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1 SEM MCOM (CBCS) USS 500 (N)

2019

(December)

COMMERCE

Paper : 10500

(Use of Statistical Software)

Full Marks : 40

Time : Two hours

The figures in the margin indicate full marks for the questions.

1. Choose the correct answer : 1×5=5

   (i) What are the two main Windows in SPSS ?

   (a) Data editor and output viewer

   (b) Data view and variable view

   (c) Data view and output viewer

   (d) Variable view and output viewer.

(ii) In this tab, rows represent variabl and columns represent characteristic of variables.

(a) Data view

(b) Variable view

(c) Output viewer

(d) Data editor.

(iii) In this tab, rows represent individual cases and columns represent variables in your data.

(a) Data view

(b) Data editor

(c) Output viewer

(d) Variable view.

(iv) In SPSS, what is the "Data Viewer"?

(a) A table summarizing the frequencies of data for one variable

(b) A spreadsheet into which data can be entered

(c) A dialog box that allows you to choose a statistical test

(d) A screen in which variables can be defined and labelled.

(v) Which menu would you select to run statistical procedures?

(a) Graph menu

(b) Data menu

(c) Analyze menu

(d) Transform menu.

Write short notes on : ***(any three)*** 5×3=15

(i) Primary *vs.* Secondary Data

(ii) Test of significance

(iii) Chi-Square Test

(iv) Parametric *vs.* Non-Parametric Tests

(v) Descriptive statistics in SPSS.

3. (a) How do you specify a variable as nominal, ordinal or scale in SPSS? Explain with example. 10

OR

(b) Prepare a questionnaire on 'Consumers' Behaviour on Consumption of Fast Food'. Explain the type of measurement applicable to each question.

Contd.

4. *(a)* How do you enter multiple choice questions an responses in SPSS? Explain with examples. 10

OR

(b) How do you perform regression analysis in SPSS? Explain its interpretion.

***Instruction to the candidate*: Attempt any 3**

Questions:

1. Prepare a questionnaire of 10 questions including all the scales of measurement under SPSS. Give a diagrammatic representation of the same in the Variable view under SPSS. 5+5=10

2. Prepare a questionnaire of 5 questions in Ordinal and Ratio scales of measurement. Hypothetically show any 3 tests of normality that can be performed to the above data along with your interpretation on same. 2.5+7.5=10

3. The following tables depict the outputs of multiple regression analysis under SPSS. Identify the problem. Explain why you proceed for multiple regression on the said data. Interpret each of the output and frame the relevant regression equation. 2+3+3+2= 10

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.909[a]	.826	.777	.5937

a. Predictors: (Constant),Gender of respondent, Age in your LBD, Frequency of watching news, Frequency of reading newspaper, Years of formal education

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.483	4	5.871	16.654	.000[b]
	Residual	4.935	14	.353		
	Total	28.418	18			

a. Dependent Variable: General Awareness score of the respondent

b. Predictors: (Constant),Gender of respondent, Age in your LBD, Frequency of watching news, Frequency of reading newspaper, Years of formal education

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.256	.831		9.934	.00
	Age in your LBD	-.033	.011	-.399	-2.875	.01
	Frequency of watching news	-.015	.029	-.060	-.511	.61
	Frequency of reading newspaper	.767	.175	.632	4.394	.001
	Years of formal education	-.114	.295	-.046	-.385	.006

a. Dependent Variable: General Awareness score of the respondent

4. " SPSS is a boon to research in Social Sciences and Health Sciences but consequences of violating assumptions would lead to erroneous and misleading solutions" Explain. 10

5+5=10

5. Write short notes: (Any 2)

(a) Data manipulation in SPSS

(b) Tests of Significance in SPSS

(c) Descriptive Statistics under SPSS

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1 SEM PG (CBCS) USS 500

2021

(held in February/March, 2022)

COMMERCE

Paper : AEC 10500

(Use of Statistical Software)

Full Marks : 40

Time : Two hours

The figures in the margin indicate full marks for the questions.

