TEACHERS' VISION

STUDY MATERIAL

QUANTITATIVE APITITUTE

6- Practice Assignment

On

Simplification

TEACHERS' VISION

WAY TO GOVERNMENT JOBS

PRACTICE EXERCISE -1

DIRECTIONS *for questions 1 to 10: What approximate value will come in place of (?) in the following questions?*

1. $7.05 \times 29.99 + ? = 300.59$

   1. 110   2. 95   3. 90   4. 98

2. What approximate value will come (?) in the following equation?
   $15.01^2 + \sqrt{81.009} \times 32 = ?$

   1. 498   2. 369   3. 611   4. 513

3. What approximate value will come (?) in the following equation?
   $84.95\% \text{ of } 280 + \sqrt{?} = 253.001$

   1. 256   2. 324   3. 18   4. 225

4. $3 \times ? + 30 = 0$

   1. -15   2. 15   3. -10   4. -30

5. $40.83 \times 1.20 \times 1.2 = ?$

   1. 49.97592   2. 41.64660   3. 58.7952   4. 42.479532

6. $\sqrt{1.5625} = ?$

   1. 125   2. 12.5   3. 1.05   4. 1.25

7. $3978 + 112 \times 2 = ? \div 2$

   1. 8180   2. 2101   3. 4090   4. 8404

8. $695.95 \times 29.07 \times ? + 40.25 = 399.99$

   1. 14   2. 17   3. 12   4. 0.01783

9. $\dfrac{2}{5} + \dfrac{7}{8} \times \dfrac{17}{19} + \dfrac{6}{5} = ?$

   1. 1   2. $\dfrac{1}{2}$ 3. $\dfrac{3}{4}$ 4. 2.3

10. $399.9 + 206 \times 11.009 = ?$

    1. 2800   2. 6666   3. 4666   4. 2666

11. $\dfrac{10008.99^2}{10009.001} \times \sqrt{3589} \times 0.4987 = ?$

    1.3,000   2.3,00,000   3. 30, 00,000   4.5000

12. $\sqrt{45689} = ?$

    1.180   2.415   3.150   4.214

13. 35% of 1478+29% of 3214=?

    1.1600   2.1250   3.1300   4.1450

14. $\dfrac{5}{7}$ of 1596 + 3015 = ? − 2150

    1.878   2.543   3.778   4. 6305

15. 5798-? =7385-4632

    1.3225   2.2595   3.2775   4.3045

PRACTICE EXERCISE -2

DIRECTIONS *for questions 1 to 5: What value will come in place of (?) in the following equation?*

1. $152\sqrt{?} + 795 = 8226 - 3486$

    1. 425   2. 985   3. 1225   4. 625

2. 159%of 1641+1395=? +2500

    1. 1400   2. 2000   3. 2500   4. 1519

3. $6\dfrac{2}{5}$ of 1705+ $\dfrac{3}{4}$ of 1628+? =15000

    1. 2467   2. 3867   3. 2867   4. 3527

4. $\dfrac{2}{3} - \dfrac{1}{6} \times 5 + \dfrac{1}{3} \div \dfrac{1}{6} = ?$

    1. $\dfrac{13}{18}$ 2. $\dfrac{11}{6}$ 3. $2\dfrac{9}{12}$ 4. $2\dfrac{7}{12}$

5. $421 \times 0.9 + 130 \times 101 + 10000 = ?$

    1. 33500   2. 23500   3. 22500   4. 24500

DIRECTIONS *for questions 6 to 15: What will come in place of the question mark (?) in the following questions?*

6. 0.5% of 1250 – 0.25% of 600 =?

