

GANIT PRABHUTWA EXAMINATION: 2023-2024
MODEL ANSWERS: Std. 5

Q. 1-A] 1) B 2) B 3) B 4) B 5) A 6) D 7) B 8) D 9) B 10) B

Q. 1-B] 1) 91 2) 77 sq. dm 3) 0.2125 4) $\frac{9}{4}$ & 1 5) $\frac{2}{3}$

Q. 2]

1) Number of voters who did not vote = 2,70,000 - 2,25,000 = 45000

$$\text{percentage of them} = \frac{45000}{270000} \times 100 = \frac{50}{3} \% \text{ or } 16\frac{2}{3} \%$$

2) Rs. 1000 is the payment per week means, Rs. 1000 for 7 days

Hari worked for 441 days. $\therefore 441 \div 7 = 63$ weeks

$\therefore$ He earned $63 \times 1000 = \text{Rs. } 63000$

3) Acute angles: $73^\circ, 18^\circ, 58^\circ$

Obtuse angles $118^\circ, 125^\circ$

Right angle 90°

4) The smallest number is 20468;

The largest number is 86420

$\therefore$ Their difference is $86420 - 20468 = 65952$

5) $9.407 \div 0.023 = 9407 \div 23 = 409$

$\therefore 9.407 \div 0.023 = 409$

Q. 3]

1) 10% of 2500 = $2500 \times \frac{10}{100} = 250$

$\therefore$ This year's population = $2500 + 250 = 2750$

2) Let the cost price be Rs. 100

The selling price = Rs. 150

Profit = $150 - 100 = 50$ on C. P. 100

$\therefore$ Profit = 50%

3) $133100 = 1331 \times 100 = 11 \times 11 \times 11 \times 25 \times 4$

$$133100 = 2 \times 2 \times 5 \times 5 \times 11 \times 11 \times 11$$

$$4) 508.43 - (368.58 - 6.7) = 508.43 - (368.58 - 6.70)$$

$$= 508.43 - 361.88 = 146.55$$

$$5) (* \times 100) - (* \times 10) = *(100 - 10) = * \times 90 = 360 \therefore * = 4$$

$\therefore$ The number = 5449

Q. 4]

$$1) 1818 = 18 \times 101 = 2 \times 3 \times 3 \times 101$$

$$1800 = 18 \times 100 = 2 \times 3 \times 3 \times 2 \times 2 \times 5 \times 5$$

$$3636 = 18 \times 202 = 2 \times 3 \times 3 \times 2 \times 101 \therefore \text{G.C.D.} = 2 \times 3 \times 3 = 18$$

$$2) (8.33 - 2.08) \div (1.47 + 1.03)$$

$$= 6.25 \div 2.50 = 62.5 \div 25.0 = 2.5$$

3) 1) Pentagon is separated into three parts

2) Each part is a triangle

3) The sum of the measures of all angles of a triangle is 180°

4) The sum of the measures of all angles of a pentagon is 540°

$$4) 63504 = 9 \times 7056 = 9 \times 9 \times 784 = 9 \times 9 \times 28 \times 28$$

$$= 2 \times 2 \times 7 \times 2 \times 2 \times 7 \times 3 \times 3 \times 3 \times 3$$

$$= 2 \times 2 \times 2 \times 2 \times 3 \times 3 \times 3 \times 3 \times 7 \times 7$$

$$5) \text{ In V-A, percentage of presence of students} = \frac{45}{60} \times 100 = 75$$

In V-B, 14 students out of 56 were absent

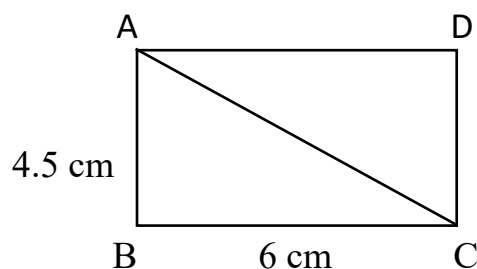
$\therefore 56 - 14 = 42$ students were present.

$$\therefore \text{ In V-B, percentage of presence of students} = \frac{42}{56} \times 100 = 75$$

$\therefore$ The percentage of presence of students in both the divisions is same.