A. Multiple choice questions : ***(any five)*** 2×5=10

1. What is the full form of SPSS ?

   (a) Statistical Process for Social Science

   (b) Statistical Package for Social Science

   (c) Statistical Package for Social Sciences

   (d) Statistical Package for Social and Science

Cont/...

2. What is the advantage of calculating statistics by hand ?

(a) This is how most qualitative data analysis is done in 'real research' now-a-days

(b) It reduces the chance of making errors in your calculations

(c) It equips you with a useful transferable skill

(d) All of the above

3. In SPSS what is 'data viewer' ?

(a) A table summarizing the frequencies of data for one variable

(b) A spreadsheet into which data can be entered

(c) A dialog box that allows you to choose a statistical test

(d) A screen in which variable can be defined and labelled

4. In SPSS, what is the 'variable viewer' ?

(a) A table summarizing the frequencies of data for one variable

(b) A spreadsheet into which data can be entered

(c) A dialog box that allows you to choose a statistical test

(d) A screen in which variable can be defined and labelled

5. How is variable name different from variable label ?

(a) It is shorter and less detailed

(b) It is longer and more detailed

(c) It is abstract and unspecific

(d) It refers to code rather than variable

6. What does the operation 'recode into difference variable' do to the data ?

(a) Replaces missing data with some random score

(b) Reverses the position of independent and dependent variable on a graph

(c) Redistributes a range of values into a new set of categories and create a new variable

(d) Represents the data in the form of a pie chart

B. Write short notes on : ***(any two)*** 5×2=10

1. Chi square tests in SPSS
2. Regression analysis in SPSS
3. Data manipulation in SPSS

C. Explain how to enter data in SPSS software with proper example. (10)

Or

Explain the process of data entry into SPSS from questionnaire. 10

D. Explain the parametric and non-parametric tests in SPSS. 10

Or

Describe the need of correlation analysis along with the process of computing correlation in SPSS. 10

ıl number of printed pages–3

1 SEM MCOM (CBCS) USS 500

2022

(December)

COMMERCE

Paper : 10500 (AEC)

(Use of Statistical Software)

Full Marks : 40

Time : 2 hours

The figures in the margin indicate full marks for the questions.

Attempt ***any four.***

1. Prepare a questionnaire of 10 questions including all the scales of measurement under SPSS. Give a diagrammatic representation of the same in the 'variable view' under SPSS. 5×2=10

2. Explain how to enter data in SPSS software with proper example. 10

Contd.

3. Describe the need of correlation anal along with the process of compu correlation in SPSS.

4. Write short notes on: ***(any two)*** 5×2=

   (i) Descriptive Statistics under SPSS

   (ii) Tests of significance in SPSS

   (iii) Chi-square test in SPSS

5. The following tables depict the outputs of simple regression analysis under SPSS. Identify the problem. Explain why you proceed for simple regression on the said data. Interpret each of the output and frame the relevant regression equations.

2+3+3+2=10

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.470[a]	0.221	0.175	1.1414

a. Predictors : (Constant), body weight of the rats in grams.

ANOVA[b]

	Sum of Squares	df	Mean square	F	Sig.
Regression	6.271	1	6.271	4.814	0.042[a]
Residual	22.146	17	1.303		
Total	28.418	18			

(a) Predictors : (Constant), body weight of the rats in grams.

(b) Dependent Variable : Liver weights of the rats in grams.

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	f	Sig.
	B	Std. Eror	Beta		
1. (Constant)	1.650	2.811		.587	.565
Body weight of the rats in grams	.036	.016	.470	2.194	.042

(a) Dependent Variable : Liver weights of the rats in grams.

6. Explain the tests applied under parametric and non-parametric tests in SPSS. 3+7=10

400

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1 SEM MCOM (CBCS) USS 500

2023

(December)

COMMERCE

Paper : 10500 (AEC)

(Use of Statistical Software)

Full Marks : 40

Time : Two hours

The figures in the margin indicate full marks for the questions.