    1. 6.25   2. 4.75   3. 7.75   4. 475

7. 4985.23 + 4632.14 - ? = 4022.12

    1. 5955.25   2. 5595.25   3. 5295.55   4. 5255.95

8. 685.59 - ? = 607.88 – 351.46

    1. 449.28   2. 419.17   3. 429.17   4. 439.28

9. (4000 + ?) / 28 = 211

    1. 1848   2. 1758   3. 1868   4. None of these

10. 39% of 230 + 22% of 115

    1. 92   2. 151   3. 115   4. 230

11. (3565 / 31) + (5415 / ?) = 400

    1. 19   2. 17   3. 21   4. 23

12. ?% of 8745 = 5160

    1. 49   2. 53   3. 56   4. None of these

13. 430% of 25 + 75% of 430

    1. 430   2. 860   3. 516   4. 86

14. $4\frac{4}{9} + 8\frac{7}{9} - 2\frac{2}{3}$

    1. $9\frac{5}{9}$ 2. $8\frac{4}{9}$ 3. $8\frac{2}{3}$ 4. $10\frac{5}{9}$

15. 43.29 + 25.127 – 11.89 = ?

    1. 55.25   2. 56.527   3. 68.417   4. 54.537

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PRACTICE EXERCISE -3

DIRECTIONS *for questions 1 to 10:* What **approximate** value will come in place of the question mark (?) in the following questions?

1. $? = \sqrt{484.5} + \sqrt{528.5}$

    1. 43   2. 47   3. 45   4. 23

2. 59.8% of 401 + 33.4% of 598 = ?

    1. 340   2. 400   3. 450   4. 440

3. $\sqrt{570 \times 580} + \dfrac{447}{1.98} = ? \times 20^2$

    1. 20   2. 2   3. 4   4. 16

4. 330% of 37.5 + 11.11% of 990 = ?

    1. 235   2. 220   3. 275   4. 250

5. 175 × 28 + 275 × 27.98 = ?

    1. 11800   2. 12600   3. 12800   4. 11600

6. $? = \sqrt{150 + \sqrt{2404 + \sqrt{674}}}$

    1. 14   2. 15   3. 18   4. 24

7. 324.995 × 15.98 ÷ 4.002 + 36.88 = ?

    1. 1300   2. 1230   3. 1440   4. 1340

8. Square root of $(241^2 - 159^2) = ?$

    1. 32800   2. 82   3. 150   4. 180

9. 182.6% of 405 + 33.5% of 240 = ?% of 1642

    1. 85   2. 75   3. 150   4. 50

10. 1171 × 128 ÷ 8.008 + 983.004 = ?

    1. 18800   2. 19500   3. 19700   4. 19200

DIRECTIONS *for questions 11 to 15:* Find the value of the following:-

11. 101+ 1001 + 2003 + 30005 + 9056

    1. 42616   2. 42166   3. 41266   4. 42156

12. $1234 - 569 + 789 - 1003 + 596$

   1. 1074   2. 1067   3. 1057   4. 1047

13. $789.345 + 30.075 - 765.21 - 7.86$

   1. 46.35   2. 46.36   3. 45.36   4. 46.34

14. $0.8239 + 0.762 + 0.02 + 5.26$

   1. 6.6859   2. 6.8659   3. 6.8569   4. 6.8639

15. What approximate value should come in place of question mark?
$80.40 \div 20 - (-4.2) = ?$

   1. 497.8   2. 5.786   3. 947.0   4. 8.22

PRACTICE EXERCISE -4

1. What approximate value should come in place of question mark? $6\frac{1}{4} \times 0.25 + 0.75 - 0.3125 = ?$

   1. 5.9375   2. 4.2968   3. 2.1250   4. 2.0000

2. What approximate value should come in place of question mark? $4\frac{1}{2} - 3\frac{1}{7} + 13\frac{2}{7} - 8\frac{1}{4} = ?$

