NEW

Part–III 3-Tier

2016

STATISTICS

(Honours)

PAPER—VIII (Group–A)

(PRACTICAL)

Full Marks : 50

Time : 4 Hours

The figures in the right-hand margin indicate full marks.

Answer *all* questions.

1. Plot 5 random points inside a circle of radius 4 c.m. (Give co-ordinates of the points only correct to 0·1 c.m.). 6

2. The following table contains the data of number of workers and number of absentee from the samples of 10 factories drawn uisng SRSWR from 150 factories situated in a district. Estimate the percentage of absence of the factory workers. Also obtain an estimate of the standard error of your estimate :

Sl. No.	1	2	3	4	5	6	7	8	9	10
No. of Workers	45	53	103	65	52	81	47	57	116	132
No. of Absentee	2	2	9	8	8	10	4	5	12	13

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3. In an electroplating experiment five nickel rods put a metallio e-lamp at five different positions were jointly immersed in the electrolyte and the thickness of aluminum oxide coating (in microns) was observed at three different heights H_1, H_2, H_3 on each of the five rods R_1, R_2, R_3, R_4, R_5.

The results are given below :

Thickness of coatings of rods

Height	R_1	R_2	R_3	R_4	R_5
H_1	125	130	128	134	143
H_2	126	150	127	124	118
H_3	130	155	168	159	138

Analyse the above data to examine how the thickness of coating deposited varies with the position and height.

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4. An experiment was planned to study the effect of potash sulphate and super phosphate on the yield of potatoes. All the combinations of 2 levels of super phosphate [0 cent (P_0) and 5 cent (P_1) / acre] and two levels of potash sulphate [0 cent (K_0) and 5 cent (K_1) / acre] were studied in a randomised block design with four replication for each. The following are the yield figures (lb per plot = 1/70 acre).

Block–I	(I)	K	P	KP
	23	25	22	38
Block–II	P	(I)	K	KP
	40	26	36	38
Block–III	(I)	K	PK	P
	29	20	36	20
Block–IV	KP	K	P	I
	34	31	24	28

Analyse the above data and give your conclusion. 12

5. Practical Note-Book and Viva-Voce. 5+5

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