1. Short answer-type questions : 1×15=15

(a) What is the full form of SPSS ?

(b) In which year SPSS was introduced ?

(c) What is a variable ?

(d) Find out the attribute :

(i) Religion

(ii) Height

(iii) Income

(iv) Age

(e) What is the singular term of data ?

(f) Gender comes under which scale measurement ?

(i) Nominal scale

(ii) Interval scale

(iii) Ratio scale

(iv) Ordinal scale

(g) SPSS is widely used for

(i) mobile app development

(ii) image and video editing

(iii) data visualization and presentation

(iv) web development and programming

(h) In SPSS, how can you recode values of a variable into different categories ?

(i) Using the 'Data' menu

(ii) Using the 'Graphs' menu

(iii) Using the 'Transform' menu

(iv) Using the 'Analyze' menu

(i) Which regression technique is used in SPPS ?

(i) Linear regression

(ii) Multiple regression

(iii) Logistic regression

(iv) All of the above

(j) A correlation of _____ indicates there is no straight line relationship at all.

(i) –2

(ii) –1

(iii) 0

(iv) 1

(k) Data can be entered in the _____ spreadsheet.

(i) variable view

(ii) data view

(iii) Both (i) and (ii)

(iv) None of the above

(l) The variables name must begin with a

(i) number

(ii) space

(iii) ampersands (&)

(iv) letter

Contd.

5

Write short notes on : ***(any one)***

(i) Normality test

(ii) Non-parametric tests under SPSS

(iii) Paired T-test

What are the features and advantages of SPSS ? How is arithmetic mean computed in SPSS ? 5+5=10

(a) Stat

1 SEM MCOM (CBCS) USS 500

2024

(December)

COMMERCE

Paper : 10500 (AEC)

(Use of Statistical Software)

Full Marks : 40

Time : Two hours

The figures in the margin indicate full marks for the questions.

Attempt ***any four*** questions.

1. Short answer type questions : 1×10=10

   (a) What is SPSS ?

   (b) What are the characteristics of a ratio scale ?

   (c) What is a hypothesis ?

   (d) What is descriptive statistics ?

   (e) What is the relationship between any two variables when the correlation coefficient is zero ?

(j) What does the Operation 'Recode Into Different Variables' do to the data ?

(i) Replaces missing data with some random scores

(ii) Reverses the position of the independent and dependent variable on a graph

(iii) Redistributes a range of values into a new set of categories and creates a new variable

(iv) Represents the data in the form of a pie chart

2. Distinguish between : 5×2=10

(a) Correlation and Regression

(b) Primary and Secondary Data

3. Explain the tests applied under parametric and non-parametric tests in SPSS. 10

4. Discuss the different scale of measurement with appropriate examples. 10

5. Critically analyze the output table which have been generated in SPSS and answer the following : 2×5=10

(a) Total no. of respondents

(b) Determine dependent and independent variables

(c) Correlation coefficient

(d) Regression coefficient

Contd.

(e) Test of significance for regression 10

Linear Regression Analysis Output

Variables Entered/Removed[b]			
Model	Variables Entered	Variables Removed	Method
1	Reading score[a]	—	Enter

a. All requested variables entered

b. Dependent variable : grade point average

Model Summary				
Model	R	R square	Adjusted R square	Std. Error of the Estimate
1	·867[a]	·752	·733	·32848

[a]Predictors : (constant), reading score

ANOVA[b]					
Model	Sum of squares	df	Mean square	F	sig.
1 Regression	4·253	1	4·253	39·418	·000[a]
Residual	1·403	13	·108		
Total	5·656	14			

[a]Predictors : (constant), reading score

[b]Dependent variable : grade point average

Coefficients[a]							
Model	Unstandardized coefficient		Standardized coefficient Beta	t	sig	95% confidence Internal for B	
	B	Stel Error				Lower Bound	Upper Bound
1 (Constant)	−111	·446		−·248	·808	−1·075	·0853
Reading score	·061	·010	·867	6·278	·000	·040	·082

Dependent variable : grade point average