Approximation Questions for SBI PO Exam

Directions (1-5): What approximate value will come in place of question mark (?) in the following questions (You are not expected to calculate the exact value).

Q1. $14.98 \times 24.88\%\ of\ 140.02 = ? \times 15$
(a) 45
(b) 25
(c) 50
(d) 35
(e) 65

Q2. $1569.99 + 2190.012 - \frac{4}{9}\ of\ 198.12 = \frac{?}{4}$
(a) 12122
(b) 14478
(c) 18750
(d) 10980
(e) 14688

Q3. $80.04\%\ of\ 560.05 + 19.02^2 - \sqrt[3]{4913.21} = ?$
(a) 702
(b) 868
(c) 912
(d) 792
(e) 446

Q4. $44.04 \div 3.97 \times 8.99 \div 2.94 + 3.01 = \sqrt{?}$
(a) 6
(b) 36
(c) 24
(d) 1296
(e) 216

Q5. $\sqrt{39.94\%\ \text{of}\ 375.08 + 75.07\%\ \text{of}\ 59.92} = ?$
(a) 12
(b) 14
(c) 16
(d) 18
(e) 22

Direction (6-10): What approximate value should come in the place of question (?) mark.

Q6. $15.98\%\ of\ 25.05\%\ of\ 599 + (6.97 \times 21.98) = ? \times 4.04$
(a) 45
(b) 37
(c) 40
(d) 52
(e) 56

Q7. $115.987 - 20.01\% of\ 239 = (?^2 + 103.98) \div 9.99$
(a) 26
(b) 29
(c) 18
(d) 24
(e) 32

Q8. 145.09% of $200.01 + \frac{620.92}{27.01} + \sqrt{?} - 3.99 = (18.07)^2$
(a) 984
(b) 324
(c) 576
(d) 225
(e) 676

Q9. 25.08% of $979.92 + \sqrt{899.99} - 24.93\% of\ 215.9 = ?$
(a) 217
(b) 213
(c) 228
(d) 236
(e) 221

Q10. $249.97 \div 25.02 + 108.08 \div 35.98 - 6.01 = ?$
(a) 2
(b) 5
(c) 10
(d) 7
(e) 4

Directions (11-15): What approximate value will come in place of question mark (?) in the following questions? (You are not expected to calculate the exact value)

Q11. $\sqrt{\sqrt{(99.99 + 104.99 \times 5}} = ? \div 8.989$
(a) 55
(b) 15
(c) 25
(d) 35
(e) 45

Q12. $35.99 \times 4.98 - 1199.99 \div 7.99 = ?$
(a) 20
(b) 50
(c) 40
(d) 30
(e) 10

Q13. $?^2 + 60\%\ of\ 239.99 = 55\%\ of\ 320.02 + 3.98$
(a) 8
(b) 6
(c) 4
(d) 16
(e) 14

Q14. $524.90 + 125.05 = ? \times 9.99$
(a) 85
(b) 75
(c) 65
(d) 55
(e) 45

Q15. $\sqrt{144.04} \times 15\%\ of\ 120.09 = ? - 54.99 \times 3.03$
(a) 401
(b) 431
(c) 341
(d) 471
(e) 381

Direction (16-18): What approximate value should come in the place of question (?) mark in following question.

Q16. $(?\%\ of\ 6400.01) \times (? \div 511.99) = (4.98)^3 + 2.99$
(a) 44
(b) 48
(c) 45
(d) 32
(e) 37

Q17. $24.07\%\ of\ 1600.03 + (15.99\%\ of\ 599.99) \div 31.99 = ?^2 - 12.94$
(a) 20
(b) 28
(c) 26
(d) 22
(e) 24

Q18. $(190.05 \times 47.89) \div (1368.01 \div 440.99) + 86.99\%\ of\ 499.97 = ?^3$
(a) 10
(b) 12
(c) 18
(d) 15
(e) 20

Direction (19-23): What approximate value should come in the place of question (?) mark in following questions.

