

Examinations:

- I. **Compositional:** This type of exams usually starts with define, Explain How, What are the reasons for...?, Why...?, How....? With their typical answers. The following questions are some examples of this kind of examinations:
- II. **Fill the blanks:** This type of question or phrase with one or more words replaced with a blank line, giving the student the chance to add the missing word(s), such as the following questions:
✓
- III. **True or false type of exams:** In this type of exam, a short sentence about a specific subject will be provided, and then students will comment on the trueness or falseness of this particular sentence, such as the following questions:
- IV. **Multiple choices:** In this type of exam there will be a number of phrases next or below a statement, students will match the correct phrase, such as the following questions:
- V. **Proofs and solutions:** Any proofs or solutions for practical questions may be provided in the exam and students should solve those questions or proof those theorems that are given at daily lectures (It is possible to solve this type of questions in any way), such as the following questions:
- VI. **Home Examinations:** This type of exams will be conducted at home through sending an email to the students and they must answer the questions in a determined period or time, then all students must send their answers through the same email, such as the following questions:

Compositional: This type of exams usually starts with define, Explain How, What are the reasons for...?, Why...?, How....? With their typical answers. The following questions are some examples of this kind of examinations:

1. *What is SPSS syntax?*
2. *What is the difference between GUI and SPSS syntax?*
3. *What does the 'Paste' option do in SPSS when statistical data is being processed or analyzed?*
4. *Describe in detail the following syntax: `FREQUENCIES VARIABLES = sex.`*
5. *What is the difference between Variable labels and Value labels in SPSS syntax?*

II. Fill the blanks: This type of question or phrase with one or more words replaced with a blank line, giving the student the chance to add the missing word(s), such as the following questions:

- ✓ *The * symbol in SPSS syntax is used for _____*
- ✓ *The . (dot) symbol in SPSS syntax is used for _____*
- ✓ *The _____ command in SPSS syntax is used for creating new variables, adding 2 variables, multiplying some variables, etc.*

✓ The following syntax: $Compute\ X = \{a_1, a_2, a_3, a_4, a_5\}$ has _____ rows and _____ columns.

✓ In order to show the results of some commands in the SPSS syntax, _____ command will be used.

III. True or false type of exams: In this type of exam, a short sentence about a specific subject will be provided, and then students will comment on the trueness or falseness of this particular sentence, such as the following questions:

- a) “Compute $X = \text{transpos}(Z)$.” is used for finding the diagonal elements of matrix Z
- b) The command “Get File” is used for opening an SPSS data file.
- c) The command “Get X/ x_1, x_2, x_3 .” is used for opening an SPSS output file.
- d) The command “compute $x = 1 * X$.” is used to find summation of each variable in matrix X .
- e) “nrow” command is used to find order of a matrix in an SPSS data.
- f) Begin Data and End Data are used for reading data.
- g) “Output Save Outfile” command is used for saving the data.

IV. Solutions & Analyses: Any analyses or solutions for practical questions may be provided in the exam and students should solve those questions that are given at daily lectures (It is possible to solve this type of questions in any way), such as the following questions:

- A. Write the syntax of ID, Gender, and Age variables for the following data: 001 1 28 002 2 29 003 2 41 004 1 32.
- B. Using car_sales.sav data, find a matrix (X) consists of Engine size, Horsepower, Fuel capacity, and Fuel efficiency (engine_s, horsepower, fuel_cap, mpg) using syntax methods. Then find mean, var-covar, and correlation matrix of X .