Course: IBPS clerk Prelims

Subject: Approximation, Wrong Series

Time:12 Minutes
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Directions (1-8): निम्नलिखित प्रश्नों में प्रश्नवाचक चिन्ह (?) का अनुमानित मान ज्ञात कीजिए-

Q1. $\sqrt{63.82 \times 36.01} + 419.92 \div 5.84 - 540 = ? - 799.98$
(a) 426
(b) 378
(c) 526
(d) 328
(e) 448

Q2. 15.812% of 1600.125 + ? % of 1199.98 = 19.88 × 121.98
(a) 182
(b) 142
(c) 326
(d) 286
(e) 216

Q3. $(7.98)^3 + (14.88)^2 - (12.01)^2 = ? - 1219.812 - 1749.98$
(a) 3643
(b) 3425
(c) 3416
(d) 3563
(e) 3521

Q4. $19.825 \times \sqrt{?}$ = 63.91% of 399.98 + 11.95% of 1200.01
(a) 300
(b) 500
(c) 420
(d) 350
(e) 400

Q5. $(?)^2$ + 14.01% of 1599.98 = 59.01 × 12.025
(a) 18
(b) 28
(c) 22

(d) 36
(e) 32

Q6. $1149.89 + \sqrt{? - 14.92} = 89.815 \times 13.012$
(a) 520
(b) 425
(c) 415
(d) 445
(e) 515

Q7. $(?)^2 + (11.79)^2 + (6.01)^2 + (8.12)^3 = 499.825 + 448.02$
(a) 32
(b) 26
(c) 24
(d) 12
(e) 16

Q8. $\sqrt{410.01 + 220.10 - \sqrt{24.98}} = ? + \sqrt{225.05}$
(a) 10
(b) 25
(c) 5
(d) 15
(e) 20

Direction (9 - 13): निम्नलिखित संख्या श्रृंखला में कौन सी संख्या गलत संख्या को प्रतिस्थापित करेगी:

Q9. 56.6, 83, 107.2, 129.2, 149, 166.2, 182
(a) 166.4
(b) 168.6
(c) 160.6
(d) 164.6
(e) 166.6

Q10. 1228, 1589, 1300, 1535, 1356, 1477, 1396
(a) 1525
(b) 1515
(c) 1520
(d) 1510
(e) 1530

Q11. 45, 165, 110, 240, 165, 305, 240
(a) 155
(b) 145
(c) 175
(d) 160
(e) 185

Q12. 12, 18, 28, 46, 80, 148, 276
(a) 142
(b) 144
(c) 152
(d) 146
(e) 154

Q13. 6, 32, 156, 620, 1854, 3708, 3704
(a) 1854
(b) 1856
(c) 1852
(d) 1850
(e) 1858

Direction (14- 15): निम्नलिखित संख्या श्रृंखला में गलत पद ज्ञात कीजिए-

Q14. 1728, 998, 1511, 1167, 1384, 1260, 1323
(a) 998
(b) 1511
(c) 1323
(d) 1167
(e) 1260

Q15. 2.5, 60, 720, 4320, 12960, 19480, 14580
(a) 720
(b) 4320
(c) 12960
(d)19480
(e) 14580

Solutions

S1. Ans.(b)
Sol.

$\sqrt{64 \times 36} + \frac{420}{6} - 540 = ? - 800$
$? = \sqrt{2304} + 70 - 540 + 800$
$? = 378$

S2. Ans.(a)
Sol.
$\frac{16}{100} \times 1600 + \frac{?}{100} \times 1200 = 20 \times 122$
$256 + ? \times 12 = 2440$
$? = \frac{2184}{12} = 182$

S3. Ans.(d)
Sol.
$(8)^3 + (15)^2 - (12)^2 = ? - 1220 - 1750$
$512 + 225 - 144 = ? - 2970$
$? = 3563$

S4. Ans.(e)
Sol.
$20 \times \sqrt{?} = \frac{64}{100} \times 400 + \frac{12}{100} \times 1200$
$20 \times \sqrt{?} = 256 + 144$
$\sqrt{?} = \frac{400}{20} = 20$
$? = 400$

