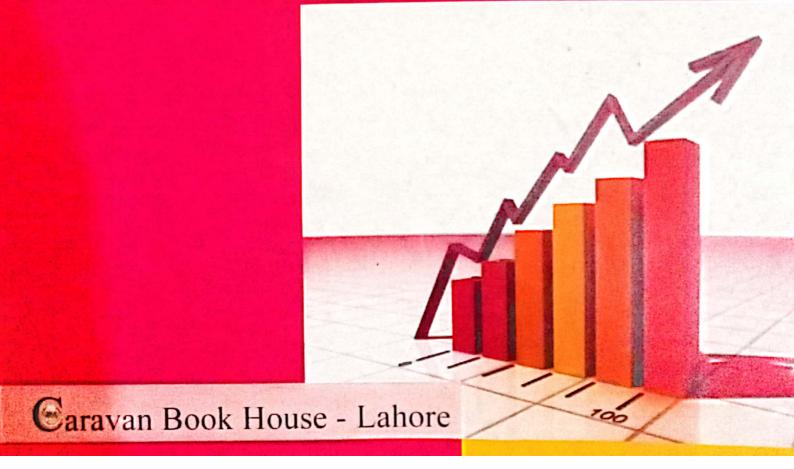**According to FPSC/PPSC & NTS Latest Pattern**

Compendium of
STATISTICS

MCQs

Lectureship,
Subject Specialist,
Statistical Officer,
S.S.S Statistics, M.A/M.Sc. Statistics
and Economics, GRE Statistics &
Other Competitive Examination

Caravan Book House - Lahore

CONTENTS

Chapter 1

INTRODUCTION

1. The origin of statistics can be traced to
   a) State
   b) Commerce
   c) Economics
   d) Industry

2. Statistics may be called the science of counting' is the definition given by
   a) Croxton
   b) A.L. Bowley
   c) Boddington
   d) Webster.

3. Raw data means
   a) Primary data
   b) Secondary data
   c) Data collected for investigation
   d) Well classified data.

4. Which, of the following are not the limitations of statistics?
   a) Statistics study the individuals
   b) Statistics tables may be misused
   c) Statistical laws are exact
   d) Both a & c but not b
   e) None of the above

5. Which of the following level of measurements in which zero is meaning full?
   a) Ordinal scale
   b) Ratio Scale
   c) Interval Scale
   d) Nominal Scale
   e) None of the above

6. Which of the following mathematical structure of ordinal scale?
   a) Permutation Group
   b) Isotonic Group
   c) General linear Group
   d) None of the above

7. Numbering of brands is an example of
   a) Ordinal Data
   b) Ratio Data

   c) Interval Data
   d) Nominal Data
   e) None of the above

8. Advertising expenditure is an example of
   a) Ordinal Data
   b) Ratio Data
   c) Interval Data
   d) Nominal Data
   e) None of the above

9. A statistical data is
   a) Qualitative
   b) Quantitative
   c) Both a) & b)
   d) None of the above

10. A Qualitative data is
    a) Ordinal
    b) Nominal
    c) Both a) & b)
    d) None of the above

11. A Quantitative data is :
    a) Interval Scale"
    b) Ratio Scale
    c) Both a) & b)
    d) Nominal

12. ID number or workers, Zip code and telephone number are the examples of
    a) Ordinal data
    b) Ratio Scale data
    c) Interval scale data
    d) Nominal data

13. Which is a categorical factor?
    a) Temperature used within an oven
    b) The horizontal location of the logo on a web page
    c) Type of tire used on a motorcycle
    d) All of the above are categorical factors.
    e) All of the above are correct except a) and d).

