

Class Test on Direct and Inverse Proportion (Class 8)

Full marks: 10

Choose the correct option.

 $1 \times 4 = 4$

- 1) 11 labours can dig $\frac{27}{4}$ m long trench in one day. How many labours should be employed for digging 47m long trench in one day?

- a. 69 labours b. 39 labours c. 78 labours d. 77 labours

- 2) If x and y are inversely proportional, then which one is true?

a. $\frac{x_1}{y_1} = \frac{x_2}{y_2}$

$$b. \frac{x1}{x2} = \frac{y1}{y2}$$

c. $\frac{x_1}{x_2} = \frac{y_2}{y_1}$

$$d. \frac{x_1}{v_2} = \frac{x_2}{v_1}$$

- 3) Which of the following is ease of direct variation?

(i) If the length of radius is increased the circumference will be increased

(ii) If number of students in a hostel are increased then the fixed food provision will last for less days

(iii) For fixed duration, more the periods, lesser will be the duration of one period

(iv) In case of a cylindrical vessel, lesser the diameter more is the level of water in it.

- 4) If $x = 20$ and $y = 40$, then x and y are:

- a. Directly proportional b. Inversely proportional
c. Neither directly nor inversely proportional d. Cannot be determined

Answer the following questions.

 $2 \times 3 = 6$

- 5) 1000 children in a hostel had enough food for 28 days. After 4 days, some children were shifted to other hostel. As a result, the food now lasted for 32 days. How many children were shifted?
- 6) The amount of extension in the length of the elastic string directly varies as the weight hung on it. If a weight of 500 gm produces an extension of 3 cm, the what weight would produce an extension of 36.2 cm ?
- 7) A library has a certain number of books. If they were to buy more books, the total cost would increase directly. If 80 books cost Rs 90 each, and the librarian gets a 20% discount from a publisher, how many more books can she buy with the same amount of money?
