

## Solution

S1. Ans. (a)

$$\text{Sol. } \frac{80}{100} \times 5000 - \frac{\frac{60}{100} \times 8000}{118 \div 59} = (?)^2$$

$$\Rightarrow 4000 - 2400 = (?)^2$$

$$\Rightarrow ? = \sqrt{1600}$$

$$? = 40$$

S2. Ans. (b)

$$\text{Sol. } \frac{70}{100} \times 900 - \left(35 \times 16 \times \frac{1}{5}\right) = ? + 193$$

$$630 - 112 - 193 = ?$$

$$? = 325$$

S3. Ans. (e)

$$\text{Sol. } \left( \left( \frac{46}{100} \times 3000 \right) \div 69 \times \left( \frac{10}{100} \times 20 \right) \right) = ?$$

$$1380 \div 138 = ?$$

$$? = 10$$

S4. Ans. (c)

Sol.

$$36.01^3 \times 4096^{\frac{1}{2}} \times 37.99^2 \div (9^3 \times 75.98^2) = 4^?$$

$$\text{or, } 4^? = \frac{36^3 \times \sqrt{4096} \times 38^2}{9^3 \times 76^2}$$

$$= \frac{4^3 \times 9^3 \times 4^3 \times 38 \times 38}{9^3 \times 76 \times 76} = \frac{4^3 \times 4^3}{2 \times 2}$$

$$\text{or, } 4^? \approx 4^3 \times 4^2 = 4^5$$

$$\therefore ? \approx 5$$

S5. Ans. (a)

Sol.

$$\frac{4}{15} \text{ of } 393 + \frac{7}{12} \text{ of } 473 = ? \times (1.99 + 1.01)$$

$$\text{or, } ? \times 3 \approx \frac{4}{15} \times 393 + \frac{7}{12} \times 478$$

$$\text{or, } ? \times 3 \approx \frac{4}{15} \times 390 + \frac{7}{12} \times 480$$

$$\text{or, } ? \times 3 \approx 104 + 280$$

$$\text{or, } ? \approx \frac{384}{3}$$

$$\therefore ? \approx 128$$

S6. Ans.(c)

Sol.

$$? \approx \sqrt{2809} \div 8 \times (12)^2 + 46$$

$$\text{or, } ? \approx \frac{53}{8} \times (12)^2 + 46$$

$$\text{or, } ? \approx 954 + 46$$

$$\therefore ? \approx 1000$$

S7. Ans.(d)

Sol.

$$\frac{164+?}{25} + 390 + 20\% \text{ of } 725 = \frac{25}{100} \times 2204$$

$$\frac{164+?}{25} + 535 = 551$$

$$? = (551 - 535) \times 25 - 164$$

$$? = 400 - 164$$

$$? = 236$$

S8. Ans.(b)

Sol.

$$\frac{?}{100} \times 750 + \sqrt{729} = \frac{27}{100} \times 500 + \frac{30}{100} \times 350 + \sqrt{81}$$

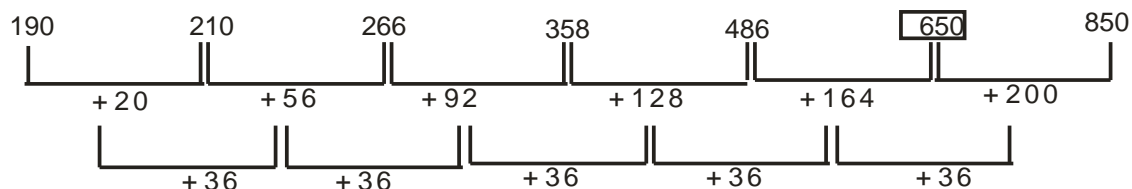
$$7.5 \times ? + 9 = 135 + 105 + 9$$

$$? = 32$$

S9. Ans.(a)

Sol. Wrong number = 646

Pattern of series -

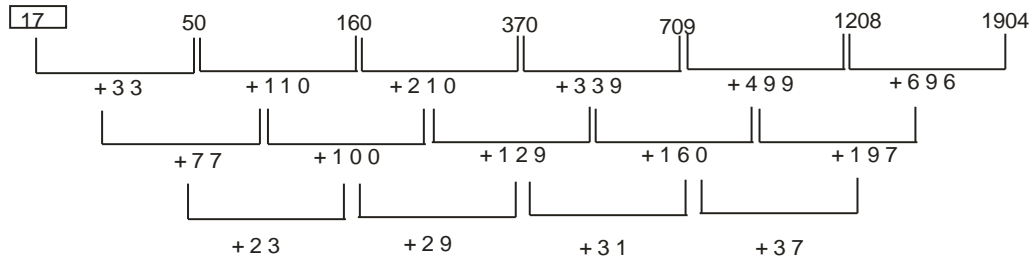


So, there should be 650 in place of 646.