Q19. $? + \sqrt{1369.08} - \sqrt{2024.98} = \sqrt[3]{2196.98}$
(a) 24
(b) 28
(c) 25
(d) 21
(e) 27

Q20. $360.09 - 79.88\%\ of\ 1199.99 = ? - 840.03$
(a) 250
(b) 240
(c) 260
(d) 220
(e) 280

Q21. $\sqrt{?} = (27.99)^2 - 1180.03 + (20.07)^2$
(a) 64
(b) 100
(c) 16
(d) 36
(e) 144

Q22. $(?)^2 + 24.98 \times 12.04 = 3999.94 \div 9.99$
(a) 10
(b) 14
(c) 11
(d) 16
(e) 8

Q23. $(47.98 \times 6.09) - (\sqrt{121.02} \times 5.07) = ?$
(a) 283
(b) 213
(c) 233
(d) 263
(e) 193

Directions (24-28): What approximate value should come in place of question (?) mark.

Q24. 144.89% of $79.99 + \sqrt{676.06} + ?^2 = 2100.91 \div 10.89$
(a) 23
(b) 7
(c) 13
(d) 17
(e) 9

Q25. $\frac{16.13+3.97\times ?}{3.02} + 7.90^3 \div 2.09^2 = 156.089 \times 1.99$
(a) 159
(b) 129
(c) 134
(d) 144
(e) 152

Q26. $5.12^3 \times 4.24^3 \div 2.12^5 + 74.95\%\ of\ 360.09 = ?$
(a) 520
(b) 610
(c) 540
(d) 660
(e) 500

Q27. 9.09 × 25.25 + 51.051 × 9.01 – 9.09 × 58.058 = ?
(a) 172
(b) 282
(c) 222
(d) 162
(e) 192

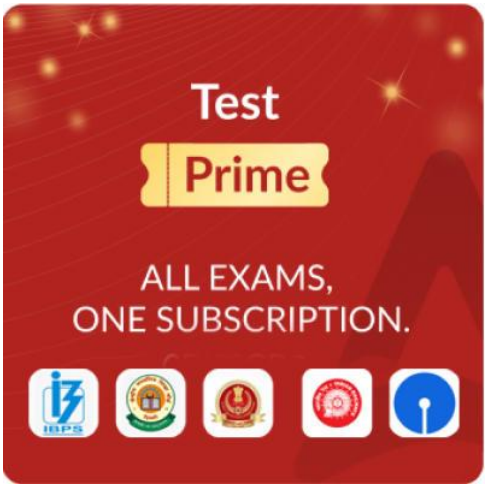
Q28. 120.012% of 450.24 + 119.920 + 155.1 ÷ 5.1 = ?
(a) 611
(b) 751
(c) 691
(d) 721
(e) 911

Directions (29-34): What approximate value will come in place of question mark (?) in the following questions (You are not expected to calculate the exact value).

Q29. $39.89\%\ of\ 549.92 + 199.88 \div 4.02 = ?$
(a) 470
(b) 545
(c) 260
(d) 145
(e) 270

Q30. $\sqrt{1440} \times 11.01 + 490.02 = ? + 560.02$
(a) 308
(b) 332
(c) 364
(d) 348
(e) 386

Q31. $\frac{89.90\%\ of\ 799.99}{8.82} = \sqrt[3]{?} \times 9.99$
(a) 125
(b) 512
(c) 64
(d) 216
(e) 729



Q32. $19.09^2 - 20.04\%\ of\ 190.04 - ? = 90.12$
(a) 233
(b) 247
(c) 212
(d) 202
(e) 285

Q33. $(11.92\%\ of\ 450.10) \div 8.90 + 3 \times ? = 1112.98 - 900.21$
(a) 62
(b) 61
(c) 29
(d) 74
(e) 69s

Q34. $1.99 \times 8.98 + 109.90 \div 10.03 = ? - 65.09\%\ of\ 199.99$
(a) 171
(b) 159
(c) 165
(d) 179
(e) 142

Direction (35-39): What approximate value should come in the place of question (?) mark in following questions:

Q35. 56.08% of 549.98 + 251.98 = $?^2 - \sqrt{256.03}$
(a) 28
(b) 26
(c) 22
(d) 24
(e) 20

Q36. $\frac{112.03\%\ of\ 699.99}{? \times 6.99} + 6.99^3 = 175.03 \times \sqrt{4.09}$
(a) 16
(b) 8
(c) 24
(d) 4
(e) 32

