## Multiple Choice Questions

1. If the integers 12, –6, 8, –5, 7, –4 and 3 are marked on the number line, the one that comes on the extreme left is:

   (a) 12 (b) –4 (c) –6 (d) 3

2. The difference in temperatures +50°C and –50°C is:

   (a) 100°C (b) 0°C (c) 50°C (d) –100°C

3. If 5 divides integer $p$ and 5 does not divide integer $r$, then:

   (a) 5 divides $(p + r)$ (b) 5 divides $(p - r)$

   (c) 5 does not divide $(p \pm r)$ (d) 5 does not divide $(pr)$

4. Additive inverse of $(pqrs)$ where $p$, $q$, $r$ and $s$ are non-zero integers is:

   (a) $(-p)(-q)(-r)(-s)$ (b) $(-p)qr(-s)$ (c) $pqrs$ (d) $(-p)(-q)(-r)s$

5. The integer $x$ for which $|1 - x| = 3$ is:

   (a) 3, 0 (b) 4, 2 (c) –2, 3 (d) 4, –2

6. The number of integers between –30 and –15 are:

   (a) 14 (b) 15 (c) 16 (d) 17

7. The sum of five consecutive positive integers is always divisible by:

   (a) 2 (b) 3 (c) 5 (d) 10

## Multiple Choice Questions

1. If a mixed fraction is converted into fraction, then its reciprocal is:

   (a) proper (b) improper (c) equal to itself (d) none of these

2. The number of months in $\frac{3}{5}$th of a century is:

   (a) 60 (b) 600 (c) 720 (d) 7.3

3. 474 surgeons were invited for a conference on the latest surgical techniques and $\frac{5}{6}$ of those invited actually participated in it. The number of participants was:

   (a) 359 (b) 395 (c) 474 (d) 568

4. The figure  represents:

(a) $3 \times \frac{2}{3} = 2$ (b) $4 \times \frac{1}{3} = \frac{4}{3}$ (c) $3 \times \frac{1}{4} = \frac{3}{4}$ (d) $3 \times \frac{5}{12} = 1\frac{1}{4}$

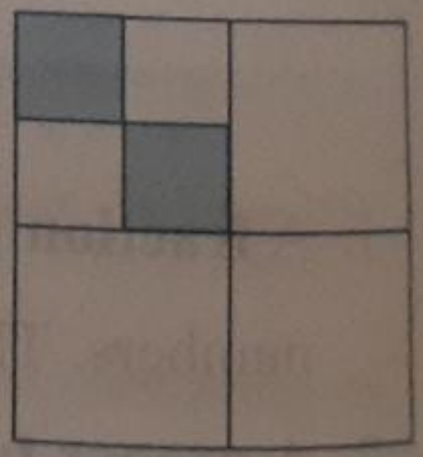
5. John can read a novel in 17 hours. If he devotes $2\frac{3}{7}$ hours to reading every day, he would finish the novel in:

(a) 5 days (b) 7 days (c) 9 days (d) 10 days

6. Smith bought a laptop from abroad in a special promotional drive for £ 45 which is $\frac{5}{8}$ of the original price. The original marked price of the laptop is:

(a) £ 72 (b) £ 28 (c) £ 90 (d) £ 112

7. The fraction representing the shaded part of the given square is:



(a) $\frac{2}{7}$ (b) $\frac{2}{4}$ (c) $\frac{2}{8}$ (d) $\frac{1}{8}$

## SOLVE MENTALLY

**True or False**

## MULTIPLE CHOICE QUESTIONS

1. The value of $0.03784 \times 1{,}000$ is:
   (a) 3.784 (b) 37.84 (c) 378.4 (d) 3,784
2. The place value of the underlined digit in $78.012\underline{3}$ is:
   (a) $\frac{1}{10{,}000}$ (b) $\frac{1}{1{,}000}$ (c) $\frac{3}{1{,}000}$ (d) $\frac{3}{10{,}000}$
3. The decimal number 0.72 when represented as a fraction in its lowest term is:
   (a) $\frac{72}{100}$ (b) $\frac{36}{50}$ (c) $\frac{100}{72}$ (d) $\frac{18}{25}$
4. On subtracting 4.81 from 43.17, we get:
   (a) 38.36 (b) 38.81 (c) 38.17 (d) 47.98
5. The number seventeen and seven thousandths in decimal form is:
   (a) 17.7000 (b) 17.07 (c) 17.007 (d) 1,77,000.00
6. If on multiplying a decimal number by some power of 10, the place value of a digit changes from tenths to tens, then the power of 10 is:
   (a) 0 (b) 1 (c) 2 (d) 3
7. Amongst the following, the value of expression different from others is:
   (a) $6 \div 0.21$ (b) $60 \div 2.1$ (c) $0.6 \div 0.21$ (d) $600 \div 21$

## Multiple Choice Questions

1. The expression which best describes the rational number $\frac{0}{3}$ is:

   (a) 0 (b) 1 (c) 3 (d) undefined

2. The rational number $\frac{24}{-18}$, when reduced to standard form is:

   (a) $\frac{12}{-9}$ (b) $\frac{4}{-3}$ (c) $\frac{-4}{3}$ (d) $\frac{-24}{18}$

3. State which of these is a rational number?

   (a) $\pi$ (b) $\frac{5}{0}$ (c) $\sqrt{2}$ (d) $1.\overline{7}$

4. The product of rational number $\frac{3}{4}$ and its multiplicative inverse is:

   (a) 1 (b) 0 (c) $\frac{3}{4}$ (d) $\frac{9}{16}$

5. A rational number lying between $\frac{5}{14}$ and $\frac{4}{7}$ is:

   (a) $\frac{1}{2}$ (b) $\frac{2}{7}$ (c) $\frac{3}{4}$ (d) 1

6. The value of the expression $\frac{-3}{4} \div \frac{8}{12}$ is:

   (a) $\frac{36}{31}$ (b) $\frac{30}{32}$ (c) $\frac{18}{16}$ (d) $\frac{-9}{8}$

7. Without actual computation, we can say that the value of $\left(5\frac{7}{9} \div 7\frac{5}{9}\right)$ is:

   (a) greater than 1 (b) greater than 2 (c) less than 1 (d) less than $\frac{1}{2}$

8. A decimal which cannot be expressed as rational number is:

   (a) 0.34128590... (b) 0.333333... (c) 2.105 (d) 4.0