

**Post Graduate Diploma in Management (Hospital & Health Management)  
PGDM – 2022-24 Batch**

**2<sup>nd</sup> Year - 5<sup>th</sup> Term Examination**

|                          |   |                   |                     |
|--------------------------|---|-------------------|---------------------|
| <b>Course &amp; Code</b> | <b>: Data Management and Analysis-HOM 800.2/HEM 801.1</b> | <b>Reg. No.</b>   | <b>:</b>            |
| <b>Term &amp; Batch</b>  | <b>: V, 2022-24</b>                                       | <b>Date</b>       | <b>: 21-12-2023</b> |
| <b>Duration</b>          | <b>: 3 Hrs.</b>   | <b>Max. Marks</b> | <b>: 70</b>         |

**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 2 marks)**

**Q1) Frequency distributions can be in**

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

**Q2) In SPSS, a user can export the output in**

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

**Q3) Which among the following is not applicable with the data editor window of the SPSS**

- (a) Entering data      (b) viewing data      (c) viewing output      (d) viewing menu bar

**Q4) In SPSS, the default variable type is**

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

**Q5) The SPSS allows a user to import the data from**

- (a) excel file      (b) jpeg file      (c) both (a) and (b)      (d) none of them

**Q6) In SPSS, a user can define missing values in**

- (a) data view window      (b) variable view window      (c) both (a) and (b)      (d) none of them

**Q7) 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

**Q8) A user can enter the data in SPSS without defining a variable** Yes/No

**Q9) In SPSS, one can use numbers to represent different groups or categories of data** Yes/No

**Q10) Correlation tells us about the causal influence of variables** Yes/No

**Contd...2..**

**SECTION B**  
**Short Questions (each carries 6 marks)**

- Q11) For each of the following, mention the appropriate 'measure' which you will define in SPSS for their respective variables:
- Temperature of the patient
  - Income of patient
  - Satisfaction level of patient captured in numbers (1 = very satisfied; 2 = satisfied; 3 = not satisfied)
  - Gender of the patient captured in numbers [1 = male; 2 = female]
  - Time when patient was admitted
  - Name of doctor who attended the patient
- Q12) Explain the relationship between data, information and knowledge.
- Q13) Explain independent and dependent variable by giving an example.
- Q14) Briefly comment on following:  
In SPSS, the above question no. 11 (d) gender of patient is captured using numbers (1 and 2). However, it can be captured as text also (male and female).
- Q15) Answer following:
- What is an outlier?
  - How does an outlier influence mean value of any score?
  - Two possible ways of detecting an outlier in the data?

**SECTION C**  
**Long Questions (each carries 10 marks)**

Q16) Interpret following outputs:

**Output A (5 marks)**

| Statistics                                     |         |                            |                         |
|--|---------|----------------------------|-------------------------|
|  |         | Husband's ages at marriage | Wives' ages at marriage |
| Mean<br>St.<br>Deviation<br>Minimum<br>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)**



Q17) Interpret following outputs:

**Output 1 (5 marks)**

| Correlations <sup>a</sup>                                   |                     |        |        |
|---|---------------------|--------|--------|
|   |                     | Height | Weight |
| Height  | Pearson Correlation | 1      | .604** |
|   | Sig. (2-tailed)     |        | .000   |
|   | N                   | 57     | 57     |
| Weight  | Pearson Correlation | .604** | 1      |
|   | Sig. (2-tailed)     | .000   |        |
|   | N                   | 57     | 57     |
| ** Correlation is significant at the 0.01 level (2-tailed). |                     |        |        |
| a. Gender = Male  |                     |        |        |

| Correlations <sup>a</sup>                                   |                     |        |        |
|---|---------------------|--------|--------|
|   |                     | Height | Weight |
| Height  | Pearson Correlation | 1      | .494** |
|   | Sig. (2-tailed)     |        | .003   |
|   | N                   | 35     | 35     |
| Weight  | Pearson Correlation | .494** | 1      |
|   | Sig. (2-tailed)     | .003   |        |
|   | N                   | 35     | 35     |
| ** Correlation is significant at the 0.01 level (2-tailed). |                     |        |        |
| a. Gender = Female  |                     |        |        |

-: 3 :-

**Output 2 (5 marks)**

| Variables Entered/Removed <sup>b</sup> |                    |                   |        |
|--|--------------------|-------------------|--------|
| Model                                  | Variables Entered  | Variables Removed | Method |
| 1                                      | grades in Biostats | .                 | Enter  |

a. All requested variables entered.

b. Dependent variable: SPSS proficiency test

| Model Summary                              |                   |          |                   |                            |
|--|-------------------|----------|-------------------|----------------------------|
| Model                                      | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1  | .504 <sup>a</sup> | .254     | .244              | 5.8001                     |
| Predictors: (Constant), Grades in Biostats |                   |          |                   |                            |