Export to Excel with Chart; Personal Business Letter with Formulas
Excel Pivot Table; Simplified Memo with table and Formulas	Database with Report
Tiebreaker – Business Report	Tiebreaker – Business Report

Test E	Test F
Database with Report; Export to Excel Spreadsheet	Database with Report; Export to Excel Spreadsheet
Simplified Memo with Table and Formulas	Excel Spreadsheet Printout with Formulas
Tiebreaker – Unbound Report with Quotation	Tiebreaker – Left-bound report with

UIL Computer Applications Tests Instructions and Scoring

I. Preparation

A. Setup

1. Contestants should set up their equipment during the 30 to 45 minutes prior to the scheduled time for the contest, and test to be sure all hardware and software components are working, and leave all applications open at the start of the contest.
2. Students from the same school may not sit adjacent to each other.
3. Roll is taken, and adjustments are made for alternates 10 minutes before the scheduled contest time.
4. Coaches are asked to leave 5 minutes before the scheduled time for the contest, and they are given a copy of the test to take while students are taking the test.
 - a. Coaches take tests individually or in groups at a different location than students.
 - b. Coaches gain insight of areas that will be complicated to grade by taking the test.
5. Be certain all students' work spaces are cleared of everything except computer, printer, optional keyboard, keypad and mouse, and writing instruments (i.e. no *Handbooks* or printed materials).
6. **If the contest uses downloaded Starter Files, be sure all students have the files or allow them to copy the files prior to starting the contest from a flash drive.**

B. Equipment

1. Each student must have a laptop/notebook computer, printer, and saving device, such as a floppy drive, a thumb/flash drive, or a CD.
2. Competitors may have an external mouse, keyboard, and keypad, but not an external hard drive.
3. **No equipment may be shared by students during contests, and networked systems may not be used.**

C. Software

1. Microsoft Office 2010, 2013 or 2016 or a more current version, but no older version.
2. Spreadsheet elements must be done in Excel; database elements, in Access; and documents, in Word.
3. Graders may check students' saving device to verify that the appropriate application and element was used for a given printout, and if the correct application/element was not used, that printout is not graded. (i.e. *If a report is requested in Access, printing a table in Access or Excel is not acceptable.*)

II. Contest

A. 5-minute Tiebreaker

1. Tiebreakers are distributed to all students face down. (Manila envelopes are passed out, if you want all tests to be collected into an envelope to be turned in at contest end as is done at the State Meet.)
2. To start the tiebreaker, the director should ask all competitors to turn over their tiebreaker and type until time is called for the 5 minute test without printing during the tiebreaker time period.
3. If a student finishes a tiebreaker, he/she starts again at the beginning to type as much as possible.
4. At the end of 5 minutes, the director should ask all students to stop typing and raise their hands.
5. If it is a large group, ask half of the competitors to print their files, and when these are complete, ask the other half to print their files.
6. Director should ask all competitors to put their Contestant number in the upper right corner of every page of their printed tiebreaker and on the manila envelope, if this is used.
7. Director should ask all competitors to pass their tiebreaker in to the officials (or ask them to put the document into their manila folder, as we do at State).

B. 30-minute Test

1. Pass out tests with cover sheets showing so students may not view the test, and ask assistants to watch that students do not view the test.
2. Preview time is 3 minutes beginning when the director asks students to open tests and begin.
3. Test is 30 minutes.
 - a. Test should start immediately after the 3-minute preview period.
 - b. Encourage students to save frequently.
 - c. Give a 10-minute warning when there are 10 minutes left in the contest.
 - d. Give a 2-minute warning where there are 2 minutes left in the contest.
 - e. At the end of 30 minutes, the director should stop the contest and ask all students to raise their hands until all printing has ceased.
 - f. Printouts initiated during the actual 30-minute contest will be graded. Printing may continue into the post-test period, but may not be initiated after time is called.

III. Grading

A. All coaches are required to grade.

1. If a coach cannot grade, it is the coach's responsibility to provide a substitute, preferably someone somewhat familiar with the contest, and advise the director that they are providing a substitute.
2. If a coach does not grade, the director can disqualify his/her student(s).

