ODM EDUCATIONAL GROUP
Changing your Tomorrow

PERIOD-6

MATHEMATICS

CHAPTER NUMBER :~ 1
CHAPTER NAME :~ NUMBER SYSTEMS
SUB TOPIC :~ RECAPITULATION

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LEARNING OUTCOME:-

Students will learn

a) Introduction

b) Natural Numbers

c) Whole Numbers

d) Integers

e) Rational Numbers

f) Equivalent form of Rational numbers and finding Rational Numbers in between two Rational Numbers

g) Representation of Irrationals on number line using Pythagoras theorem

h) Representation of more Irrationals on number line using Pythagoras theorem

LEARNING OUTCOME:-

Students will learn

i) Real Numbers and their Decimal Expansions

j) Representing Real Numbers(Decimals) on the Number line

k) Rational form of decimal numbers and irrationals in between rational numbers

l) Operations on Real Numbers

m) Representation of square root of decimals on number line

n) Rationalization of expressions

o) More on Rationalization

p) Laws of Exponents for Real Numbers.

Q.1: Find five rational numbers between 1 and 2.

Q.2: Find five rational numbers between 3/5 and 4/5.

Q.3: Locate $\sqrt{3}$ on the number line.

Q.4: Are the square roots of all positive integers irrational? If not, give an example of the square root of a number that is a rational number.

Q.5: Find the decimal expansions of 10/3, 7/8 and 1/7.

Q.6: Show that $0.3333\ldots = 0.\overline{3}$ can be expressed in the form p/q, where p and q are integers and $q \neq 0$.

Q.7: What can the maximum number of digits be in the repeating block of digits in the decimal expansion of 1/17? Perform the division to check your answer.

Q.8: Find three different irrational numbers between the rational numbers 5/7 and 9/11.

Q.9: Visualise 3.765 on the number line, using successive magnification.

Q.12: Rationalise the denominator of $1/[7+3\sqrt{3}]$.

Q.10: Add $2\sqrt{2}+ 5\sqrt{3}$ and $\sqrt{2} - 3\sqrt{3}$.

Q.13: Represent $\sqrt{(9.3)}$ on the number line.

2. Evaluation:

Question:1.Show $\sqrt{5}$ on number line.

2. Evaluate:- $\left(\frac{64}{25}\right)^{-\frac{3}{2}}$

5. AHA:~

1. Find x: $(2^3)^4 = (2^2)^x$
2. $27^x = \frac{9}{3x}$ find x.
3. $\sqrt[3]{125 \times 27}$ =?

THANKING YOU

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