Stats Assignment - 1

Q1 (a)

Rang	frequency	m	mf
1-10	2		
11-20	7		
21-30	10		
31-40	3		
41-50	1		

0.5 - 10.5	2	5.5	11.0
10.5 - 20.5	7	15.5	108.5
20.5 - 30.5	10	25.5	255
30.5 - 40.5	3	35.5	106.5
40.5 - 50.5	1	45.5	45.5
	23		526.5

$$\text{mean} = \frac{\Sigma mf}{n} = \frac{526.5}{230} = 22.89$$

(b)

Rang	frequency	m	mf
0-10	2	5	10
10-20	7	15	105
20-30	15	25	575
30-40	10	35	350
40-50	11	45	495
50-60	5	55	275
	30		1610

Page No.
Date

$$\text{mean} = \frac{\Sigma mf}{n} = \frac{1610}{50} = 32.2$$

Exam Score	No. of student	m	mf
51-60	4	55.5	222
60-70	8	65	520
70-80	15	75.5	1132.5
80-90	8	85.5	684
90-100	5	95.5	477.5
	40		3036

$$\text{mean} = \frac{\Sigma mf}{n} = \frac{3036}{40} = 75.9$$

Q2 mean wages group 1 = 75
mean wages group 2 = 60

Workers group 1 = 1000
Workers group 2 = 1500

$$\text{mean} = \frac{\Sigma x}{n} \qquad \frac{\Sigma x}{n}$$

$$75 = \frac{\Sigma x}{1000} \qquad 60 = \frac{\Sigma x}{1500}$$

$$75 \times 1000 = \Sigma x \qquad 60 \times 1500 = \Sigma x$$
$$75000 = \Sigma x \qquad 90,000 = \Sigma x$$

Sum of all wages = 75000 + 90,000
= 165000

Page No.
Date

Total Workers = 1000 + 1500
= 2500

Over all mean Value

$$\text{mean} = \frac{\Sigma x}{n}$$

$$= \frac{165000}{2500} = 66 \text{ Ans}$$

Q3 A No. examined = 50
B No. Examined = 60
C No Examined = 90

mean of A = 113
Mean of B = 120
Mean of C = 115

$$\text{mean } A = \frac{\Sigma x}{n}, \quad B = \frac{\Sigma x}{n}, \quad C = \frac{\Sigma x}{n}$$

$$113 = \frac{\Sigma x}{50} \qquad 120 = \frac{\Sigma x}{60} \qquad 115 = \frac{\Sigma x}{90}$$

$113 \times 50 = \Sigma x$ $\quad 120 \times 60 = \Sigma x$ $\quad 115 \times 90 = \Sigma x$
5650 $\quad 7200$ $\quad 1035$

Total mean = 23,200
Total Worker = 200