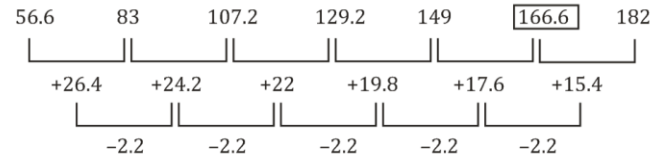
S5. Ans.(c)
Sol.
$(?)^2 + \frac{14}{100} \times 1600 = 59 \times 12$
$(?)^2 + 224 = 708$
$(?)^2 = 484$
$? = 22$

S6. Ans.(c)
Sol.
$1150 + \sqrt{? - 15} \simeq 90 \times 13$
$1150 + \sqrt{? - 15} = 1170$
$\sqrt{? - 15} = 20$
$? = 415$

S7. Ans.(e)
Sol.
$(?)^2 + (12)^2 + (6)^2 + (8)^3 \simeq 500 + 448$
$(?)^2 = 948 - 144 - 36 - 512$
$(?)^2 = 256$
? = 16

S8. Ans.(a)
Sol.
$\sqrt{410 + 220 - \sqrt{25}} \simeq ? + 15$
$? = \sqrt{630 - 5} - 15$
? = 25 – 15 = 10

S9. Ans(e)
Sol.
Pattern of series -

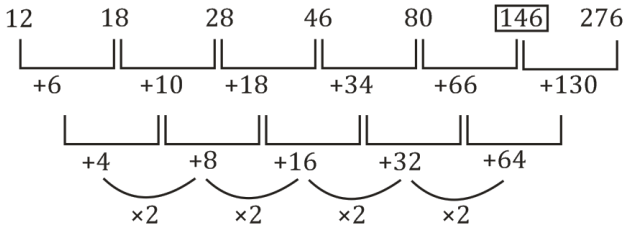


So, 166.2 should be replace by 166.6.

S10.Ans(a)
Sol.
Pattern of series -
$1228 + (19)^2 = 1589$
$1589 - (17)^2 = 1300$
$1300 + (15)^2 =$ **1525**
$1525 - (13)^2 = 1356$
$1356 + (11)^2 = 1477$
$1477 - (9)^2 = 1396$
So, 1535 should be replace by 1525.

S11.Ans(c)
Sol.
Pattern of series -
45 + 130 = **175**
$175 - 65 = 110$
110 + 130 = 240
$240 - 65 = 175$
175 + 130 = 305
$305 - 65 = 240$
So, 165 should be replace by 175.

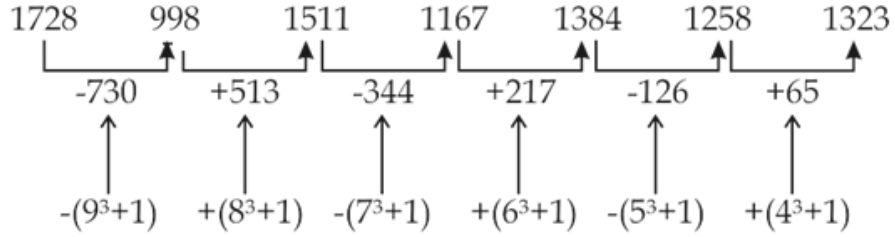
S12.Ans(d)
Sol.
Pattern of series –



So, 148 should be replaced by 146.

S13.Ans(b)
Sol.
Pattern of series –
$6 \times 6 - 4 = 32$
$32 \times 5 - 4 = 156$
$156 \times 4 - 4 = 620$
$620 \times 3 - 4 =$ **1856**
$1856 \times 2 - 4 = 3708$
$3708 \times 1 - 4 = 3704$
So, 1854 should be replaced by 1856.

S14. Ans(e)
Sol.
Wrong number = 1260



So, there should be 1258 instead of 1260

S15. Ans(d)
Sol.
Wrong number = 19480
Pattern of series –
$2.5 \times 24 = 60$
$60 \times 12 = 720$
$720 \times 6 = 4320$
$4320 \times 3 = 12960$
$12960 \times 1.5 = 19440$

$19440 \times 0.75 = 14580$
So, there should be 19440 instead of 19480.