1

14. Which scale is the simplest form of measurement?
a) Nominal
b) Ordinal
c) Interval
d) Ratio

15. If a baseball coach calculates batting averages, what scale would be used?
a) Interval scale
b) Ratio scale
c) Nominal scale
d) Ordinal scale

16. Most of the outcome/dependent variable characteristics and attributes measured in educational research probably exist at the ———— level of measurement.
a) Nominal
b) Ordinal
c) Interval
d) Ratio

17. An ordinal scale is:
a) The simplest form of measurement
b) A rank-order scale of measurement
c) A scale with equal intervals between adjacent numbers
d) A scale with an absolute zero point
e) A categorical scale

18. Which of the following is the correct order of Stevens' four levels of measurement?
a) Ordinal, nominal, ratio, interval
b) Nominal, ordinal, interval, ratio
c) Interval, nominal, ordinal, ratio
d) Ratio, interval, nominal, ordinal

19. A condition or characteristic that can take on different values or categories is called
a) A constant
b) A variable
c) A cause-and-effect relationship
d) A descriptive relationship
e) None of the above

20. Which of the following includes examples of quantitative variables?
a) Age, temperature, income, height

b) Grade point average, anxiety level, reading performance
c) Gender, religion, ethnic group
d) Both a) and b)

21. What is the opposite of a variable?
a) A constant
b) An extraneous variable
c) A dependent variable
d) A data set

22. A number derived from sample data which describes the data in some useful way is called a:
a) Constant
b) Statistic.
c) Parameter.
d) Critical value.

23. Which of the following are examples of a variable?
a) Gender of a high school graduate
b) Number of major credit cards a person has
c) Type of automobile transmission
d) All of the above

24. A variable's level of measurement indicates the:
a) Number of questions used to measure the variable
b) Number of categories which can be used to group scores on the variable
c) Kinds of comparisons that can be made between cases in different categories
d) Correspondence between conceptual and operational definitions

25. Which of the following is an example of nominal level measurement?
a) Family size (number of children in a family)
b) Political participation (number of times voted in last 10 years)
c) Educational attainment (highest year or grade in school completed)
d) Political party affiliation (Republican, Democrat, Independent, Other)

26. Suppose a survey item asks someone if something is very important, somewhat important, not very important, or unimportant. This is an example of what level of measurement?
    a) Nominal
    b) Ordinal
    c) interval
    d) ratio

27. What level of measurement do most inferential statistics relies upon?
    a) Nominal
    b) Ordinal
    c) Interval
    d) Ratio

28. An example of a measurement scale with an interval rather than a ratio scale is:
    a) 1 = blue, 2 = green, 3 = red.
    b) Temperature in degrees centigrade.
    c) Area in square millimeters.
    d) Priority ranking, such as first, second, third.

29. The following data were collected on the diameters of turned shafts: 2.506 2.508 2.505 2.505. These values are:
    I. Attribute data.
    II. Discrete data.
    III. Variables data.
    IV. Continuous data.
    a) I and II
    b) I only
    c) II only
    d) I and IV
    e) III and IV

30. Suppose a large image file is downloaded from the Internet. The speed of the data, in bits per second (bps), is plotted as a function of time in seconds. In this situation, data speed is considered
    a) The dependent variable
    b) The independent variable
    c) A constant function
    d) Nondecreasing

31. Which of the following is an example of a discrete variable?
    a) The direction of the wind as a tornado passes.
    b) The number of car accidents per month in a certain town.
    c) The overall loudness of sound during a symphony.
    d) The speed of a car on a highway.
    e) The thrust of a jet engine during an airline flight.

32. Which of the following statements are correct?
    a) Color of ten automobiles recently purchased at a certain dealership is an example of a univariate data set.
    b) Height and weight for each basketball player on B.Z University team is an example of bivariate data set.
    c) The systolic blood pressure, diastolic blood pressure, and serum cholesterol level for each patient participating in a research study is an example of multivariate data set.
    d) None of the above statements is correct.
    e) All of the above statements are correct.

33. Which of the following statements are correct?
    a) Probability reasons from the population to the sample (deductive reasoning), whereas inferential statistics reasons from the sample to the population (inductive reasoning).
    b) Hypothesis testing and estimation by confidence intervals are the least important types of inferential statistical procedures.
    c) In a probability problem, properties of the population under study are assumed to be unknown.
    d) In a statistics problem, characteristics of a sample are assumed to be unknown.