**SAMPLE PAPER-1 (SOLVED)**

PERIODIC TEST-1 (2023-24)

CLASS- VII

SUB: - MATHEMATICS

TIME ALLOWED: - 1Hr 30Mins F.M:-40

**SECTION-A**

**CHOOSE THE CORRECT ANSWER . 1 X 5 = 5 MARKS**

1. Which of the following is a negative rational number:
2. $\frac{-13}{25}$ (ii) $0$ (iii) $\frac{-12}{-23}$ (iv) -1
3. Which is the additive inverse of $\frac{-2}{7}$ :
4. $\frac{-2}{7}$ (ii) $\frac{2}{-7}$ (iii) $\frac{-4}{14}$ (iv) $\frac{2}{7}$
5. 0.8 expressed as a rational number is :
6. $\frac{1}{7}$ (ii) $\frac{4}{5}$ (iii) $\frac{3}{6}$ (iv) $\frac{2}{9}$
7. Which is the smallest rational out of 4/-11 , -4/12 , 4/-17 .
8. 4/-11 (ii) -4/12 (iii) 4/-17
9. The reciprocal of -3/2 is \_\_\_\_\_\_ .
10. 3/2 (ii) 2/3 (iii) -2/3 (iv) 0

 **FILL IN THE BLANKS . 1 X 3 = 3 MARKS**

1. 6.25 $÷$ 0.5 = \_\_\_\_\_ .
2. The number \_\_\_\_\_\_ has no reciprocal .
3. The decimal representation of 9/40 is \_\_\_\_\_ .

 **ANSWER ALL QUESTIONS . 1 X 2 = 2 MARKS**

1. How many rational numbers are there between any two rational numbers ?
2. What is the sum of 5.012 and 6.998 ?

**SECTION-B**

**ANSWER ALL QUESTION . 2 X 3 = 6 MARKS**

1. Evaluate $\frac{2}{3}$ - $\frac{-3}{5}$
2. Divide ($\frac{-3}{4}$) by ($\frac{9}{-16}$)
3. Without actual division determine $\frac{16}{45}$ have terminating decimal representation or not .

**SECTION-C**

**ANSWER ALL QUESTION . 3 X 4 = 12 MARKS**

1. What number should be subtracted from $\frac{-2}{3}$ to get $\frac{-1}{6}$?
2. The product of two numbers is 14 . If one of the numbers is $\frac{-8}{7}$ , find the other .
3. Simplify (75.05 ÷ 0.05) × 0.00 + 2.351 and express the result as decimal .
4. Compare the following rational numbers$\frac{4}{-9}$ , $\frac{5}{-12}$ , $\frac{7}{-18}$ , $\frac{2}{-3}$

**SECTION-D**

**ANSWER ALL QUESTION . 4 X 3 = 12 MARKS**

1. Which is greater among $\frac{-1}{2}$and $\frac{-1}{5}$?
2. A drum of kerosene oil is 3/4 full. When 15 litres of oil is drawn from it, it is 6/10 full. Find the total capacity of the drum ?
3. 0.144÷1.2÷0.016÷0.02+7÷5-21÷8 simplify and express the result as a rational number in its lowest form .

