UNIVERSITY OF THE PUNJAB

Roll No. ....

PAPER: Social Statistics
Course Code: SOC-309

TIME ALLOWED: 2 hrs. & 30 mins.
MAX. MARKS: 50

Attempt this Paper on Separate Answer Sheet provided.

Attempt all questions.

Part B

Questions with Short Answers

Marks: (10+10= 20 Marks)

Q1. (i) Define the following terms with examples:

a) Mean Deviation

b) Range

c) Variables and attributes

d) Descriptive and inferential statistics

e) Group & Ungroup data

(ii) Attempt the following Question:

a) Define the properties of Normal distribution.

b) What are the advantages and disadvantages of Standard Deviation? (Any 2)

c) Define population and sample.

d) What are the advantages of median? (Any 3)

e) What is Dispersion?

Part C
Questions with Brief Answers
Marks: (15*2=30 Marks)

Q2. What is meant by term correlation? Also describe difference between positive and negative correlation.

Q3. Find the Semi inter Quartile range for the following data. Also calculate Coefficient of Quartile Deviation.

Marks	30-39	40-49	50-59	60-69	70-79	80-89	90-99
Frequency	2	3	11	20	32	25	7

UNIVERSITY OF THE PUNJAB

Roll No. ....

Sixth Semester - 2017
Examination: B.S. 4 Years Programme

PAPER: Social Statistics
Course Code: SOC-309

TIME ALLOWED: 30 mins.
MAX. MARKS: 10

Attempt this Paper on this Question Sheet only.

Objective Portion

Multiple Choice Questions

Total Marks: 10 x 1 = 10 Marks

Encircle the correct option. Encircle only one option.

1. The mean of a distribution is 14 and the standard deviation is 5. What is the coefficient of variation?
A. 60.4%
B. 48.3%
C. 35.7%
D. 27.8%

2. Which of the following describe the middle part of a group of numbers?
A. Measure of Variability
B. Measure of Central Tendency
C. Measure of Association
D. Measure of Shape

3. The middle value of an ordered array of numbers is the
A. Mode
B. Mean
C. Median
D. Mid-Point

4. Which of the following is not a measure of central tendency?
A. Percentile
B. Quartile
C. Standard Deviation
D. Mode

(P.T.O.)

5. Which of the following divides a group of data into four subgroups?
A. Percentiles
B. Deciles
C. Median
D. Quartiles
E. Standard Deviation

6. If the standard deviation of a population is 9, the population variance is:
   a) 9
   b) 3
   c) 21
   d) 81

7. Sum of dots when two dice are rolled is
   a) A discrete variable
   b) A continuous variable
   c) A constant
   d) A qualitative variable

8. The weights of students in a college/ school is a
a) Discrete Variable
b) Continuous Variable
c) Qualitative Variable
d) None of above

9. The first hand and unorganized form of data is called
   a) Secondary data
   b) Organized data
   c) Primary data
   d) None of these

10. The data which have already been collected by someone are called
a) Raw data
b) Array data
c) Secondary data
d) Fictitious data

UNIVERSITY OF THE PUNJAB

Sixth Semester - 2018

Examination: B.S. 4 Years Programme

PAPER: Social Statistics

Course Code: SOC-309   Part – II

TIME ALLOWED: 2 Hrs. & 45 Mints.

MAX. MARKS: 50

Attempt this Paper on Separate Answer Sheet provided.

Questions with Short answers
Marks: (4 x 5 = 20 Marks)

1. Define Standard Deviation with example.

2. What is form of normal curve?

3. What is grouped and un-grouped data

4. What is chi-square test?

Questions with Brief answers
Marks: (10 x 3 = 30 Marks)

Q1. Find out the Median of the following values

(I) 5, 4, 8, 3, 7, 2, 9

(II) 18.3, 20.6, 19.3, 22.4, 20.8, 18.8.

Q2. Explain two common advantages and disadvantages of median and mode?

Q3. What is probability? Differentiate between rule and binominal probability.

PAPER: Social Statistics
Course Code: SOC-309   Part – I (Compulsory)

TIME ALLOWED: 15 Mints.
MAX. MARKS: 10

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Each MCQ carries 1 Mark. This Paper will be collected back after expiry of time limit mentioned above.

