**PERL EDUCATION**

**DPP**
DAILY PRACTICE PAPER

**MCQ WORKSHEET-I**
**NUMBER SYSTEM**

**MATHEMATICS**
**CLASS- 9TH**

1. Rational number $\frac{3}{40}$ is equal to:

   (a) 0.75     (b) 0.12     (c) 0.012     (d) 0.075

2. A rational number between 3 and 4 is:

   (a) $\frac{3}{2}$     (b) $\frac{4}{3}$     (c) $\frac{7}{2}$     (d) $\frac{7}{4}$

3. A rational number between $\frac{3}{5}$ and $\frac{4}{5}$ is:

   (a) $\frac{7}{5}$     (b) $\frac{7}{10}$     (c) $\frac{3}{10}$     (d) $\frac{4}{10}$

4. A rational number between $\frac{1}{2}$ and $\frac{3}{4}$ is:

   (a) $\frac{2}{5}$     (b) $\frac{5}{8}$     (c) $\frac{4}{3}$     (d) $\frac{1}{4}$

5. Which one of the following is not a rational number:

   (a) $\sqrt{2}$     (b) 0     (c) $\sqrt{4}$     (d) $\sqrt{-16}$

6. Which one of the following is an irrational number:

   (a) $\sqrt{4}$     (b) $3\sqrt{8}$     (c) $\sqrt{100}$     (d) $-\sqrt{0.64}$

7. Decimal representation of $\frac{1}{5}$ is :

   (a) 0.2     (b) 0.5     (c) 0.02     (d) 0.002

8. $3\frac{3}{8}$ in decimal form is:

   (a) 3.35     (b) 3.375     (c) 33.75     (d) 337.5

9. $\frac{5}{6}$ in the decimal form is:

   (a) $0.8\bar{3}$     (b) $0.8\overline{33}$     (c) $0.6\bar{3}$     (d) $0.6\overline{33}$

10. Decimal representation of rational number $\frac{8}{27}$ is:

    (a) $0.\overline{296}$     (b) $0.29\bar{6}$     (c) $0.2\overline{96}$     (d) $0.296$

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**MCQ WORKSHEET-II**
**NUMBER SYSTEM**

**MATHEMATICS**

**CLASS- 9TH**

1. Which one of the following is a rational number:
   (a) $\sqrt{3}$  (b) $\sqrt{2}$  (c) $0$  (d) $\sqrt{5}$

2. $0.6666$ in $\dfrac{p}{q}$ form is:
   (a) $\dfrac{6}{99}$  (b) $\dfrac{2}{3}$  (c) $\dfrac{3}{5}$  (d) $\dfrac{1}{66}$

3. $4\dfrac{1}{8}$ in decimal form is:
   (a) $4.125$  (b) $4.\overline{15}$  (c) $4.1\overline{5}$  (d) $0.\overline{415}$

4. The value of $\left(3+\sqrt{3}\right)\left(3-\sqrt{3}\right)$ is:
   (a) $0$  (b) $6$  (c) $9$  (d) $3$

5. The value of $\left(\sqrt{5}+\sqrt{2}\right)^2$ is:
   (a) $7+2\sqrt{5}$  (b) $1+5\sqrt{2}$  (c) $7+2\sqrt{10}$  (d) $7-2\sqrt{10}$

6. The value of $\left(\sqrt{5}+\sqrt{2}\right)\left(\sqrt{5}-\sqrt{2}\right)$ is:
   (a) $10$  (b) $7$  (c) $3$  (d) $\sqrt{3}$

7. The value of $\left(3+\sqrt{3}\right)\left(2+\sqrt{2}\right)$ is:
   $(a) 6+3\sqrt{2}+2\sqrt{3}+\sqrt{6}$
   $(b) 3+3\sqrt{2}+3\sqrt{3}+6$
   $(c) 6-3\sqrt{2}-2\sqrt{3}-\sqrt{6}$
   $(d) 6-3\sqrt{2}+2\sqrt{3}-\sqrt{6}$

8. The value of $\left(\sqrt{11}+\sqrt{7}\right)\left(\sqrt{11}-\sqrt{7}\right)$ is:
   (a) $4$  (b) $-4$  (c) $18$  (d) $-18$

9. The value of $\left(5+\sqrt{5}\right)\left(5-\sqrt{5}\right)$ is :
   (a) $0$  (b) $25$  (c) $20$  (d) $-20$

10. On rationalizing the denominator of $\dfrac{1}{\sqrt{7}}$, we get
    (a) $7$  (b) $\dfrac{\sqrt{7}}{7}$  (c) $\dfrac{-\sqrt{7}}{7}$  (d) $\sqrt{7}$

