



International Institute of Health Management Research (IIHMR), New Delhi

PGDM (HOSPITAL AND HEALTH MANAGEMENT)

(Batch 2022-2024)

RE_SUPPLEMENTARY EXAM (4th Term)

SUPPLEMENTARY EXAM (5th & 6th Term)

HOM 800.2-Data Management and Analysis

Date: June 24, 2024

Timing & Duration: 10:30 A.M.-01:30 P.M. (3 Hrs.)

Max. Marks: 100

Instructions:

- Budget your time as per the marks given for each question and write your answer accordingly.
- Don't write anything on the Question Paper except writing your Registration No.
- Mobile Phones are not allowed even for computations.

**ANSWER MCQs IN QUESTION PAPER ITSELF AND
ATTACH WITH THE ANSWER SHEET**

SECTION A

Multiple Choice Questions (each carries 3 marks)

Q1) Expected value for each cell in the contingency table needs to be one among following for chi-square test to be effective

- (a) 3 (b) 6 (c) 10 (d) 5

Q2) Frequency distributions can be in

- (a) different shapes (b) different sizes (c) both (a) and (b) (d) none of them

Q3) In SPSS, a user can export the output in

- (a) word file (b) PDF (c) excel file (d) all of them

Q4) Measure of location which is the most likely to be influenced by extreme values in any data set is

- (a) range (b) median (c) mode (d) mean

Q5) In SPSS, the default variable type is

- (a) numeric (b) string (c) date (d) none of them

Q6) Which type of file can be imported in SPSS

- (a) excel files (b) MS Access database file (c) both (a) and (b) (d) none of the above

Q7) Which among the following is used to display the frequency distribution of categorical data?

- (a) scatter plot (b) steam and leaf plot (c) bar chart (d) none of the above

Contd...2..

Q8) Which option is SPSS allows user to arithmetically combine or alter variables and place the resulting value under a new variable name

- (a) transform (b) compute variable (c) recode (d) none of them

Q9) Spaces while defining the variable name is allowed in SPSS? Yes/No

Q10) A user can enter the data in SPSS without defining a variable Yes/No

SECTION B

Short Questions (each carries 7 marks)

Q11) What are graphs? Explain the importance of using graphs in data analysis?

Q12) Explain the relationship between data, information and knowledge.

Q13) Explain independent and dependent variable by giving an example.

Q14) Explain the importance of 'label' while defining the variables in SPSS.

Q15) Answer following:

- (a) What is an outlier? (b) How does an outlier influence mean value of any score?
 (c) Two possible ways of detecting an outlier in the data?

SECTION C

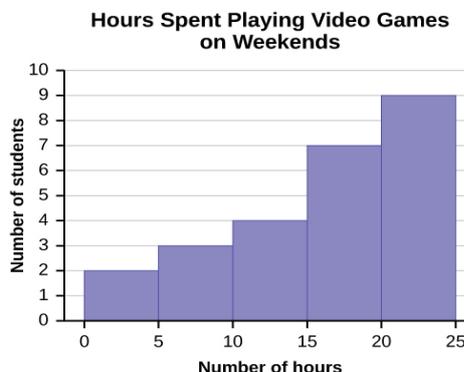
Long Questions

Q16) Interpret following outputs:

Output A (5 marks)

Statistics			
		Husband's ages at marriage	Wives' ages at marriage
	Valid	100	100
	Missing	0	0
Mean		33.0800	31.1600
St. Deviation		12.31053	11.00479
Minimum		18.00	16.00
Maximum		71.00	73.00

Output B (5 marks)



Output C (5 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 D (5 marks)

Output 2				
Gender*Internet use crosstabulation				
		Internet Use		
		User	Non-User	Total
Sex	Male	141	59	200
		113	87	200
	Female			
	Total	254	146	400

Q17) Interpret the following output

(15 marks)

Group Statistics					
	Students_attended_remedial classes	N	Mean	Std. Deviation	Std. Error Mean
Exam_score	Yes	46	17.7370	2.90435	.42822
	No	46	14.6152	1.78848	.26370

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% CI of the Difference	
									Lower	Upper
Exam_scores	Equal variances assumed	8.080	.006	6.207	90	.000	3.12174	.50290	2.12263	4.12084
	Equal variances not assumed			6.207	74.838	.000	3.12174	.50290	2.11987	4.12361