## H.P.BOARD OF DEPARTMENTAL EXAMINATION DEPARTMENTAL EXMAINATIONS OF OTHER GAZETTED OFFICERS/ OFFICIALS OF HIMACHAL PRADESH SESSION APRIL, 2008

## PAPER-3 (ECONOMICS AND STATISTICS)

Time Allowed: 3 Hours. 100

Maximum Marks:

## Note:- Attempt five questions. All questions carry equal marks.

Q.No.1 a) What are the five stages of Statistical Investigation? Describe? Describe them.

- b) Define the terms Primary and Secondary methods of data collection and in what special circumstances are two methods suitable?
- Q.No.2 The various methods of sampling are called "Sampling design", which can be Grouped under two heads. What are those? Describe them with limitations?
- Q.No.3 a) Define the various M's of central tendency. What purpose do their Measurements serve?
  - b) What are the various types of data presentation? How and where are they useful in presenting the data?
- Q.No.4 Calculate the mean deviation from the following data. What light does it throw On the social conditions of the community?

| Differences in years 0-5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-30 | 30-35 | 35-40 |
|--------------------------|------|-------|-------|-------|-------|-------|-------|
| 449                      | 705  | 507   | 281   | 109   | 52    | 16    | 4     |

Q.No.5 a) The number of employees, wage per employee and the variance of the wages Per employee for two departments are given below:-

|  | •    |
|--|------|
| Number of employees 50                         | 100  |
| Average wage/ employee/ month (Rs.) 120        | ) 85 |
| Variance of the wages/ employee/ month (Rs.) 9 | 16   |

- (i) In which department is there greater variation in the distribution of wages per employee?
- (ii) Suppose in department B, the wages of and employee were wrongly noted as 120 instead of Rs.100. What would be the correct variance for department B?

b) In Himachal Pradesh the ratio of males to females is 1000: 968. if this tendency

is to continue, what is the chance that a newly born baby is female?

- Q.No.6 a) What do you mean by weights? Why are they assigned? Point out a few cases In which weighted average should be used?
  - b) Do you agree with the following, Comment?
  - (i) Usually the attendance of a Office is 50 persons per day. Therefore the total Attendance for 100 working days is 5000.
    - (iii) The increase in the price commodity X was 20%. Then the price decreased 25% and again increased 15%. So the resultant increase is (i) 15% & (ii) 10%.
- Q.No.7 Describe the Statistical System in India? What is the role of the Central Statistical Organisation and National Sample Survey Organisation?

Q.No.8 Write short notes on any four

- (i) Positive & Negative correlation
- (ii) Index numbers
- (iii) Periodicity
- (iv) Gross State Domestic Product
- (v) Moving averages.

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