

6. DECIMALS

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Class: VI, MATHEMATICS
FOUNDATION⁺ SOLUTIONS

TEACHING TASK JEE MAINS LEVEL

01	Conceptual	Ans: C
02	Conceptual	Ans: B
03	$0.0075 = \frac{75}{10000}$	Ans: C
04	$405.206 \rightarrow \frac{2}{10}$	Ans: B
05	$a \times 1 = a$	Ans: B
06	$\frac{3.75}{0.25} = x \quad \left \quad \Rightarrow x = 15\right.$ $\Rightarrow \frac{375}{25} = x$	Ans: C
07	$0.006 \times 10^3 = 0.006 \times 1000 = 6$	Ans: D
08	10.269	Ans: C
09	$\frac{1}{8} = 0.125$	Ans: B
10	6.834	Ans: C

11. 1 hour = 60 min = 60 x 60 = 3600 sec.

$$\therefore \frac{1 \text{ sec}}{3600 \text{ sec}} = 0.00027$$

Ans: A

12. $0.36 = \frac{36}{100} = \frac{9}{25}$

Ans: C

$$\therefore 25 - 9 = 16$$

13. 0.00243

Ans: C

14. $6 \times 45.8 = 274.8 \text{ km}$

Ans: C

15. 0.0024

Ans: C

JEE ADVANCED LEVEL

01. 0.12

Ans: A

02. 9.546 , 765.047 , 87.349

Ans: B, C, D

03. $\frac{60}{100} \times 15000 = 9000$

Ans: A

04. $25,000 - 8750 = 16,250$

$$\therefore \frac{16250}{25000} \times 100 = 65\%$$

Ans: C

05. 63.694
 43.492

Ans: C

06 A) 22.789, 2.9

Ans: A

07 Statement I: Conceptual (False)

Statement II: Conceptual (False)

Ans: B

08 Statement I: Conceptual (False)

Statement II: Conceptual (True)

Ans: D

09 Assertion: Conceptual (True)

Reason: Conceptual (True)

Ans: A

10 Assertion: Conceptual (True)

Reason: Conceptual (True)

Ans: A

11 $0.25 \times 0.04 = 0.0100 = 0.01$

Ans: 2

12 6

Ans: 6

13 $0.7 \times 0.25 = 0.175$

Ans: 0

14 $2.\bar{3} = \frac{23-2}{9} = \frac{21}{9} = \frac{7}{3} = \frac{p}{q} : p+q=10$

Ans: 10

15 a) $0.006 \times 100 = 0.6 (P)$

b) $2.5 \times 10 = 25 (Q)$

c) $\frac{4.2}{10} = 0.42 (R)$

d) $0.75 \times 10^0 = 0.75 \times 1 = 0.75 (S)$

Ans: P, Q, R, S



$$\begin{array}{r}
 16 \quad a) \quad 20.000 \\
 \quad \quad 3.000 \\
 \quad \quad 0.700 \\
 \quad \quad 0.050 \\
 \quad \quad 0.008 \\
 \hline
 \quad \quad 23.758 \quad (t)
 \end{array}$$

$$b) \quad 827.7973 \dots (p)$$

$$c) \quad 573.\underline{636363} \dots (s)$$

$$\begin{array}{r}
 d) \quad 14.62 \\
 + 12.63 \\
 \hline
 27.25 \\
 25.25 \\
 \hline
 2.00 \quad (r)
 \end{array}$$

Ans: t, p, s, r

LEARNERS TASK (CUES)

01	Conceptual	Ans: B
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02	0.666 - - -	Ans: B
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03	$0.125 = \frac{125}{1000} = \frac{1}{8}$ 60	Ans: B
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04	$47.206 \rightarrow \frac{6}{1000}$	Ans: C
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05	Conceptual	Ans: B
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06	$\frac{0.4}{0.02} = \frac{0.40}{0.02} = \frac{40}{2} = 20$	Ans: C
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07	$\frac{25}{0.0005} = \frac{5}{0.0001} = \frac{5}{\left(\frac{1}{10000}\right)} = 50000$	Ans: D
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08

$$40 \text{ ml} \rightarrow \text{lit} = 1000 \text{ ml}$$

$$\frac{40}{1000} = 0.04$$

(5)

