

**Chapter: 7**

**Q.1 Choose the correct alternative. (2)**

1) If two quantities X and y vary directly then.

a.  $X \times y$  is constant

b.  $\frac{x}{y}$  is constant.

c.  $X - y$  constant

d.  $X + y$  is constant

2) 20 people can make a wall in 12 days. How many days will 16 people take to build the wall.

a. 5 days

b. 10 days

c. 15 days

d. 20 days

**Q.2 Answer the following questions (any two) (6)**

1) y varies directly as square root of x. when  $x = 16$ ,  $y = 24$ . Find the constant of variation and equation of variation.

2)

$x \propto \frac{1}{\sqrt{y}}$  and when  $x = 40$  then  $y = 16$  if  $x = 10$ . Find y.

3) if 24 workers can build a wall in 30 hours how many workers will be required to build the same wall in 48 hours.

**Q.3 Attempt the following questions. (Any three) (12)**

1) The total remuneration paid to labourers employed to harvest soyabean is in direct variation with the number of labourers. If remuneration of 4 labourers is Rs. 1000. Find the remuneration of 17 labourers.

2) When Ram travels from his home to school at a speed of 36 km/hr, he takes 2 hour to reach the school. How much time will be take if he reduces his speed to 30 km/hr.

3) If n varies directly as m, complete the following table.

m	3	5	6.5	7	1.25
n	12	20	.....	28	.....

4) The information about number of workers and numbers of workers and number of days to complete the work is given in the following table. Complete the table

Number of workers	30	20	.....	10	5
Days	6	9	12	.....	36