

Question Paper

Class: VI

60 Marks

I. Choose the correct answer.

(10 × 1 = 10)

a. How many square numbers are there between 2 and 99?

- i. 7 ii. 8 iii. 9 iv. 10

b. The natural numbers along with '0' form the collection of _____.

- i. Natural numbers ii. Whole numbers iii. Even number iv. Odd numbers

c. The only even prime number is _____.

- i. 2 ii. 4 iii. 10 iv. 1

d. Two prime numbers that differ by 2 are called _____.

- i. Natural numbers ii. Whole numbers iii. Twin prime numbers iv. Odd numbers

e. If a number is divisible by both ____ and ____, then it is divisible by 6.

- i. 1 and 5 ii. 2 and 3 iii. 2 and 4 iv. 3 and 4

f. The additive inverse of -6 is _____.

- i. 6 ii. 60 iii. $\frac{1}{6}$ iv. 0

g. The number _____ is neither positive nor negative.

- i. 1 ii. 0 iii. 2 iv. 10

h. 99 is divisible by _____.

- i. 2 ii. 4 iii. 5 iv. 11

i. 22,55000 divided by 5 gives _____.

- i. 45100 ii. 451000 iii. 4510 iv. 451

j. On the number line, 5 is to the _____ of -4.

- i. left ii. right iii. above iv. below

2. Fill in the blanks.

(5 × 1 = 5)

- a. A number whose only factors are 1 and the number itself is called a _____.
- b. The absolute value of -12 is _____.
- c. Any two consecutive numbers are always _____.
- d. Numbers that are not multiples of 2 are called _____ numbers.
- e. The successor of -12 is _____.

3. Solve the following.

(6 × 2 = 12)

- a. Find the prime factorisation of 288.
 - b. Find the smallest number that has 2, 7 and 11 as its prime factors.
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- c. Find the value of $|-7| - (-4)$.

- d. Use a number line to solve $(-6) + (-2)$.

- e. Given the numbers 9, -8 , -3 and 10, arrange their absolute values in ascending order.

f. Use the divisibility test, determine whether 102489628 is divisible by 11 or not.

4. Do as instructed.

(4 × 3 = 12)

a. Observe and complete the pattern.

$$0 \times 9 + 8 = 8$$

$$9 \times 9 + 7 = 88$$

$$98 \times 9 + 6 = \underline{\hspace{2cm}}$$

$$987 \times 9 + 5 = \underline{\hspace{2cm}}$$

$$\underline{\hspace{2cm}} \times 9 + \underline{\hspace{1cm}} = \underline{\hspace{2cm}} \times 9 + \underline{\hspace{1cm}} = \underline{\hspace{2cm}}$$

b. Evaluate: $(32 - 14) \times [9 + 11 - \{17 + 8 - 5\}]$

c. Find the HCF of 14, 84 and 144.

d. Evaluate: $-14 + (-8) + 9 + (-7)$.

5. Solve the following word problems.

(4 × 5 = 20)

a. A car travels 14 km due west, 28 km due east, and then 11 km due west. What is the final position from the starting point?

b. Danish visits a shrine after every 48 days. Mehak visits after every 32 days and Varun after every 64 days. One day, they met at the shrine. After how many days will they meet again at the same place?

c. Ishan started a bank account by depositing ₹2000. After a month, he deposited another ₹2500 in the account. After a week, he withdrew ₹1550 from the same account. Find the amount left in his account.

d. A rectangular piece of metal sheet that measures 240 cm by 200 cm is cut into identical small square pieces. Find the greatest possible length of a side of each square. Also find the number of square pieces that can be obtained.