B. View all papers from each contestant.

1. Consider covering ALL contestant numbers with post-it notes.
2. Verify that all pages have contestant numbers. If a printout does not have identification, the director can try to determine which contestant produced it and grade it.
3. Verify that there are no "extra" printouts. If there are more than one of a given printout, simply take the first one you encounter as the one to grade, and mark an X on the "extra" printout.
4. If there is an "extra" printout with a chart or graph, verify that the document with which it is associated does not have a chart or graph already printed. If it does, mark X on the stand-alone chart and grade the chart/graph embedded in the document, even if it is from a template.
5. Paperclip all printouts to be graded together (and to the outside of the envelope if using these).
6. Tiebreakers remain in a separate stack or are returned to the student's envelope.

C. Sort tests into 1A, 2A, 3A, etc., and arrange coaches into like groups.

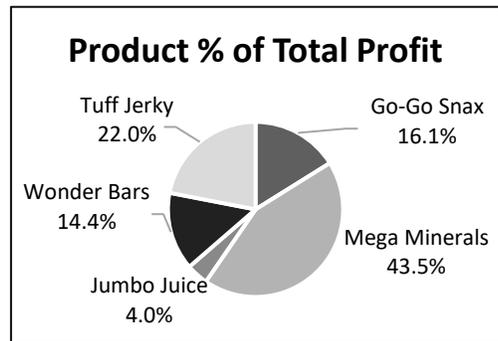
1. Give 1A tests to 3A coaches, 2A tests to 4A coaches, 3A tests to 5A coaches, 4A tests to 1A coaches, and 5A tests to 2A coaches or something of this ilk.
2. No coach should grade his/her own student's printouts.

D. Follow these grading rules.

1. Grading is all or nothing (i.e. each item on the score sheet is worth zero or the specified points).
2. Zero is the lowest possible grade for a printout. There are no negative grades for either printout.
3. Rulers, other than those in computer software, should not be used during the contest or during grading. Grading of centering, margins, etc. is a visual check. Do not attempt to be "ruler-exact." Do not fold papers to ascertain an exact center.
4. If there is a significant error on the test, notify the UIL state office or contact the State Contest Director for clarification. Mistakes in the keys should be corrected, and all printouts should be graded on correctness, not on an incorrect answer. That is, if a word is obviously misspelled (like *alternations* instead of *alterations*), credit is given for either spelling.
5. **Do not disqualify a printout on "mailability" standards.**
6. Allow about ¼" differential between requested margins and printed margins.
7. Right-justified data in a printout may vary between alphabetic data and numeric data with numeric data leaving the rightmost character position in numbers presumably for a minus sign if one were present.
8. Do not grade parts of a template that a contestant has not entered in a document. No credit is given for possible correct information in a document that was brought in as a template in the complimentary close, reference initials, or other parts of a document beyond where a contestant had entered information in the document.
9. If a contestant skipped to alter information at the bottom of a template for a document, such as a sender's name, then he/she effectively completed the entire document and gets credit for completing all paragraphs even if one or more are incomplete or missing altogether. In these cases, the entire document is graded for typos, and credit is given for correct data in the close, sender's name, etc.
10. If a contestant completed most of a paragraph and omitted a sentence or line, the student gets credit for completing the paragraph if it appears that he or she inadvertently skipped over a portion and continued typing beyond that part. Deduct typos for the omitted portion.

II. EXCEL CHART

- A. Select Cells A2 thru A7 and Cells H2 thru H7 and then create a 2-D pie chart with the following.
 - 1. Center the following title above chart in boldface type:
Product % of Total Profit
 - 2. In chart design tab, select change colors from the chart styles block and change to monochromatic.
 - 3. Under add chart element, select data labels and select more data label options. Under label options, show category name, value, and show leader lines; change separator to new line.
 - 4. Show data labels on outside ends of pie slices and show at least one leader line.
 - 5. Delete the legend.
 - 6. Format values as percentages with 1 decimal.
 - 7. Add a black border around chart area.
 - 8. Your chart should have the appearance above.
- B. Copy the chart to be used in **Part III** and paste it into the document as instructed below.
- C. Save the spreadsheet. *(If you don't have time to complete Part III, print the chart for some credit.)*



