

2012

Time : 3 hours

Full Marks : 80

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

*Answer **four** questions in which Q. No. 1 is compulsory.*

1. Select the most appropriate option of the following :
 - (a) Measures of dispersion includes :
 - (i) Probability
 - (ii) Mode
 - (iii) Standard deviation
 - (iv) None of the above
 - (b) Which one is not related with Primary Data :
 - (i) Direct Personal Investigation
 - (ii) Indirect Oral Investigation
 - (iii) Schedules and Questionnaires
 - (iv) Official Publication of the Central Government

- (c) Types of averages includes :
- (i) Geometric Mean
 - (ii) Harmonic Mean
 - (iii) Both (i) and (ii)
 - (iv) None of the above
- (d) Secondary data should be used when :
- (i) The data meet the purpose of study
 - (ii) It is easily available
 - (iii) It is less costly to use
 - (iv) The source and purpose are known
- (e) Secondary data should be used when :
- (i) It is easily available
 - (ii) It is less costly to use
 - (iii) The source and purpose are known
 - (iv) The data meet the purpose of study
- (f) Co-efficient of Quartile Deviation is equal to :
- (i) $\frac{2 \text{ Quartile Deviation} \times 100}{Q_3 + Q_1}$
 - (ii) $\frac{Q. D}{\text{Mean}}$

(iii) $\frac{Q. D \times 100}{\text{Mode}}$

(iv) None of these

(g) The probability of drawing a spade from a pack of cards is :

(i) $\frac{1}{52}$

(ii) $\frac{1}{13}$

(iii) $\frac{4}{13}$

(iv) $\frac{1}{4}$

(h) Median of 2, 5, 8, 14, 9, 16, 7, is :

(i) 9

(ii) 8

(iii) 15

(iv) 16

(i) **Class** **Frequency**

0 – 10 7

10 – 20 10

20 – 30 17

Class	Frequency
30 – 40	8
40 – 50	6

For the class 10 – 20, cumulative frequency is :

- (i) 14
 - (ii) 34
 - (iii) 30
 - (iv) 17
- (j) The probability of drawing a King or Queen from a pack of cards is :
- (i) $\frac{1}{13}$
 - (ii) $\frac{2}{13}$
 - (iii) $\frac{1}{4}$
 - (iv) None of the above

2. Describe the meaning, nature and scope of quantitative technique in different areas.

3. Explain the various methods that are used in the

collection of primary data pointing out their merits and demerits.

4. Find arithmetic mean from the following data by step deviation method :

Wages	No. of Workers
0 – 10	5
10 – 20	10
20 – 30	25
30 – 40	30
40 – 50	20
50 – 60	10

5. What is correlation ? Distinguish between positive, negative and zero correlation.
6. A bag contains 3 red and 4 white balls. Two draws are made without replacement. What is the probability that both the balls are red ?

7.

Value	Frequency
0 – 10	4
10 – 20	12
20 – 30	24
30 – 40	36

AP – 5/3

(5)

(Turn over)

Value	Frequency
40 – 50	20
50 – 60	16
60 – 70	13

Calculate median and first and third quartiles from the above data.