Q. 5]

1)



$$AC = 7.5 \text{ cm}$$

2) Cost of one ball + cost of one bat = Rs. 1100

Cost of one bat = Rs. 1000 + Cost of one ball

$$\therefore \text{Cost of one ball} + 1000 + \text{Cost of one ball} = 1100$$

$$\therefore \text{Cost of two balls} + 1000 = 1100$$

$$\therefore \text{Cost of two balls} = 100 \quad \therefore \text{Cost of one ball} = \text{Rs. } 50$$

$$\therefore \text{Cost of one bat} + \text{cost of one ball} = \text{Rs. } 1100$$

$$\therefore \text{Cost of one bat} = 1100 - 50 = \text{Rs. } 1050$$

$$\therefore \text{Cost of 2 bats} = 1050 \times 2 = 2100 \text{ rupees and}$$

$$\text{cost of 4 balls} = 50 \times 4 = 200 \text{ rupees.}$$

$$\therefore \text{Total cost} = 2100 + 200 = \text{Rs. } 2300$$

3) The perimeter of a square = $4 \times$ side of that square

$$\therefore \text{The perimeter of the given square} = 4 \times 15 = 60 \text{ cm}$$

The perimeter of the given square = The perimeter of a regular hexagon.

$$\therefore \text{The perimeter of that regular hexagon} = 60 \text{ cm}$$

The perimeter of a regular hexagon = $6 \times$ side of that hexagon

$$\therefore 60 = 6 \times \text{side of that hexagon}$$

$$\therefore \text{The length of side of the hexagon} = 10 \text{ cm}$$

$$4) 9990 \times \frac{333}{999} + 888 \times \frac{340}{888}$$

$$= 10 \times 333 + 340 = 3330 + 340 = 3670$$

5) First boy collected 36 flowers. Second and third boy, each collected

29 flowers from the remaining flowers. Fourth and fifth boy, each collected

23 flowers from the remaining flowers.

$$\therefore \text{Remaining boys} = 7 - (1+2+2) = 7 - 5 = 2$$

Remaining two boys collected 14 flowers each.

$$\therefore \text{Total number of flowers collected by all} = 36 + 29 + 29 + 23 + 23 + 14 + 14 = 168$$

168 flowers are equally distributed among all seven students.

$$\text{Each of them got } 168 \div 7 = 24 \text{ flowers}$$

Q. 6]

1) The smallest 1-digit prime number is 2 and the smallest 2-digit prime number is 11

Their product is $2 \times 11 = 22$. $\therefore$ Among two numbers, one number is 22

Product of two numbers is 1980 $\therefore$ Another number is $1980 \div 22 = 90$

$22 = 2 \times 11$ and $90 = 3 \times 3 \times 2 \times 5$

$\therefore$ L.C.M. of 22 and 90 is $2 \times 11 \times 3 \times 3 \times 5 = 990$

2) S.I. = Amount – Principal and $S.I. = \frac{PNR}{100}$

In Neeta's transaction, A = Rs. 1,80,000 and P = Rs.1,50,000

$\therefore$ S.I. = 1,80,000 – 1,50,000 = Rs. 30,000

$\therefore$ S.I. = 30,000 = $(1,50,000 \times 2 \times R) \div 100$

$\therefore$ R = 10%

In Ganesh's transaction, A = Rs. 3,10,000 and P = Rs. 2,50,000

$\therefore$ S.I. = 3,10,000 – 2,50,000 = Rs. 60,000

$\therefore$ S.I. = 60,000 = $2,50,000 \times 2 \times R \div 100$ $\therefore$ R = 12 %

$\therefore$ Difference between the rates of interest = 12% – 10% = 2%

$\therefore$ Urban co-operative bank charged 2% higher rate of interest than rural co-operative bank.
