Approximation Questions for Bank Clerk Pre Exams.

Approximation Quiz 6

Directions: What approximate value should come in the place of question mark (?) in the following questions?

1. 33.05% of 5010.11 + $\dfrac{1}{12.93}$ of 2404.99 = ?

    A. 1728   B. 1935   C. 1898   D. 1838   E. 1450

2. 98.98 ÷ 11.03 + 7.014 × 15.99 = ?

    A. 132   B. 144   C. 12   D. 121   E. 11

3. $10^3 \times 100^3 + 999999999 = 10^? + 10^?$

    A. 6, 9   B. 9, 9   C. 6, 12   D. 6, 16   E. 6, 18

4. 134% of 3894 + 38.94% of 134 = ?

    A. 500   B. 5300   C. 5500   D. 5270   E. 4900

5. (21 + 99) × (30 − 19.02) = ?

    A. 3581   B. 131   C. 1290   D. 1600   E. 1320

6. $\dfrac{2}{3} \times \dfrac{6}{8} \times \dfrac{2}{3} \times \dfrac{3}{5}$ = ?

    A. 0.5   B. 2.0   C. 1.45   D. 0.2   E. 0.55

7. $\sqrt{257} + \sqrt{224.5} \times \sqrt[3]{21.5}$ = ?

    A. 106   B. 151   C. 205   D. 264   E. 325

8. $\sqrt{575}$ ÷ ? × 14.98^2 = 450

    A. 15   B. 10   C. 7   D. 4   E. 12

9. $30.01^2 - 19.98^2 - ? = 21.01^2$

    A. 49   B. 60   C. 30   D. 39   E. 41

10. 820.15 + 2379.85 + 140.01 × 4.99 = ?

    A. 4400   B. 3900   C. 4000   D. 4300   E. 4800

Correct Answers:

1	2	3	4	5	6	7	8	9	10
D	D	B	D	E	D	A	E	B	B

Explanations:

1.

33.05% of 5010.11 + $\dfrac{1}{12.93}$ of 2404.99 = ?

? ≈ 33% of 5010 + $\dfrac{1}{13}$ of 2405

⇒ ? = $\dfrac{33}{100}$ × 5010 + $\dfrac{1}{13}$ × 2405

= 1653.30 + 185 = 1838.30 ≈ 1838

Hence, option D is correct.

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2. 98.98 ÷ 11.03 + 7.014 × 15.99 = ?

Suppose, ? = x

Then 99 ÷ 11 + 7 × 16 = 9 + 112 = 121 (taking approximate value)

∴ x = 121

Hence, option D is correct.

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3. Here 10^3 × 100^3 + 999999999

= 10^3 × $(10^2)^3$ + 10^9

= 10^3 × 10^6 + 10^9

= 10^{3+6} + 10^9

= 10^9 + 10^9

Therefore, question mark will be replaced by 9.

Hence, option B is correct.

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4. 134% of 3894 + 38.94% of 134

= 134% of 3894 + 3894 of 1.34%

= 134% of 3894 + 1.34% of 3894

= 135.34% of 3894

= 5270.1396 ≈ 5270

Hence, option D is correct.

5. $(21 + 99) \times (30 - 19.02)$

$= 120 \times 10.98$

$= 120 \times 11 = 1320$

Hence, option E is correct.

6.

$\dfrac{2}{3} \times \dfrac{6}{8} \times \dfrac{2}{3} \times \dfrac{3}{5} = \dfrac{1}{5} = 0.2$

Hence, option D is correct.

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7. $\sqrt{257} + \sqrt{224.5} \times \sqrt[3]{215.5} = ?$

$? \approx \sqrt{257} + \sqrt{225} \times \sqrt[3]{216} = ?$

$= 16 + 15 \times 6 = 16 + 90 = 106$

Hence, option A is correct.

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8. $\sqrt{575} \div ? \times 14.98^2 = 450$

Or, $\dfrac{\sqrt{575}}{?} \times 15 \times 15 = 450$

Or, $\dfrac{24}{?} \times 15 \times 15 \approx 450$

Or, $? \approx \dfrac{24 \times 15 \times 15}{450} = 12$

Hence, option E is correct.

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9. $30.01^2 - 19.98^2 - ? = 21.01^2$

Or, $? \approx (30)^2 - (20)^2 - ? = (21)^2$
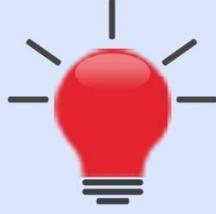
$= 900 - 400 - 441$

$= 900 - 841 = 59 \approx 60$

Hence, option B is correct.

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10. $820.15 + 2379.85 + 140.01 \times 4.99 = ?$

$\Rightarrow ? = 820 + 2380 + 140 \times 5$

$\Rightarrow ? = 820 + 2380 + 700 = 3900$

Hence, option B is correct.