2023

GEOGRAPHY (Honours)

Paper Code : GEOH DC-14B

(Practical)

Set - III

Full Marks : 15   Time : One Hour Thirty Minutes

The figures in the margin indicate full marks.

Answer *all* the questions.

1. (a) An agricultural scientist is planning to compare the ages from a random sample of male and female farmer in an area. The scientist collected 62 female farmers' data, and the mean age is 23.1 with a standard deviation of 3.5. Similarly, collected 46 male farmers' data, and the mean average is 19.2 with a standard deviation of 4.8. Assume the population follows a standard normal distribution. At 0.05 significance level, is there a significant difference in age between female and male farmers? [Critical value : + 1.960 and – 1.960]   2+1=3

    (b) A class about basic statistics by a teacher greatly enriched to pupil. Teacher claims class to be able to score above 70 marks on the topic on a class

test. Six students are chosen at random from the class for the test. The six students get scores of 62, 92, 75, 68, 83 and 95. Can the teacher have 90 percent confidence that the mean score for the class on the test would be above 70? (Where critical value is 1.476 at 0.10 significant level with df = 5). 3+1=4

2. One hundred Shirts were selected randomly from the output of each of the five macines. From these five machines, numbers of defective shirts were found i.e. 5, 9, 13, 7 and 6 respectively. Assume 8 as unexpected number of defective shirt of each of the five machines output. Is there a significant difference among the machines? Use 5% level of significance adopting Chi square test [where, df = 4 and critical value = 9.488]. 4+1=5

3. Laboratory note book and viva-voce. 1.5+1.5=3