



Federal Board HSSC Examination  
Statistics Practical Model Question Paper

Time allowed: 3 hours

Marks: 30

Note: Attempt two questions, one from each section. All questions carry equal marks.

**SECTION-I**

Q.1 Given: (10)

Classes	f	Classes	f
10 – 19	7	60 – 69	12
20 – 29	15	70 – 79	8
30 – 39	25	80 – 89	4
40 – 49	30	90 – 99	5
50 – 59	45	100 – 109	9

Calculate Mean Deviation from mean and standard Deviation.

Q.2 Construct Weighted Price index number by using: (10)  
(i) Laspeyres's (ii) Paasche's (iii) Fisher ideal index  
taking year 2012 as base

Commodities	Price		Quantity	
	2012	2014	2012	2014
A	12	19	8	10
B	75	90	12	15
C	110	130	10	12
D	30	45	6	9
E	48	62	25	23

**OR**

From the following data show that  $r = \frac{\pm \sqrt{b \times d}}{a}$

X: 8 10 6 15 20 27 30 32 21 39

Y: 11 14 8 20 18 22 34 36 20 32

**SECTION-II**

Q.3 Select 60, four digit number from random number table diagonally. Let X represent even number in selected number. Obtained probability distribution of X and find E(X) and Ver(X). (10)

Q.4 A population consists of 1, 3, 5, 7, 9, 11. Draw all possible sample of size 2 with replacement. Form sampling distribution of means and show that (10)

(i)  $\mu_{\bar{x}} = \mu$                       (ii)  $\sigma_{\bar{x}}^2 = \frac{\sigma^2}{n}$

**OR**

Test the association between the heights of father and heights of son at 5% level of significance.

Height of father	Height of sons		
	Short	Tall	Very Tall
Short	113	175	107
Tall	145	210	115
Very Tall	190	290	145

Viva voce (5)

Note book (5)