ARASWATI DEVI INTERNATIONAL SCHOOL, BANKURA

WEEKLY TEST-1 ACADEMIC SESSION : 2020-21

TIME – 1 hr. CLASS : VIII SUBJECT : MATHS F.M.-20

A. Choose the correct option : 1x5=5

1. A lamp post has half of its length in mud, ⅓ of its length in water and 3⅓m above the water. The total length of the post is

(a) 10⅓m (b) 4⅙m

(c) 4m (d) 20m.

2. If $3^{2x} \div 3^{-3} = 3^5$, then x is equal to

(a) 1 (b) -1

(c) 0 (d) 2

3. The multiplicative inverse of $\left(-\frac{5}{9}\right)^{-99}$ is

(a) $\left(-\frac{5}{9}\right)^{99}$ (b) $\left(\frac{5}{9}\right)^{99}$ (c) $\left(\frac{9}{-5}\right)^{99}$ (d) $\left(\frac{9}{5}\right)^{99}$

4. Which of the following is not true?

(a) rational numbers are closed under addition

(b) rational numbers are closed under subtraction

(c) rational numbers are closed under multiplication

(d) rational numbers are closed under division

5.Which of the following statements is always true?

(a) $\frac{x-y}{2}$ is a rational number between x and y

(b) $\frac{x+y}{2}$ is a rational number between x and y

(c) $\frac{x \times y}{2}$ is a rational number between x and y

(d) $\frac{x+y}{2}$ is a rational number between x and y

B. Very short answer type question : 1x5=5

6. Show that : $\frac{25 \times 2x^{-4}}{5^{-2} \times 10x^{-6}} = 125x^2$

7. What do you mean by standard form of a rational number .

8. If 2/3 of a number exceeds its 3/5 by 1, find the number .

9. Find multiplicative inverse of (7/16)x(-52/18) .

10. Show that $5^0=1$.

C. Short answer type question : 2x5=10

11. Represent -8/3 on the number line .

12. Prove that $\left[\left(\frac{3}{5}\right)^{-1} - \left(\frac{1}{3}\right)^{-1}\right]^{-1} = -\frac{3}{4}$.

13. Rajan's annual income is ₹1,20,000. His monthly expenses is 3/4 of his income.

How much does he save every month ?

14. Evaluate : $\left(1-\frac{1}{2}\right)\left(1-\frac{1}{3}\right)\left(1-\frac{1}{4}\right)\ldots\left(1-\frac{1}{200}\right)$

15. Find the value of $\sqrt{12+\sqrt{12+\sqrt{12+\ldots}}}$