Q37. $\sqrt[3]{64.01}$ + 15.03 % of 1279.99 = $?^2$

(a) 16
(b) 8
(c) 10
(d) 12
(e) 14

Q38. $\frac{240.01+24.99\%\ of\ 719.99+280.03}{69.87} = \sqrt[3]{?}$

(a) 64
(b) 8
(c) 1728
(d) 1000
(e) 343

Q39. $32.01 \div 1.99^2 \times 127.99 = 2^?$

(a) 11
(b) 9
(c) 8
(d) 10
(e) 12

Q40. $\frac{455.93}{?} = 12.98 \times (1.99)^5 - 44.99\%\ of\ 840.1$

(a) 1
(b) 29
(c) 18
(d) 38
(e) 12

Q41. $\sqrt{831.01 - \sqrt{2208.97}} = \sqrt{?} + \sqrt{529.09}$

(a) 25
(b) 36
(c) 49
(d) 16
(e) 9

Q42. 29.92% of 180.01 + $(17.06)^2$ = ? % of 8574.90

(a) 32
(b) 46
(c) 10
(d) 4
(e) 18

Q43. $(32.02)^2 = (?)^3 - (14.89)^2 + 15.98\ \%$ of $1600.20 + 13.02\%$ of 4999.99
(a) 7
(b) 15
(c) 24
(d) 52
(e) 39

Q44. $52.03 \times 17.89 - \sqrt{2303.98} = (29.99)^? - 5\%$ of 239.987
(a) 13
(b) 2
(c) 24
(d) 45
(e) 31

Q45. $17.98\ \%$ of $600.20 + 13.02\%$ of $499.99 - 20.02\%$ of $19.99 = ?^2$
(a) 13
(b) 26
(c) 4
(d) 34
(e) 48

Directions (46-50): What approximate value will come in place of question mark (?) in the following questions? (You are not expected to calculate the exact value)

Q46. 55.67% of $450.02 + 59.78\%$ of $290.09 = ? - 420.18 \div 3.03$
(a) 566
(b) 540
(c) 654
(d) 346
(e) 864

Q47. $\sqrt{(38.38 \div 2.45 + 52.99 + 56.34 \div 1.99)} = ?$
(a) 19
(b) 14
(c) 23
(d) 10
(e) 4

Q48. $\frac{1}{5.67}of\frac{?}{3.89}of\frac{48.23}{23.78} \times ? = 10$
(a) 21
(b) 18
(c) 9
(d) 14
(e) 11

Q49. 420.2 ÷ 10 × 44.33 – 455.89 ÷ 8 ×10 = ?
(a) 1078
(b) 1208
(c) 1278
(d) 2270
(e) 1008

Q50. $(25.17^2 - 15.89^2) \times \frac{1}{19.88} + ? = 99.56$
(a) 82
(b) 89
(c) 52
(d) 71
(e) 77

Solution

S1. Ans.(d)
Sol. $15 \times \frac{25}{100} \times 140 = ? \times 15$
$\frac{525}{15} = ?$
$35 = ?$

S2. Ans.(e)
Sol. $1570 + 2190 - \frac{4}{9}\ of\ 198 = \frac{?}{4}$
$3760 - 88 = \frac{?}{4}$
$14688 = ?$

S3. Ans.(d)
Sol. $\frac{80}{100} \times 560 + 361 - \sqrt[3]{4913}$
$448 + 361 - 17 = ?$
$792 = ?$

S4. Ans.(d)
Sol. $\frac{44}{4} \times \frac{9}{3} + 3 = \sqrt{?}$
$\sqrt{?} = 11 \times 3 + 3$
$36 = \sqrt{?}$
$? = 1296$

S5. Ans.(b)
Sol. $\sqrt{40\% \times 375 + 75\% \times 60} = ?$
$? = \sqrt{150 + 45}$
$? = \sqrt{195}$
$? = 14$

S6. Ans.(a)

Sol. $16\%\ of\ 25\%\ of\ 600 + (7 \times 22) = ? \times 4$

$\frac{16}{100} \times \frac{25}{100} \times 600 + 154 = ? \times 4$

$24 + 154 = ? \times 4$

$? = 44.5 \approx 45$

S7. Ans.(d)

Sol. $116 - 20\%\ of\ 240 = (?^2 + 104) \div 10$

$116 - 48 = (?^2 + 104) \div 10$

$680 = ?^2 + 104$

$? = \sqrt{576}$

$? = 24$

S8. Ans.(d)

