

**Departmental Examination of Other Gazetted Officers of Himachal Pradesh
October, 2016**

Paper No.3 Economics and Statistics
Time Allowed: Three Hours

Max. Marks:100

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

Question I: What are the various Census done in the country? List out the objectives of these census? Give your opinion whether these be done in one point of time? (7+8+5)

Question II (a) Describe what is meant by correlation and distinguish between positive and negative correlation? (10)

(b) 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? (10)

Question III: (a) Describe the Statistical System in India? What is the role of the Central Statistical Office and National Sample Survey Office? (12)

(b) What is the importance of statistics to the Economist, Government and Businessman? (8)

Question IV: (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 (12)

(b) The odds in favour of 'A' winning a game of Badminton against 'B' are 5:2. If three games are to be played, what are the odds in favour of A's winning at least one game? (8)

Question V: 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
Number of employees	50	100
Average wage/employee/month(Rs.)	120	85
Variance of the wages/employee/month(Rs.)	9	16

(a) In which department is there greater variation in the distribution of wages per employee?

(b) Suppose in department B, the wages of an employee were wrongly noted as 120 instead of Rs.100. What would be the correct variance for department B? (20)

Question VI: The various methods of sampling are called "Sampling designs", which can be grouped under two heads. What are those? Describe them with limitations? (20)

Question VII: What is meant by term Whole Sale Price Index and Consumer Price Index? How they are different? what methods are used for their compilation and what is meaning of base year in its compilation? (20)

Question VIII Write short notes on any three

- (i) Continuous and Discrete series
- (ii) Zero base Budgeting
- (iii) Periodicity
- (iv) Line of best fit

(7+7+6)