# H.P.BOARD OF DEPARTMENT AL EXAMINATION <br> DEPARTMENTALEXMAINATIONS OF OTHER GAZETTED OFFICERS/ OFFICIALS OF HIMACHAL PRADESH SESSION APRIL, 2008 

PAPER-3
(ECONOMICS AND ST ATISTICS)
T ime Allowed: 3 H ours.
M aximum M arks:
100

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

Q.No.1 a) W hat are the five stages of Statistical Investigation? D escribe? D escribe them.
b) D efine the terms Primary and Secondary methods of data collection and in what special circumstances are two methods suitable?
Q.N o. 2 T he various methods of sampling are called "Sampling design", which can be Grouped under two heads. W hat are those? D escribe them with limitations?
Q.N o. 3 a) D efine the various M 's of central tendency. W hat purpose do their M easurements serve?
b) W hat are the various types of data presentation? H ow and where are they useful in presenting the data?
Q.N o. 4 Calculate the mean deviation from the following data. W hat light does it throw On the social conditions of the community?
$\begin{array}{rcccccccc}\text { Differences in years } 0-5 & 5-10 & 10-15 & 15-20 & 20-25 & 25-30 & 30-35 & 35-40 \\ 449 & 705 & 507 & 281 & 109 & 52 & 16 & 4\end{array}$
Q.N o. 5 a) The number of employees, wage per employee and the variance of the wages Per employee for two departments are given below:-

Deptt.A Deptt. B
N umber of employees 50100
Average wage/ employee/ month (Rs.) 12085
Variance of the wages/ employee/ month (Rs.) 916
(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. W hat 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) W hat do you mean by weights? W hy are they assigned? Point out a few cases In which weighted average should be used?
b) Do you agree with the following, Comment?
(i) U sually the attendance of a Office is 50 persons per day. T herefore the total A ttendance 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.N o. 7 Describe the Statistical System in India? W hat is the role of the Central Statistical Organisation and National Sample Survey Organisation?
Q.N o.8 W rite short notes on any four
(i) Positive \& N egative correlation
(ii) Index numbers
(iii) Periodicity
(iv) G ross State D omestic Product
(v) M oving averages.

