



Time - 3 Hour

MM-70

The question paper contains __ 4 __ printed page.

INSTRUCTION TO THE CANDIDATES:

Section-A contains 20 questions carrying ONE marks each and attempt all questions. Section-B consists of 5 marks questions and answer any four in your answer sheet. Section C contains questions requires use of SPSS or MS office. Answer any two questions and each carry 15 marks. **Save all output files in one folder clear stating the name of the folder in format "Output_RM_RollNo" Example: "Output RM012".** Don't mix answers from different sections.

Section A**Q. 1. Answer All. [20 X 1 Marks]**

- i. Which of the following is not an essential element of report writing?
 - a) Research Methodology
 - b) Reference
 - c) Conclusion
 - d) None of these
- ii. Which method can be applicable for collecting qualitative data?
 - a) Artifacts (visual)
 - b) People
 - c) Media products (textual visual and sensory)
 - d) All of these
- iii. What is the purpose of doing research?
 - a) To identify problem
 - b) To find the solution
 - c) Both a and b
 - d) None of these
- iv. Mean, Median and Mode are
 - a) Measure of Control Quality
 - b) Ways of sampling
 - c) Measure of deviation
 - d) None of these
- v. Which of the following is the first steps in starting the research?
 - a) Searching source of information to locate problem
 - b) Survey of related literature
 - c) Identification of problem
 - d) Searching for solutions to the problem

- vi. Which of the following variables cannot be expressed in quantitative terms?
- a) Socio economic Status
 - b) Marital Status
 - c) Numeric Aptitude
 - d) None of the above
- vii. Using different methods of collecting data, different sources of evidence, different tests and in some cases different interviewers, is known as what?
- a) Triangulation
 - b) Transferability
 - c) Reliability
 - d) None of the above
- viii. The primary aim of _____ is to give structure to data in the form of categories which can then be analyzed.
- a) Statistical Analysis
 - b) Self-completion questionnaire
 - c) Coding
 - d) Pilot Studies
- ix. Which one of the below is true of pre-coding?
- a) Pre-coding advances its self to qualitative data analysis.
 - b) The data collected are limited by the nature of the categories created by the researcher.
 - c) Pre-coding provides rich and detailed data.
 - d) Pre-coding is only employed when self-completion questionnaires are used.
- x. What is the name for a variable which is measured using 2 different values?
- a) Dichotomous
 - b) Binomial
 - c) Binary
 - d) All of these
- xi. What is an example of a subject variable?
- a) Race
 - b) Religion
 - c) Sex
 - d) All of the above
- xii. What sort of data are post codes (zip codes)?
- a) Nominal
 - b) Ordinal
 - c) Interval
 - d) Ratio
- xiii. Age in completed years of a person is a continuous variable.
- a) True
 - b) False
- xiv. 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 labeled.
- xv. In which format, SPSS syntax files are saved?
- a) .sps
 - b) .sav
 - c) .spv
 - d) .csv



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- xvi. Frequency distribution of a variable is a
- Multivariate Analysis
 - Bi-variate Analysis
 - Univariate Analysis
 - Computing of variable
- xvii. In which sub-dialog box can the Standard deviation be found?
- Frequencies: Statistics
 - Crosstabs: Statistics
 - Bivariate: Pearson
 - Compute variable
- xviii. If the value of $r = -0.775$, How are the independent and dependent variable co-related?
- Weak and Indirect
 - Strong and direct
 - Strong and Indirect
 - Intermediate and indirect
- xix. The fourth round of National Family Health Survey (NFHS) data was collected in the year:
- 2005-06
 - 2015-16
 - 2012-13
 - 1991-92
- xx. What does the operation "Recode into Different Variables" do to the data?
- Replaces missing data with some random scores.
 - Bi-variate Analysis of variables
 - Reverses the position of the independent and dependent variable on a graph.
 - Redistributes a range of values into a new set of categories and creates a new variable.

SECTION B

Q.2 Answer any four [4* 5 Marks]

- Compute the mean, median, mode, and range for following data 2, 3, 1, 2, 6, 4, 2, 1, 5, 3, 2, 3, 1, 2, 2, 1, 3, 1, 2, 2, 4, 2, 1, 2, 8, 3, 2, 1, 1, 3.
- What is standard deviation? Explain its superiority over other methods of variation.
- Distinguish between discrete and continuous variables with examples.
- Describe different types measurement scales and explain various measurement scales with example.
- Identify the difference between 'Bar graph, histogram and age-sex pyramid'?
- Discuss the application of statistics in Business Research.
 - Explain the different sources of collection of data with examples.
- What do you understand by Data view and variable view?
 - What do you mean by Recoding and Compute in analysis?

SECTION C

(Answer any two; Save all output and graph in one folder with your roll number)

Q. 3. Using the excel data (Q3. Data RM2018.xlsx) provided to you (the sheet 1 contains data and sheet 2 contains variable details): **[15 Marks]**

- a) Create an SPSS data file. Define all characteristics (Variable & Value labels) of the variable in "variable view". Save the SPSS file in the name "Q3. Data_RM2018" in your answer folder.
- b) Find out the average income (in thousand) of person and the percentage of individual "highly satisfied with their job".
- c) Cross tabulate job satisfaction (jobstat) with income category (inccat). Find what percentage of individuals having income of \$25-\$49 thousand income are 'highly satisfied' with their jobs.

Q.4. The SPSS data for India is given to you (Q4. RM_data_India). Using the data: **[15 Marks]**

- a) Create a separate dataset for Rajasthan and save it as "RM_Data_Rajasthan" in the answer folder.
- b) Recode the value labels "Source of drinking water" into a different variable "water_s" with value labels as 1 "Piped water (old code 10-13)" 2 "Tube well (old code 20-21)" 3 "Dug well (old code 30-32)" 4 "Others (all other values)". Save the data.
- c) Cross tabulate "water_s" with "type place of residence" and "religion" and find out what percentage of household from "Rural" and "Hindu religious" group are using piped water in Rajasthan.

Q.5. Prepare appropriate graph/s for the following table using MS Excel (file: Q5 Table for Graph) and interpret the result in your answer sheet. **[15 Marks]**

Table 1: Percentage of underweight by different socio-economic and demographic characteristics of children in rural Kerala, 2005-06

Background Characteristics	Underweight (%)	Background Characteristics	Underweight (%)
Religion		Mass Media Exposure	
Hindu	16.4	No exposure	17.2
Others	15.4	Have exposure	11.4
Caste		Age of Child (Months)	
SC & ST	26.1	0-11	26.4
OBC	17.7	12-23	17.8
Others	15.3	24-35	15.8
Standard of living index		36-47	14.3
Low	24.5	48-59	14.2
Medium	16.4	Has diarrhoea recently	
High	15.2	No	15.5
Mother's Education		Yes	24.2
No education	16.7		
Upto secondary	16.1		
Higher	15.3		

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