Q. 1   **(1x10=10)**

1. The mean of a distribution is 23, the median is 24, and the mode is 25.5. It is most likely that this distribution is:
   a. Positively Skewed
   b. Symmetrical
   c. Asymptotic
   d. Negatively Skewed

2. According to the empirical rule, approximately what percent of the data should lie within $\mu \pm \sigma$?
   a. 75%
   b. 68%
   c. 99.7%
   d. 95%

3. The sum of the deviations about the mean is always:
   a. Range
   b. Zero
   c. Total Standard Deviation
   d. Positive

4. The middle value of an ordered array of numbers is the
   a. Mode
   b. Mean
   c. Median
   d. Mid Point

(P.T.O.)

5. If the standard deviation of a population is 9, the population variance is:
    a. 9
    b. 3
    c. 21
    d. 81

6. Which of these represent qualitative data
    a. Height of a student
    b. Liking or disliking of (500) persons of a product
    c. Income of a government servant in a city
    d. Yield from a wheat plot

7. The data which have already been collected by some one are called
    a. Raw data
    b. Array data
    c. Secondary data
    d. Fictitious data

8. Questionnaire survey method is used to collect
    a. Secondary data
    b. Qualitative variable
    c. Primary data
    d. None of these

9. A constant variable can take values
    a. Zero
    b. Fixed
    c. Not fixed
    d. Nothing

10. A parameter is a measure which is computed from
    a. Population data
    b. Sample data
    c. Test statistics
    d. None of these

Q.1.   Encircle the correct option.   **(10x1=10)**

1. In statistics out of 100, marks of 21 students in final exams are as 90, 95, 95, 94, 90, 85, 84, 83, 85, 81, 92, 93, 82, 78, 79, 81, 80, 82, 85, 76, 85 then mode of data is

    a. 85

    b. 95

    c. 90

    d. 81

2. Branches of statistics includes

    a. applied statistics

    b. mathematical statistics

    c. industry statistics

    d. both a and b

3. Procedures of descriptive statistics and control charts which are used to improve process are classified as

    a. statistical tools

    b. parallel tools

    c. serial tools

    d. behavioral tools

4. Sample statistics are denoted by the

    a. upper case Greek letter

    b. associated roman alphabets

    c. roman letters

    d. lower case Greek letter

P.T.O.

5. Which of the following is not an example of a discrete probability distribution?

    a. The sale or purchase price of a house

    b. The number of bedrooms in a house

    c. The number of bathrooms in a house

    d. Whether or not a home has a swimming pool in it

6. The collection of one or more outcomes from an experiment is called

    a. Probability

    b. Event

    c. Random Value

    d. Z-value

7. If you roll a pair of dice, what is the probability that (at least) one of the dice is a 4 or the sum of the dice is 7?

    a. 4/36ss

    b. 13/36

    c. 21/36

    d. 15/36

8. To create a new data file in SPSS Statistics, you select:

    a. Open a New Data File

    b. Type in Data

    c. New Dataset

    d. New Data File

9. What menu item do you select to find the "Descriptive Statistics…" selection?

    a. Frequencies

    b. Graphs

    c. Analyze

    d. Utilities

10. The name of the tool in SPSS Statistics that creates a frequency polygon is called:

    a. Graph Builder

    b. Figure Builder

    c. Chart Builder

    d. Graph Builder

UNIVERSITY OF THE PUNJAB

B.S. 4 Years Program / Sixth Semester – 2019

Roll No. ....

Paper: Social Statistics
Course Code: SOC-309   Part – II

Time: 2 Hrs. 45 Min.   Marks: 50

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Q.2. Give Short Answers.   (5x4=20)

1. Chi Square Test
2. Rules of Probability
3. Area Under the normal curve
4. Variance
5. Inferential Statistics

Q.3. Give Long Answers.   (3x10=30)

1. What are nominal, ordinal and Interval scales? Explain with examples.
2. Define Measures of Dispersion. Explain its types with examples.
3. What is Empirical relationship between Mean, Median, and Mode? Explain with graphs.