**ANNEXURE –C**

|  |  |  |
| --- | --- | --- |
| **QSTN NO** | **KEY POINTS /VALUE POINTS** | **MARKS ALLOTED** |
| 1 | $$\frac{-13}{25}$$ | 1 |
| 2 | $$\frac{2}{7}$$ | 1 |
| 3 | $$\frac{4}{5}$$ | 1 |
| 4 | 4/-17 | 1 |
| 5 | -2/3 | 1 |
| 6 | 12.5 | 1 |
| 7 | 0 | 1 |
|  8 | 0.225 | 1 |
| 9 | Infinite | 1 |
| 10 | 12.01 | 1 |
| 11 | Given (2/3) – (3/5)The LCM of 3 and 5 is 15Consider (2/3) = (2/3) × (5/5) = (10/15)Now again (3/5) = (3/5) × (3/3) = (9/15)(2/3) – (3/5) = (10/15) – (9/15)= (1/15) | 11 |
| 12 | Given (-3/4) by (9/-16)(-3/4) ÷ (9/-16) = (-3/4) × (-16/9)= (-4/-3)= (4/3) | 11 |
| 13 | If we do prime factorization of denominator, we get,16/45=16/32×5The denominator of the fraction contains factors of 3 and 5. Since the denominator of given fraction does not have only factors of 2 and factors of 5, i.e. denominator is not of the form (2m×5n), thus, the given fraction does not have terminating decimal representation. | 11 |
| 14 | Let x should be subtractedso-2/3 – x = -1/6-2/3 + 1/6 = xTaking their lcm and solving further(-4+1)/6 = x-3/6 = xSo x=-1/2 | 111 |
| 15 | It is given that Product of two numbers =14 One of the number = -8/7​Other number =XX × -8/7 =14X = 14 ÷ -8/7​We cam write it as =14 × -7/8​= -98/8​= -49/4 | 111 |
| 16 | ​ 1501x0.001+2.351=1.501+2.351=3.852 | 111 |
| 17 | LCM of 9, 12, 18, 3 is 36.Using LCM make the denominator equal.4/-9 = 4×4/-9×4 = 16/-365/-12 = 5×3/-12×3 = 15/-367/-18 = 7×2/-18×2 = 14/-362/-3 = 2×12/-3×12 = 24/-36Among 16/-36 , 15/-36 , 14/-36and 24/-36;14/-36 is greatest and 24/-36 is smallest. | 111 |
| 18 | Given rational numbers are -1/2 and -1/5LCM of 2, 5 is 10Expressing the rational numbers with the same denominator using the LCM obtained.-1/2 = (-1\*5)/(2\*5)= -5/10-1/5 = (-1\*2)/(5\*2) = -2/10-2 > -5Therefore, – 1/5 is greater than -1/2. | 1111 |
| 19 | Let the total capacity be x.According to the question,(3x/4)−15=(6x/10)3x/4 – 6x/10 = 1515x – 12x = 15 x 203x = 300x = 300/3x = 100 litre | 1111 |
| 20 |  https://tex.z-dn.net/?f=0.144%5Cdiv%201.2%5Cdiv%200.016%5Cdiv0.02%2B7%5Cdiv5-21%5Cdiv%208https://tex.z-dn.net/?f=%3D0.12%5Cdiv%200.016%5Cdiv0.02%2B7%5Cdiv5-21%5Cdiv%208https://tex.z-dn.net/?f=%3D7.5%5Cdiv0.02%2B7%5Cdiv5-21%5Cdiv%208https://tex.z-dn.net/?f=%3D375%2B1.4-2.625https://tex.z-dn.net/?f=%3D376.4-2.625https://tex.z-dn.net/?f=%3D373.775https://tex.z-dn.net/?f=%3D%5Cfrac%7B373775%7D%7B1000%7Dhttps://tex.z-dn.net/?f=%3D%5Cfrac%7B14951%7D%7B40%7D | 1111 |

**SAMPLE PAPER-2 (UNSOLVED)**

**SECTION-A**

**CHOOSE THE CORRECT ANSWER 1 X 5 = 5 MARKS**

1. Sum of a number and its additive inverse is \_\_\_\_\_\_ .

(i) -1 (ii) 1 (iii) 0 (iv) Doesn't exist

1. The multiplicative inverse of -3/4 is \_\_\_\_\_ .

(i) 3/4 (ii) 4/3 (iii) -4/3 (iv) 0

1. 3.75 expressed as a rational number is \_\_\_\_\_\_ .

(i) 2/5 (ii) 15/4 (iii) 41/40 (iv) 64/25

1. Length of the line segment joining -2 & 3 is \_\_\_\_\_ units .

(i) 3 (ii) 4 (iii) 5 (iv) 6

1. Every rational number has an absolute value which is \_\_\_\_ zero .

(i) Always greater than (ii) Equal to (iii) less than (iv) Greater than or equal to

 **FILL IN THE BLANKS . 1 X 3 = 3 MARKS**

1. 2.4 X 2.5 = \_\_\_\_\_ .
2. The number \_\_\_\_\_\_ has no reciprocal .
3. Digits in the decimal part are called \_\_\_\_\_ .

**ANSWER ALL QUESTIONS . 1 X 2 = 2 MARKS**

1. Divide 6.25 by 0.5
2. What is the absolute value of zero ?

**SECTION-B**

**ANSWER ALL QUESTION . 2 X 3 = 6 MARKS**

1. Find the reciprocal of 2/5 X (7/-10)
2. Divide -7/4 by 1/8
3. Without actual division determine *22/190*  have terminating decimal representation or not .

**SECTION-C**

**ANSWER ALL QUESTION . 3 X 4 = 12 MARKS**

1. Find three rational numbers between 1/3 and -1/2 .
2. Simplify -4/15 ÷ (40/3)-1.
3. Simplify (25.05 ÷ 0.05) × 0.01 + 2.225 and express the result as decimal .
4. Compare -2/9 and 8/-36 .

**SECTION-D**

**ANSWER ALL QUESTION . 4 X 3 = 12 MARKS**

1. Simplify 3.125 ÷ 0.125 + 0.50 - 0.225 and express the result as a rational number in its lowest

 form.

1. Divide the difference of 4/15 and 5/12 by their product.
2. (i) Find the value of x for 14/x = 7/15 .

 (ii) Compare 12/-20 and -3/-5 .