III. DOCUMENT WITH CHART

MAXIMUM 175

- A. Create a simplified memo with a 1 ½" top margin and the following specifications.
 - 1. Use today's date.
 - 2. Use the following addressee: Healthy Foods Investors
 - 3. Use the following subject in all caps: ANNUAL PROFIT ANALYSIS
 - 4. Show the following header ½" from the top edge of the paper and right justified on the right margin, replacing 99999 with your contestant number: (99999)-S22A-2
 - 5. Use the following paragraphs for the body, importing/embedding the formula from **Part I** and the chart/graph from **Part II** where indicated.

The following is a breakdown of percentage of total profit from our five product lines. Note the high percentage of total profit does not necessarily correspond to high profit margin but only reflect sales volume.

[Import/embed the chart/graph from Part II leaving one blank line before and after the chart.
Maintain specifications for chart/graph from Part II.
Be sure all labels, data and values are easily readable and not truncated.
Indent at least ½" and resize so that at least one leader line shows. Center between margins.]

These are the formulas used.

Total Sales: [copy formula for Total Sales from Cell E3 in Part I including the equal sign and paste here]

Total Profit: [copy formula for Total Profit from Cell F3 in Part I including the equal sign and paste here]

% of Total Profit: [copy formula for % of Total Profit from Cell H3 in Part I including equal sign and paste here]

TOTAL: [copy formula for TOTAL from Cell E9 in Part I including the equal sign and paste here]

AVERAGE: [copy formula for AVERAGE from Cell E10 in Part I including the equal sign and paste here]

HIGHEST: [copy formula for HIGHEST from Cell E11 in Part I including the equal sign and paste here]

LOWEST: [copy the formula for LOWEST from Cell E12 in Part I including the equal sign and paste here]

- 6. Vertically left align formula labels with no space between Paragraph 2 and formula labels.
 - 7. Use sender's name and title on one line: Sonny Daise, Director of Finances
 - 8. Use the reference initials: uil
- B. Save your document as a file named **S22A-2** and print it in portrait orientation on one page.

Computer Applications Invitational Test S22A - Score Sheet - Printout 2

II. DOCUMENT WITH CHART & FORMULAS		MAXIMUM			175
1	Format <i>(Grading for formatting, not correct data)</i>	PTS	GRD1	GRD2	GRD3
2	Printout in portrait orientation on 1 page in Calibri 12-point font	10			
3	Top margin 1 ½", left and right 1", and bottom at least 1"	5			
4	Header shown 1/2" from top of page and right aligned on right margin	5			
5	Everything blocked on the left, not counting header or chart	5			
6	Today's date shown on top margin	5			
7	3 lines between date and addressee and one line between addressee and subject and between subject and Paragraph 1	5			
8	3 blank lines between last paragraph and sender's name	5			
9	Senders name and title on one line with comma and space between	5			
10	1 blank line between sender's name and/or title and reference initials	5			
11	Format Total	50			
12	Body of Document/Chart/Formulas <i>(Grading for correct data from current test only, not formatting)</i>				
13	Add 5 points for each completed paragraph	10			
14	2-D pie chart shown	5			
15	2-D pie chart shown in gray scale	10			
16	2-D pie chart centered between margins and indented at least 1/2"	5			
17	5 slices shown on chart	10			
18	1 blank line between chart and Paragraph 1 and between chart and Paragraph 2 <i>(Part of Paragraph 2 must be present for credit.)</i>	5			
19	Title shown centered above chart in all caps in boldface type	5			
20	Data labels shown outside each pie slice	5			
21	Each data label shows Item and % of Profit on separate lines, no commas	10			
22	At least one leader line shown	5			
23	% of Profit shown in data label as a percent with 1 decimal	5			
24	No legend shown	5			
25	Black border shown around chart	5			
26	*Add 5 points for each formula matching key max	40			
27	Body of Document/Chart/Formulas Total	125			
28	❖ SUBTOTAL PRINTOUT	175			
29	SUBTRACT DEDUCTION Maximum	-40	-	-	-
30	<ul style="list-style-type: none"> ❖ Deduct 2 points for each typo or missing field in the printout, not otherwise graded. Header is subject to 2 typos if present and subject to 2 typos plus 5 point for location. *Formulas follow math rules, multipliers and addends can be in any order; parentheses are required in some formulas. ❖ Errors include misspelling, missed capitalization or punctuation, extra, double, or omitted words, values or rows, words that run together, incorrectly divided words, incorrect, wrapped or truncated words or values or other errors. ❖ Stop grading where student stopped typing. (i.e. if a student typed sender's name, he gets credit for all paragraphs completed even if they are incomplete or missing, but typos are taken for the entire document, including guide words for formulas.) 				
31	❖TOTAL PRINTOUT	175			
32	GRADERS' INITIALS				