Sol. $\frac{145}{100} \times 200 + \frac{621}{27} - 4 + \sqrt{?} = 324$

$290 + 23 - 4 + \sqrt{?} = 324$

$? = 225$

S9. Ans.(e)

Sol. $\frac{980}{4} + 30 - \frac{25}{100} \times 216 = ?$

?=245+30-54

?=221

S10. Ans.(d)

Sol. $\frac{250}{25} + \frac{108}{36} - 6 = ?$

? =10+3-6

? =7

S11. Ans.(e)

Sol. $\sqrt{\sqrt{(99.99 + 104.99 \times 5}} = ? \div 8.989$

$\sqrt{\sqrt{100 + 105 \times 5}} = \frac{?}{9}$

$\sqrt{\sqrt{625}} = \frac{?}{9}$

$? = 45$

S12. Ans.(d)

Sol. $35.99 \times 4.98 - 1199.99 \div 7.99 = ?$

$36 \times 5 - \frac{1200}{8} = ?$

$? = 180 - 150$

$? = 30$

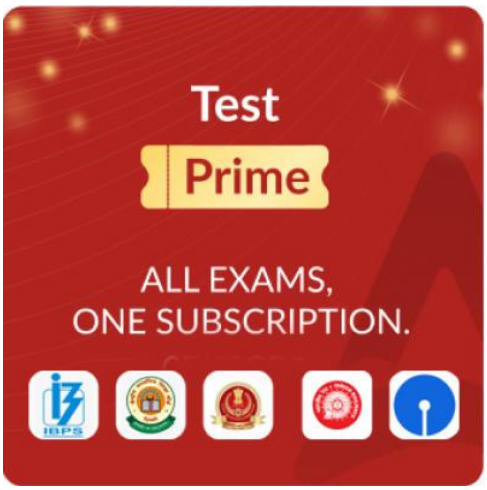
S13. Ans.(b)

Sol. $?^2 + 60\%\ of\ 239.99 = 55\%\ of\ 320.02 + 3.98$

$?^2 + \frac{60}{100} \times 240 = \frac{55}{100} \times 320 + 4$

$?^2 = 180 - 144$

$? = 6$



S14. Ans.(c)

Sol. $525 + 125 = ? \times 10$

$? = \frac{650}{10}$

$? = 65$

S15. Ans.(e)

Sol. $\sqrt{144} \times \frac{15}{100} \times 120 = ? - 55 \times 3$

$12 \times 18 = ? - 165$

$? = 216 + 165$

$? = 381$

S16. Ans.(d)

Sol. $\frac{?}{100} \times 6400 \times ? \times \frac{1}{512} \approx 125 + 3$

$?^2 \times \frac{1}{8} \approx 128$

$?^2 \approx 1024$

$? \approx 32$

S17. Ans.(a)

Sol. $\frac{24}{100} \times 1600 + \left(\frac{16}{100} \times 600\right) \times \frac{1}{32} \approx ?^2 - 13$

$384 + 3 + 13 \approx ?^2$

$?^2 \approx 400$

$? \approx 20$

S18. Ans.(d)

Sol. $(190 \times 48) \div \left(\frac{1368}{441}\right) + \frac{87}{100} \times 500 \approx ?^3$

$190 \times 48 \times \frac{441}{1368} + 435 \approx (?)^3$

$2940 + 435 \approx (?)^3$

$? \approx 15$

S19. Ans.(d)

Sol. $? + 37 - 45 \approx 13$

$? \approx 13 + 8$

$? \approx 21$

S20. Ans.(b)
Sol. $360 - \frac{80}{100} \times 1200 + 840 \approx ?$
$1200 - 960 \approx ?$
$? \approx 240$

S21. Ans.(c)
Sol. $\sqrt{?} \approx 784 - 1180 + 400$
$\sqrt{?} \approx 4$
$? \approx 16$

S22. Ans.(a)
Sol. $(?)^2 \approx 400 - 300$
$(?)^2 \approx 100$
$? \approx 10$

S23. Ans.(c)
Sol. $288 - 55 \approx ?$
$? \approx 233$

S24. Ans.(b)
Sol. $\frac{145}{100} \times 80 + \sqrt{676} + ?^2 = \frac{2101}{11}$
$116 + 26 + ?^2 = 191$
$?^2 = 49$
$? = 7$