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MCQ WORKSHEET-III
NUMBER SYSTEM

MATHEMATICS

CLASS- 9TH

1. On rationalizing the denominator of $\dfrac{1}{\sqrt{7}-\sqrt{6}}$, we get

   (a) $\dfrac{\sqrt{7}+\sqrt{6}}{\sqrt{7}-\sqrt{6}}$    (b) $\dfrac{\sqrt{7}-\sqrt{6}}{\sqrt{7}+\sqrt{6}}$    (c) $\sqrt{7}+\sqrt{6}$    (d) $\sqrt{7}-\sqrt{6}$

2. On rationalizing the denominator of $\dfrac{1}{\sqrt{5}+\sqrt{2}}$, we get

   (a) $\sqrt{5}-\sqrt{2}$    (b) $\sqrt{2}-\sqrt{5}$    (c) $\dfrac{\sqrt{5}-\sqrt{2}}{3}$    (d) $\dfrac{\sqrt{2}-\sqrt{5}}{3}$

3. On rationalizing the denominator of $\dfrac{1}{\sqrt{7}-2}$, we get

   (a) $\sqrt{7}-2$    (b) $\sqrt{7}+2$    (c) $\dfrac{\sqrt{7}+2}{3}$    (d) $\dfrac{\sqrt{7}-2}{3}$

4. On rationalizing the denominator of $\dfrac{1}{\sqrt{2}}$, we get

   (a) $2$    (b) $\sqrt{2}$    (c) $\dfrac{2}{\sqrt{2}}$    (d) $\dfrac{\sqrt{2}}{2}$

5. On rationalizing the denominator of $\dfrac{1}{2+\sqrt{3}}$, we get

   (a) $2-\sqrt{3}$    (b) $\sqrt{3}-2$    (c) $2+\sqrt{3}$    (d) $-\sqrt{3}-2$

6. On rationalizing the denominator of $\dfrac{1}{\sqrt{3}-\sqrt{2}}$, we get

   (a) $\dfrac{1}{\sqrt{3}+\sqrt{2}}$    (b) $\sqrt{3}+\sqrt{2}$    (c) $\sqrt{2}-\sqrt{3}$    (d) $-\sqrt{3}-\sqrt{2}$

7. The value of $64^{\frac{1}{2}}$ is :
   (a) 8    (b) 4    (c) 16    (d) 32

8. The value of $32^{\frac{1}{5}}$ is :
   (a) 16    (b) 160    (c) 2    (d) 18

9. The value of $(125)^{\frac{1}{3}}$ is :
   (a) 5    (b) 25    (c) 45    (d) 35

10. The value of $9^{\frac{3}{2}}$ is :
    (a) 18    (b) 27    (c) – 18    (d) $\dfrac{1}{27}$

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**MCQ WORKSHEET-IV**
**NUMBER SYSTEM**

**MATHEMATICS**

**CLASS- 9TH**

1. The value of $32^{2/5}$ is :
   (a) 2     (b) 4     (c) 16     (d) 14

2. The value of $16^{3/4}$ is :
   (a) 4     (b) 12     (c) 8     (d) 48

3. The value of $125^{\frac{-1}{3}}$ is :
   (a) $\frac{1}{5}$     (b) $\frac{1}{25}$     (c) $\frac{1}{15}$     (d) $\frac{1}{125}$

4. The value of $11^{1/2} \div 11^{1/4}$ is :
   (a) $11^{1/4}$     (b) $11^{3/4}$     (c) $11^{1/8}$     (d) $11^{1/2}$

5. The value of $64^{-3/2}$ is :
   (a) $\frac{1}{96}$     (b) $\frac{1}{64}$     (c) 512     (d) $\frac{1}{512}$

6. The value of $(125)^{\frac{2}{3}}$ is :
   (a) 5     (b) 25     (c) 45     (d) 35

7. The value of $25^{3/2}$ is :
   (a) 5     (b) 25     (c) 125     (d) 625

8. The value of $\frac{1}{11}$ in decimal form is:
   (a) $0.0\overline{99}$     (b) $0.\overline{909}$     (c) $0.\overline{09}$     (d) $0.00\overline{9}$