Ans: B

Ans: A

09

$$32.25 = \frac{3225}{100}$$

10

$$\begin{array}{r} 40.000 \\ 20.000 \\ 1.000 \\ 0.200 \\ 0.030 \\ 0.005 \\ \hline \end{array}$$

$$421.235$$

Ans: A

11

$$102 \times 0.22 = 22.44$$

Ans: B

12

$$\frac{0.0098}{0.28} = 0.035$$

Ans: D

13

$$\begin{array}{l} \text{A) } 0.8666 \dots \\ \text{B) } 0.15 \\ \text{C) } 0.878787 \dots \\ \text{D) } 0.8333 \dots \end{array}$$

Ans: B

JEE MAINS LEVEL

01 Conceptual

Ans: C

02

$$3.1415926535 \dots$$

Ans: B

03

$$0.\overline{6} = \frac{2}{3}$$

Ans: B

04

$$52.309 \rightarrow \frac{9}{1000}$$

Ans: C

05

Conceptual

Ans: B



06

$$0.25 \times 0.4 = 0.1$$

Ans: B

07

$$8 \times 3.35 = 26.80 \text{ mt}$$

Ans: C

08

$$\begin{array}{r} 218.99 \\ + 109.85 \\ \hline 328.84 \end{array}$$

Ans: D

09

$$\begin{array}{r} 39.45 \\ - 28.47 \\ \hline 10.98 \end{array}$$

Ans: B

10

$$18.35 \times 1.2 = 22.02$$

Ans: C

11

$$2.4x - 0.6 = 1.8$$

$$2.4x = 1.8 + 0.6$$

$$2.4x = 2.4$$

$$\Rightarrow x = 1$$

Ans: C

12

$$0.12$$

Ans: A

13

$$0.2 + 3x = 1.1$$

$$\Rightarrow 3x = 1.1 - 0.2$$

$$\Rightarrow 3x = 0.9$$

$$\Rightarrow x = 0.3$$

$$\begin{array}{r} 1.1 \\ - 0.2 \\ \hline 0.9 \end{array}$$

Ans: A

JEE ADVANCED



01. Conceptual

Ans: A, C

02

Scientific notation $\rightarrow a \times 10^n$

where $1 \leq a < 10$, $n \in$ positive (or) negative integers

A) 5.3242×10^2 ✓

C) 6.4932×10^{-2} ✓

Ans: A, C

03

$300 \times 12.75 = \text{Rs } 3825$

Ans: —

Ans: A

04

A) Yes, $\text{Rs } 5000 > \text{Rs } 3825$

05

~~$$\begin{array}{r} 1.25 \\ 0.75 \\ 0.50 \\ 0.25 \\ \hline 2.75 \end{array}$$~~

$$\begin{array}{r} 1.25 \\ 0.75 \\ 0.50 \\ \hline 2.50 \end{array}$$

Ans: D

06

$0.25 \times 2 = 0.5$

Ans: B

07

$0.4 \times 2 = 0.8$

Ans: B

08

Statement I: Conceptual (False)

Statement II: Conceptual (False)

Ans: B

09

Statement I:

$$\begin{array}{r} 1.20 \\ 0.75 \\ \hline 1.95 \end{array} \quad (\text{True})$$

Statement II: Conceptual (True)

Ans: A



10

Assertion: Conceptual (True)

Reason: Conceptual (True)

Ans. A

11

Assertion: Conceptual (False)

Reason: Conceptual (False)

Ans. B

12

10

Ans. 10

13

$$\frac{129.5}{18.5} = 7$$

Ans. 7

14

$$0.6 \times 0.4 = 0.24 = \frac{24}{100} = \frac{p}{q}$$

Ans. 124

$$\therefore p + q = 24 + 100 = 124$$

15

- a) 1.5 (p)
- b) 0.666... (q)
- c) $\sqrt{2}$ (r)
- d) 4.0 (s)

Ans. p, q, r, s

16

- a) 2206.8 (r)
- b) 277.772 (p)
- c) 2.5375 (s)
- d) 543.73 (q)

Ans. r, p, s, q

$\Rightarrow$ THE END $\Leftarrow$