   1. $5\frac{11}{28}$ 2. $5\frac{13}{28}$ 3. $6\frac{11}{28}$ 4. $5\frac{15}{28}$

3. What approximate value should come in place of question mark?

   $12591 \div 39.8 + 933 \div 13 - 12.86 \times 14.2 + 135 = ?$

   1. 340   2. 330   3. 325   4. 350

4. What approximate value should come in place of question mark?

   33% of $1235 + 917 \div 12 - 129\%$ of $765 + 682 = ?$

   1. 160   2. 180   3. 200   4. 210

5. What approximate value should come in place of question mark?
119% of $1190 + 33\%$ of $125 - 97\%$ of $813 = ?$

   1. 620   2. 700   3. 725   4. 670

6. Simplify $10\frac{1}{2}-[8\frac{1}{2}+\{6-(7-(6-4)\}]$

1. $\frac{5}{2}$　　　　2. 2　　　　3. 1　　　　4. 3

7. Simplify $12\frac{1}{2}-[8\frac{1}{2}+\{6-(7-(4-2)\}]$

1. 6　　　　2. 8　　　　3. 4　　　　4. 3

8. Find the value of $\dfrac{(1125+143)^2-(1125-143)^2}{4\times1125\times143}$

1. 4　　　　2. 0　　　　3. 3　　　　4. 1

9. Find the value of $\dfrac{(0.46+0.64)^2+(0.18)^2}{(0.64)^2+(0.46)^2}$

1. 1　　　　2. 2　　　　3. 4　　　　4. 8

10. Find the value of $0.7\times0.7\times0.7+0.3\times0.3\times0.3+0.63$

1. 1　　　　2. 3　　　　3. 4　　　　4. 2

11. Find the value of $\dfrac{0.60\times0.60\times0.60+0.40\times0.40\times0.40+0.40\times0.6\times3}{0.6\times0.6+0.4\times0.4+0.48}$

1. 2　　　　2. 1　　　　3. 4　　　　4. 3

12. Find the value of $\dfrac{(1.7)^3-(0.7)^3-3\times0.7\times1.7}{(3.6)^2+(0.6)^2-2\times3.6\times0.6}$

1. $\dfrac{1}{3}$　　　　2. 1　　　　3. $\dfrac{1}{3^2}$　　　　4. $\dfrac{1}{3^3}$

13. Find the value of $(243)^{0.8}\div(243)^{0.4}$.

1. 49　　　　2. 25　　　　3. 9　　　　4. 16

14. Find the value of $(8^2\times512)^{\frac{2}{5}}\div\left(\dfrac{1}{16}\right)^{-2}$

1. 4　　　　2. 8　　　　3. $\dfrac{1}{8}$　　　　4. $\dfrac{1}{4}$

15. Find the value of $(526)^{\frac{7}{3}}\div(526)^{\frac{1}{3}}$

1. $(526)^2$　　　　2. $(526)^0$　　　　3. $(526)^3$　　　　4. $(526)^4$

1. Which of the following is a prime number?

    1. 0   2. 1   3. 2   4. – 1

2. What should come in place of # in the 5 digit number 9#325, for which the number is divisible by 5?

    1. 1   2. 2   3. 4   4. Any of these

3. What is the product of 5 smallest whole numbers?

    1. 1   2. 0   3. 25   4. 60

4. What is the sum of first 10 perfect squares?

    1. 240   2. 385   3. 424   4. 334

5. What is the difference between the greatest 6 digits number and the smallest 6 digit number?

    1. 999998   2. 899999   3. 89990   4. 99990

6. There are 10 people in a party. If every person shakes hand with every other person. What is the total number of handshakes?

    1. 105   2. 55   3. 45   4. 30

7. A 101 digit number is formed by writing first 55 natural number next to each other. Find the remainder when number is divided by 16.

    1. 15   2. 14   3. 4   4. 9

8. The six digit number 735A08 is divisible by 8. How many values of A are possible?

    1. 0   2. 3   3. 5   4. 4

9. What is the sum of this series $1 + 1 + 4 + 8 + 9 + 27 + 16 + 64 +$ _____ $100 + 1000$

    1. 3240   2. 3401   3. 3410   4. 2409

10. Which one of these is not a rational number?

    1. 0.333   2. 2.0.16666   3. $\sqrt{2}$ 4. 5

11. Which of the following number is divisible by 4?

    1. 178654   2. 164857   3. 176485   4. 178564

12. Simplify the expression using BODMAS rule $\frac{2}{3} \, of \, \frac{4}{5} \, \{(9 \times 3) - (6 \times 2)\} + \frac{1}{4} - \frac{1}{12}$