9. Decimal expansion of a rational number is terminating if in its denominator there is:
   (a) 2 or 5     (b) 3 or 5     (c) 9 or 11     (d) 3 or 7

10. The exponent form of $\sqrt[3]{7}$ is:
    (a) $7^3$     (b) $3^7$     (c) $7^{1/3}$     (d) $3^{1/7}$

**PERL EDUCATION**

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**DAILY PRACTICE PAPER**

**MCQ WORKSHEET-V**
**NUMBER SYSTEM**

**MATHEMATICS**
**CLASS- 9TH**

1. Which of the following is true?
   (a) Every whole number is a natural number  (b) Every integer is a rational number
   (c) Every rational number is an integer       (d) Every integer is a whole number

2. For Positive real numbers a and b, which is not true?
   (a) $\sqrt{ab} = \sqrt{a}\sqrt{b}$            (b) $\left(a + \sqrt{b}\right)\left(a - \sqrt{b}\right) = a^2 - b$
   (c) $\sqrt{\dfrac{a}{b}} = \dfrac{\sqrt{a}}{\sqrt{b}}$       (d) $\left(\sqrt{a} + \sqrt{b}\right)\left(\sqrt{a} - \sqrt{b}\right) = a + b$

3. Out of the following, the irrational number is
   (a) $1.\overline{5}$     (b) $2.4\overline{77}$     (c) $1.2\overline{77}$     (d) $\pi$

4. To rationalize the denominator of $\dfrac{1}{\sqrt{a} + b}$, we multiply this by

   (a) $\dfrac{1}{\sqrt{a} + b}$     (b) $\dfrac{1}{\sqrt{a} - b}$     (c) $\dfrac{\sqrt{a} + b}{\sqrt{a} + b}$     (d) $\dfrac{\sqrt{a} - b}{\sqrt{a} - b}$

5. The number of rational numbers between $\sqrt{3}$ and $\sqrt{5}$ is
   (a) One     (b) 3     (c) none     (d) infinitely many

6. If we add two irrational numbers, the resulting number
   (a) is always an irrational number          (b) is always a rational number
   (c) may be a rational or an irrational number  (d) always an integer

7. The rationalizing factor of $7 - 2\sqrt{3}$ is
   (a) $7 - 2\sqrt{3}$     (b) $7 + 2\sqrt{3}$     (c) $5 + 2\sqrt{3}$     (d) $4 + 2\sqrt{3}$

8. If $\dfrac{1}{7} = 0.\overline{142857}$, then $\dfrac{4}{7}$ equals
   (a) $0.\overline{428571}$  (b) $0.\overline{571428}$     (c) $0.\overline{857142}$  (d) $0.\overline{285718}$

9. The value of n for which $\sqrt{n}$ be a rational number is
   (a) 2     (b) 4     (c) 3     (d) 5

10. $\dfrac{3\sqrt{12}}{6\sqrt{27}}$ equals

    (a) $\dfrac{1}{2}$     (b) $\sqrt{2}$     (c) $\sqrt{3}$     (d) $\dfrac{1}{3}$

11. $\left(3 + \sqrt{3}\right)\left(3 - \sqrt{2}\right)$ equals
    (a) $9 - 5\sqrt{2} - \sqrt{6}$     (b) $9 - \sqrt{6}$     (c) $3 + \sqrt{2}$     (d) $9 - 3\sqrt{2} + 3\sqrt{3} - \sqrt{6}$

**12.** The arrangement of $\sqrt{2}, \sqrt{5}, \sqrt{3}$ in ascending order is

    (a) $\sqrt{2}, \sqrt{3}, \sqrt{5}$     (b) $\sqrt{2}, \sqrt{5}, \sqrt{3}$     (c) $\sqrt{5}, \sqrt{3}, \sqrt{2}$     (d) $\sqrt{3}, \sqrt{2}, \sqrt{5}$

**13.** If m and n are two natural numbers and $m^n = 32$, then $n^{mn}$ is

    (a) $5^2$     (b) $5^3$     (c) $5^{10}$     (d) $5^{12}$

**14.** If $\sqrt{10} = 3.162$, then the value of $\dfrac{1}{\sqrt{10}}$ is

    (a) 0.3162     (b) 3.162     (c) 31.62     (d) 316.2

**15.** If $\left(\dfrac{3}{4}\right)^6 \times \left(\dfrac{16}{9}\right)^5 = \left(\dfrac{4}{3}\right)^{x+2}$, then the value of x is

    (a) 2     (b) 4     (c) -2     (d) 6