International Institute of Health Management Research Delhi

Supplementary Exam

Data Management & Analysis

Total marks: 100 **Duration: 2.5hrs**

Answer MCQs in question paper itself and attach with the answer sheet.

SECTION A **(10*3 = 30)**

Q1) Data analysis is a process of data _____

a) Inspection (b) Cleaning (c) Transformation (d) All of them

Q 2) Which measure of the central tendency is derived from the most common value?

(a) Mean (b) Median (c) Mode (d) All of them

Q 3) Which measure is the most unreliable indicator of central tendency if data are skewed?

(a) Mean (b) Median (c) Mode (d) All of them

Q 4) Which of the following variable name will not be considered in SPSS 16?

(a) agerange$ (b) age@range (c) age-range d) all of them

Q5) Which of the following aspects of a variable CANNOT be defined in the Variable View window?

(a) Value labels (b) Measurement (c) Maximum and minimum values (d) All of them

Q6) Graph which present the values on the horizontal axis and the number of times this occurs on the vertical axis are known as

(a) Line graph (b) Scatter Plot Graph (c) Frequency Distribution (d) All of them

Q 7) The SPSS data files is saved with which extension_____

Q8) Database Management System is a complex set of _____that controls the organization, storage, management and retrieval of data in a database.

Q 9) To run a cross-tabe in SPSS, one needs to click Analyze > Compare Means > Means>Crosstab

(YES/NO)

Q 10) Descriptives (Analyze > Descriptive Statistics > Descriptives) is best to obtain quick summaries of numeric variables, or to compare several numeric variables side-by-side

(YES/NO)

Section B **(30 marks)**

Q 11) Differentiate between univariate and bivariate quantitative data analysis.

Q 12) Discuss the relationship between data, information and knowledge

Q 13) Mention the advantages of presenting the data in tabular and graphical format

Q 14) Write about five functions of DBMS

Q 15) Differentiate between nominal, ordinal and scale variable by giving examples

Q 16) Differentiate between variable name and variable label options of the SPSS

Section C (40 marks)

Q17) Interpret following two outputs: (10 marks)

Output 1		
Stress Level (Higher Values = More Stressed)		
N	Valid	10
	Missing	0
Mean		37.7
Median		36.0
Mode		28[a]
Std. Deviation		7.8
Variance		61.8
Range		23
Minimum		28
Maximum		51

a. Multiple modes exist. The smallest value is shown

Output 2

Gender*Internet use crosstabulation

		Internet Use		
		User	Non-User	Total
Sex	Male	141	59	200
	Female	113	87	200
Total		254	146	400

Q 18) Interpret the following output: (15 marks)

		Parent's score on anxiety	Child score on anxiety
Parent's score on anxiety	Person Correlation	1	.756**
	Sig. (2-tailed)		.011
	N	10	10
Child score on anxiety	Person Correlation	.756**	1
	Sig. (2-tailed)	.011	
	N	10	10

**. Correlation is significant at the 0.01 level (2-tailed).

Q19) The following contains the results generated on data related to salaries of two categories of employees (clerical and manager). Explain the data and discuss the interpretation of the output (15 marks)

Group Statistics

	Employment Category	N	Mean Salary	Std. Deviation	Std. Error Mean
Current Salary	Clerical	27	Rs. 30,938.89	Rs. 2,114.62	Rs. 406.96
	Manager	84	Rs. 63,977.80	Rs. 18,244.78	Rs. 1,990.67

Independent Samples Test

		Levene's Test for Equality of Variances	t-test for Equality of Means	t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of difference	
									Lower	Upper
Current Salary	Equal Variances Assumed	29.23	.000	-9.36	109.0	.000	-Rs.33,039	Rs.3,530	-Rs.40,034	-26044
	Equal Variances Not Assumed			-16.26	89.58	.000	-Rs.33,039	Rs.2,032	-Rs.37,076	-29002