## H.P. BOARD OF DEPARTMENTAL EXAMINATION Departmental Examination for Tehsildars & Naib Tehsildars NoV- 2019

Paper: 2 Arithmetic and Patwaris Mensuration;

TIME ALLOWED: Three Hours

**MAXIMUM MARKS: 100** 

Note. 1. Attempt any five questions. All questions carry equal marks.

2. The candidates may answer the questions either in Hindi or English.

## PART-I, ARITHMATIC

Note:- Attempt any five question.

## Question:-

- 1. A trader purchased two Cows for Rs.920. He sold one Cow at a profit of 10% and the second at a loss of 15%. He neither profited nor incurred loss. What was the cost price of each Cow. (10 Marks)
- 2. Harman can finish a work in 12 days. Gurnam in 15 days and Satnam in 20 days. If all of them combine, how many days will they take to finish the work.

  (10 Marks)
- 3. A rectangular orchard is 208 meters in length and 108 meters in breadth. There are 4 meters wide road on the four sides of the orchard. Give the area under the road and the orchard separately. (10 Marks)
- 4. Ram gave on credit Rs.165.50 for a period of 3 years to Shyam and to Harnam Rs.275.25 for a period of 2 years and got an interest of Rs.41.88 from both of them. What is the percent rate of interest? (10 Marks)
- 5. There are three shareholders A, B and C in a property. The ration of A's Share to B's share=4:5 and the ratio of B's share to C's share= 3:4. Find the ratio of the three shares.

  (10 Marks)
- 6. Oranges were purchased at 7 a rupee. At what price of 100 should they be sold so as to gain 33 prepent? (10 Marks)

7. The average age of 24 students was 12 years and 3 months. A new boy came in the class and average was raised to 12 years 4 months. Find the age of the new student.

(10 Marks)

## PART-II PATWARIS MENSURATION

Note:- Attempt any five Questions

- 8. Write short notes on the following:
  - i. Chandabandi;
  - ii. Base-line;
  - iii. Pahari Paimanish;
  - iv. Murrabandi; and MURRABABANDI
  - v. Assessment Circles.

(10 Marks)

- 9. Define Adda, how it is prepared and how the length of a Jarib is checked on it? (10 Marks)
- 10. Define Kadami Paimaish. When this method is adopted? How will you fix up central point of a field during this process? (10 Marks)
- 11. If a field has more than 4 corners, what methods are adopted to calculate its area? Calculate the area of such a field by giving an example.

(10 Marks)

12. What is the method of Tarmim Paimaish? How will you do it? If you find changes in the Karukans, how will you proceed to prepare its map.

(10 Marks)

- 13. State briefly the method of measurement where it is intercepted by a river. (10 Marks)
- 14. What is a field-book? How and when it is prepared and what are its uses? (10 Marks)