

(i) (ii) (iii) ⇒ Max^m (Range of All. enter in ms. excel) = 95 scores.
 Minimum (Range of All no. enter in ms. excel) = 10 scores.

(iv) Pass ⇒

variable	Tally Bars	Frequency
10 - 20	1	6
20 - 30	1	6
30 - 40		3
40 - 50	11	8
50 - 60		4
60 - 70		2
70 - 80	11	7
80 - 90	11	8
90 - 100		4
Total		48

(iii) Pass ⇒ NO. of students scored above pass marks of 50 = 25 ; Percentage = $\frac{\text{No. of student}}{\text{Total}} \times 100$

⇒ $\frac{25}{48} \times 100$

= 52.08%

(iv) 13 student scored ^{between} below 50 and 80. AS

Q14/Ans =)

Day	sales	5 year total	5 yearly moving avg
1	230	-	-
2	200	-	-
3	250	1180	236
4	300	1175	235
5	200	1375	275
6	225	1575	315
7	400	1690	338
8	450	1910	382
9	415	2185	437
10	420	2085	417
11	500	2035	407
12	300	1920	384
13	400	1815	363
14	300	-	-
15	315	-	-

Moving average of length 5. shown in above diagram.

Q. (16) \Rightarrow Fitting straight line trend by method of Least squares.

Month	Demand	(3.5) Deviation from	xy	x^2
1	46	2.5	115	6.25
2	56	1.5	84	2.25
3	54	0.5	27	0.25
4	43	-0.5	-21.5	0.25
5	57	-1.5	-85.5	2.25
6	56	-2.5	-140	6.25

$$N = 6, \quad \Sigma y = 312, \quad \Sigma x = 0, \quad \Sigma xy = 21$$

$$\Sigma x^2 = 17.5$$

The eq. of straight line trend is =

$$y = a + bx$$

$$\Sigma x = 0$$

$$a = \frac{\Sigma y}{N} = \frac{312}{6} = 52$$

$$b = \frac{\Sigma xy}{\Sigma x^2} = \frac{21}{17.5} = 1.2$$

$$a = 52, \quad b = 1.2$$

$$y = 5x + 1.2x \quad (\because y = 5x + 1.2x)$$

Let x would be 8.

Hence,

$$y = 5x + 1.2x$$

$$y = 5 \times 8 + 1.2 \times 8$$

$$y = 41.6 \text{ Ans.}$$