



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 |
| Mean St. Deviation Minimum Maximum | Valid | 100 | 100 |
| | Missing | 0 | 0 |
| | | 33.0800 | 31.1600 |
| | | 12.31053 | 11.00479 |
| | | 18.00 | 16.00 |
| | | 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 |

-: 3 :-

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 |