    1. $\frac{49}{6}$ 2. $\frac{27}{5}$ 3. $\frac{49}{9}$ 4. $\frac{27}{13}$

13. The product of 45 even numbers is

    1. even   2. odd   3. 625   4. Can't say

14. The eight digit number 7654321A is divisible by 9 where A is a single digit whole number. Find A.

    1. 0   2. 2   3. 4   4. 8

15. The six digit number 24687X is divisible by 9, where X is a single digit whole number. Find X.

    1. 0   2. 7   3. 9   4. Can't be determined

PRACTICE EXERCISE -6

1. $(17)^{3.5} \times (17)^? = 17^8$

    1. 2.29   2. 4.25   3. 2.75   4. 4.5

2. If $5^a = 3125$, then the value of $5^{(a-3)}$ is

    1. 25   2. 125   3. 625   4. 1625

3. The value of $\left[(10)^{150} \div (10)^{146} \right]$ is

    1. 1000   2. 10000   3. 100000   4. 10^6

4. If m and n are whole number such. Such that $m^n - 121$, the value of $(m - 1)^{n + 1}$ is

    1. 1   2. 10   3. 121   4. 1000

5. If $(32768)^{x-2} = (32)^x$, then find the value of x.

    1. 5   2. 4   3. 3   4. 2

6. If $4^{2x} = 256$, find x

    1. 1   2. 4   3. 2   4. 3

7. Find the conjugate of the surd $\left(\sqrt{13} - 2 \right)$

    1. $\sqrt{3} + 2$ 2. $\sqrt{13} - 2$ 3. $-(2 + \sqrt{13})$ 4. $2 - \sqrt{3}$

8. If $2^p \, 3^q = 432$, and p and q are integers, find $(p + q)$.

   1. 6   2. 7   3. 8   4. 9

9. Solve $x^{3/2} + 4x^{-1} - 5x^0$ when x = 4

   1. 4   2. -4 3. 7   4. 0

10. Solve $y^{2/3} + 3y^{-1} - 2y^0$ when y = 1/8

    1. 0   2. 7/9   3. 89/4   4. 22/4

11. Simplify $64^{-2/3} \times 16^{5/4} \times 2^0 \times \sqrt{3^4}$

    1. 10   2. 1   3. 18   4. 20

12. Simplify $8^{2/3} \times 16^{-3/4} \times 2^0 - 8^{-2/3}$

    1. 1   2. 1/4   3. 1/8   4. 1/16

13. Simplify $\sqrt[n]{\dfrac{32}{2^{5+n}}}$

    1. 1/4   2. 1/16   3. 1/8   4. 1/2

14. Simplify $\left(\dfrac{2^{-8} \times 3^4}{5^{-4}}\right)^{-\frac{1}{4}}$

    1. 2/15   2. 8/15   3. 1/12   4. 4/15

15. Simplify $\dfrac{\sqrt{a} \times a^{-\frac{2}{3}}}{\sqrt[6]{a^5}} + \dfrac{a^{-\frac{1}{2}}}{\sqrt[3]{a^2 \times a^{-\frac{1}{2}}}}$

    1. 2/a   2. 1/a   3. 0   4. -1/a

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ANSWERS

PRACTICE EX-1		PRACTICE EX-2		PRACTICE EX-3		PRACTICE EX-4		PRACTICE EX-5		PRACTICE EX-6	
1.	3	1.	4	1.	3	1.	4	1.	3	1.	4
2.	4	2.	4	2.	4	2.	3	2.	4	2.	1
3.	4	3.	3	3.	2	3.	1	3.	2	3.	2
4.	3	4.	2	4.	1	4.	2	4.	2	4.	4
5.	3	5.	2	5.	2	5.	4	5.	2	5.	3
6.	4	6.	2	6.	2	6.	3	6.	3	6.	3
7.	4	7.	2	7.	4	7.	4	7.	1	7.	3
8.	4	8.	3	8.	4	8.	4	8.	3	8.	2
9.	4	9.	4	9.	4	9.	2	9.	3	9.	1
10.	4	10.	3	10.	3	10.	1	10.	3	10.	3
11.	2	11.	1	11.	2	11.	2	11.	4	11.	3
12.	4	12.	4	12.	4	12.	3	12.	1	12.	2
13.	4	13.	1	13.	1	13.	3	13.	1	13.	4
14.	4	14.	4	14.	2	14.	4	14.	4	14.	4
15.	4	15.	2	15.	4	15.	1	15.	4	15.	1