S10. Ans.(e)

Sol. Wrong number = 15

Pattern of series -

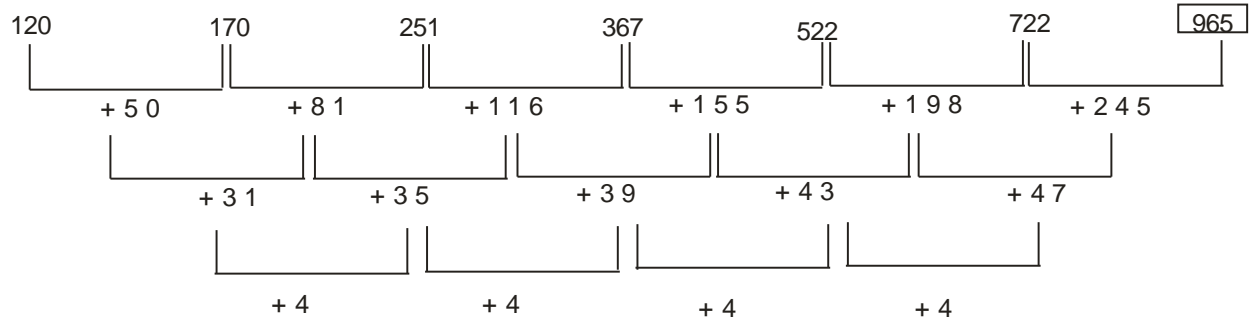


So, there should be 17 in place of 15.

S11. Ans.(b)

Sol. Wrong number = 990

Pattern of series –



So, there should be 965 in place of 990.

S12. Ans(b)

Sol.

Wrong number = 569

Pattern of series –

$$4^2 \times 2 = 32$$

$$5^2 \times 3 = 75$$

$$6^2 \times 4 = 144$$

$$7^2 \times 5 = 245$$

$$8^2 \times 6 = 384$$

$$9^2 \times 7 = 567$$

$$10^2 \times 8 = 800$$

So, should be 567 in the place of 569.

S13. Ans(e)

Sol.

Pattern of series –

$$3 \times 1 - 1 = 2$$

$$2 \times 2 + 2 = 6$$

$$6 \times 3 - 3 = 15$$

$$15 \times 4 + 4 = 64$$

$$64 \times 5 - 5 = 315$$

$$315 \times 6 + 6 = 1896$$

So, wrong number = 60

Now new series start with wrong number, which is 60

So, new series -

$$60 \times 1 - 1 = 59$$

$$59 \times 2 + 2 = 120$$

$$120 \times 3 - 3 = 357$$

$$357 \times 4 + 4 = 1432$$

$$1432 \times 5 - 5 = 7155$$

$$7155 \times 6 + 6 = 42936$$

So, 5<sup>th</sup> term of new series = 1432

S14. Ans(a)

Sol.

Pattern of series -

$$993 - (12^2 - 1) = 850$$

$$850 - (10^2 - 1) = 751$$

$$751 - (8^2 - 1) = 688$$

$$688 - (6^2 - 1) = 653$$

$$653 - (4^2 - 1) = 638$$

$$638 - (2^2 - 1) = 635$$

So, wrong number = 750

Now new series start with wrong number, which is 750

So, new series -

$$750 - (12^2 - 1) = 607$$

$$607 - (10^2 - 1) = 508$$

$$508 - (8^2 - 1) = 445$$

$$445 - (6^2 - 1) = 410$$

$$410 - (4^2 - 1) = 395$$

$$395 - (2^2 - 1) = 392$$

So, 5<sup>th</sup> term of new series = 410

S15. Ans(c)

Sol.

Pattern of series -

$$20 + 10 = 30$$

$$30 + 20 = 50$$

$$50 + 40 = 90$$

$$90 + 80 = 170$$

$$170 + 160 = 330$$

$$330 + 320 = 650$$

So, wrong number = 160

Now new series start with wrong number, which is 160

So, new series –

$$160 + 10 = 170$$

$$170 + 20 = 190$$

$$190 + 40 = 230$$

$$230 + 80 = 310$$

$$310 + 160 = 470$$

$$470 + 320 = 790$$

So, 5<sup>th</sup> term of new series = 310