

**H.P.BOARD OF DEPARTMENTAL EXAMINATION
DEPARTMENTAL EXAMINATION OF OTHER GAZETTED OFFICERS OF
HIMACHAL PRADESH SESSION SEPTEMBER, 2008**

PAPER-3 (ECONOMICS AND STATISTICS)

**Time Allowed: 3 Hours.
100**

Maximum Marks:

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

- Q.No.1 (a) Describe the Statistical System in India? What is the role of the Central Statistical Organisation and National Sample Survey Organisation?
(b) What is the importance of statistics to the Economist, Government and Businessman?

- Q.No.2 (a) Explain the usefulness of diagrams in presenting statistical data? What, in Your opinion, are the tests of a good diagram?
(b) Define the terms Primary and Secondary methods of data collection and in What special circumstances are two methods suitable?

- Q.NO.3 (a) What do you mean y Weights? Why are they assigned? Point out a few cases

Which weighted average should be used?

- (b) Monthly incomes of the families are given below in rupees:
2000, 35, 400, 15, 40, 1500, 300, 6, 90, 250, 20, 12, 450, 10, 150, 8, 25, 30, 1200, 60,
Calculate the arithmetic mean, geometric mean and harmonic mean of the Above series?

- Q.No.4 (a) The following marks have been obtained in three papers of statistics in Examination by 12 students. In which paper is the general level of the Knowledge of the students highest? Given reasons

A- 36, 56, 41, 46, 54, 59, 55, 51, 52, 44, 37, 59

B- 58, 54, 21, 51, 59, 46, 65, 31, 68, 41, 70, 36

C- 65, 55, 26, 40, 30, 74, 45, 29, 85, 32, 80, 39

- (b) Do you agree with the following, comment:
(i) Rate for a certain commodity in the first week is 4 Kg. for a rupee and in the Second week is 8 Kg. for a rupee. So the average price is $(4 + 8) / 2 =$ for a Rupee.
(ii) 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%

(iv) The rate of increase in the number of cows in India is greater than the Population. So the people of India are now getting more milk per head.

Q.No.5 (a) Describe the terms Interpolation and Extrapolation?

(b) What are the various methods of estimating seasonal variations in historical Series?

Q.No.6 (a) Describe fully what is meant by correlation and distinguish between positive Negative correlation?

(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.7 (a) In a beauty contest two judges rank the 10 participants in the following order

Individual	1	2	3	4	5	6	7	8	9	10
Ranking by I	6	4	3	1	2	7	9	8	10	5
Ranking by II	1	1	6	7	5	8	10	9	3	2

Is there any concordance between the two judges?

(b) Calculate the mean deviation from the following data. What light does it throw

On the social conditions of the community?

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

Q.No.8 Write short notes on any four

(i) Sample and Census Surveys

(viii) Continuous and Discrete series

(ix) Zero base budgeting

(x) Periodicity

(xi) Gross State Domestic Product
