* Answer The Following Questions In One Sentence.[1 Marks Each]

[10]

- 1. The negative of 1 is 1 itself
- 2. The population of India in 2004 05 is a rational number.
- 3. Every integer is a rational number.
- 4. Write the additive inverse of the following rational number:

$$\frac{-2}{17}$$

5. Find the multiplicative inverse (reciprocal) of the following rational numbers:

$$\frac{0}{3}$$

- 6. Is subtraction associative on rational numbers?
- 7. What is the negative of a negative rational number?
- 8. Find the multiplicative inverse (i.e., reciprocal) of:

$$\frac{-3}{-5}$$

9. Add the following rational numbers.

2 and
$$\frac{-5}{4}$$

10. Name the property of multiplication shown by the following statement:

$$\left(\frac{-2}{3} \times \frac{7}{8}\right) \times \frac{-5}{7} = \frac{-2}{3} \times \left(\frac{7}{8} \times \frac{-5}{7}\right)$$

* Questions With Calculation.[2 Marks Each]

[8]

11. Verify the property $x \times (y \times z) = (x \times y) \times z$ of rational numbers by using:

$$x=1, \ y=\frac{-1}{2} \ \ \text{and} \ z=\frac{1}{4}$$

12. Evaluate the following:

$$\frac{-5}{14} - \frac{-2}{7}$$

13. Express the following rational numbers in standard form.

$$\frac{-12}{30}$$

14. An aeroplane covers 1020km in an hour. How much distance will it cover in $4\frac{1}{6}$ hours?

* Questions With Calculation.[3 Marks Each]

[12]

- 15. The cost of $2\frac{1}{3}$ m metres of cloth is Rs. $75\frac{1}{4}$ Find the cost of cloth per metre.
- 16. Simplify:

$$\frac{-8}{19} + \frac{-4}{57}$$

- 17. The product of two fractions is $9\frac{3}{5}$. If one of the fractions is $9\frac{3}{7}$, find the other.
- 18. Using the rearrangement property find the sum:

$$\frac{-13}{20} + \frac{11}{14} + \frac{-5}{7} + \frac{7}{10}$$