Computer Applications Invitational Test S22C

General test instructions: Follow instructions to create printouts for this contest. When time is called, printouts will be graded. Calibri 12-point font must be used for Excel and Word documents, but Access default font size is acceptable for database reports.

I. DATABASE WITH REPORT

MAXIMUM 125

- A. Create a database named **S22C**.
- B. In design view, create a table named **TravelCost** with field specifications shown.
- C. Populate the fields with the data shown below at right.
- D. Create a second table named **Vehicle** with the field specifications shown below; enter data below the table.

Field Name	Data Type	Description (Optional)
Travel ID	AutoNumber	
Destination	Short Text	15 characters
Miles	Number	Integer, fixed, 0 decimals
Passengers	Number	Integer, fixed, 0 decimals
Vehicle	Number	Integer, fixed, 0 decimals
Vehicles Required	Number	Double, fixed, 0 decimals
Fuel Cost	Currency	Currency, 2 decimals

Field Name	Data Type	Description (Optional)
Vehicle ID	Number	Integer, fixed, 0 decimals
Vehicle	Short Text	15 characters
MPG	Number	Double, standard, 2 decimals
Max Passengers	Number	Integer, fixed, 0 decimals

Vehicle ID	Vehicle	MPG	Max Passengers
1	Long Bus	7.75	60
2	Shuttle Bus	14.25	25
3	Van	18.25	11

Travel ID	Destination	Miles	Passengers	Vehicle
1	Houston	65	58	1
2	Houston	65	58	2
3	Houston	65	58	3
4	Dallas	90	52	1
5	Dallas	90	52	2
6	Dallas	90	52	3
7	Austin	15	7	1
8	Austin	15	7	2
9	Austin	15	7	3

- E. Create a relationship between **Vehicle ID** field of **Vehicle** table and **Vehicle** field of **TravelCost** table.
- F. Create an update query in design view using both tables to update the following fields.
 1. Update **Vehicles Required** field in **TravelCost** table by dividing **Passengers** field from **TravelCost** table by **Max Passengers** field from **Vehicle** table and adding .5 to result.
 2. Update **Fuel Cost** field of the **TravelCost** table using the following specifications:
 - a. Use a Round function with the following parameters:
 - (1) The number parameter is **Vehicles Required** field of **TravelCost** table.
 - (2) The precision parameter is zero.
 - b. Multiply the result of the Round function times the result of the **Miles** field of the **TravelCost** table divided by **MPG** field of **Vehicle** table.
 - c. Multiply that result times 3.45.
 3. Save the query as **UpdQry**, and run the query until all fields are populated.
- G. Create a report using the report wizard with 1" margins with the following:
 1. Select all fields from the **TravelCost** table except **Travel ID** and **Vehicle**.
 2. Select all fields from the **Vehicle** table except **Vehicle ID**.
 3. Group by **Destination**.
 4. Sort by **Fuel Cost** in ascending order.
 5. Calculate the minimum value of the **Fuel Cost** field.
 6. Use stepped layout and portrait orientation.
 7. Use the following title: **Vehicle Selection**