S25. Ans.(c)
Sol. $\frac{16+4\times?}{3} + \frac{512}{4} = 312$
$16 + 4 \times ? = 3 \times (312 - 128)$
$4 \times ? = 552 - 16$
$?=134$

S26. Ans.(a)
Sol. $125 \times \frac{64}{32} + \frac{75}{100} \times 360 = ?$
$? = 250 + 270$
$? = 520$

S27. Ans.(d)
Sol. $9 \times (25 + 51 - 58) = ?$
$? = 9 \times 18$
$? = 162$

S28. Ans.(c)
Sol. $\frac{120}{100} \times 450 + 120 + 31 = ?$
$540 + 120 + 31 = ?$
$? = 691$

S29. Ans.(e)

Sol. $40\%\ of\ 550 + 200 \div 4 = ?$

$220 + 50 = ?$

$270 = ?$

S30. Ans.(d)

Sol. $\sqrt{1444} \times 11 + 490 = ? + 560$

$418 + 490 - 560 = ?$

$348 = ?$

S31. Ans.(b)

Sol. $\frac{90\%\ of\ 800}{9} = \sqrt[3]{?} \times 10$

$\frac{80}{10} = \sqrt[3]{?}$

$8 = \sqrt[3]{?}$

$512 = ?$

S32. Ans.(a)

Sol. $19^2 - 20\%\ of\ 190 - ? = 90$

$361 - 38 - ? = 90$

$233 = ?$

S33. Ans.(e)

Sol. $(12\%\ of\ 450) \div 9 + 3 \times ? = 1113 - 900$

$6 + 3 \times ? = 213$

$3 \times ? = 207$

$? = 69$

S34. Ans.(b)

Sol. $2 \times 9 + 110 \div 10 = ? - 65\%\ of\ 200$

$18 + 11 = ? - 130$

$159 = ?$

S35. Ans.(d)

Sol. $\frac{56}{100} \times 550 + 252 = ?^2 - \sqrt{256}$

$308 + 252 + 16 = ?^2$

$576 = ?^2$

$? = 24$

S36. Ans.(a)

Sol. $\frac{\frac{112}{100}\times 700}{?\times 7} + 343 = 175 \times 2$

$\frac{784}{?\times 7} = 350 - 343$

$\frac{784}{?\times 7} = 7$

$? = \frac{784}{49}$

$? = 16$

S37. Ans.(e)

Sol. $4 + \frac{15}{100} \times 1280 = ?^2$

$4 + 192 = ?^2$

$? = 14$

S38. Ans.(d)

Sol. $\frac{240+\frac{25}{100}\times 720+280}{70} = \sqrt[3]{?}$

$\frac{240+180+280}{70} = \sqrt[3]{?}$

$\frac{700}{70} = \sqrt[3]{?}$

$10 = \sqrt[3]{?}$

? = 1000

S39. Ans.(d)

Sol. $2^5 \div 2^2 \times 2^7 = 2^?$

$2^{(5-2)} \times 2^7 = 2$

$2^{10} = 2^?$

$? = 10$

S40. Ans.(e)

Sol. $\frac{456}{?} = 13 \times 32 - \frac{45}{100} \times 840$

$\frac{456}{?} = 416 - 378$

$\frac{456}{?} = 38$

$? = 12$

S41. Ans.(a)

Sol. $\sqrt{831 - \sqrt{2209}} = \sqrt{?} + \sqrt{529}$

$\sqrt{784} = \sqrt{?} + 23$

$? = 25$

S42. Ans.(d)

Sol. $\frac{30}{100} \times 180 + (17)^2 = \frac{?}{100} \times 8575$

$54 + 289 = \frac{?}{100} \times 8575$

$343 \times \frac{100}{8575} = ?$

$? = 4$

S43. Ans.(a)

Sol. $(32)^2 = (?)^3 - (15)^2 + \frac{16}{100} \times 1600 + \frac{13}{100} \times 5000$

$1024 = ?^3 - 225 + 256 + 650$

$?^3 = 343$

$? = 7$

S44. Ans.(b)

Sol. $52 \times 18 - \sqrt{2304} = (30)^? - \frac{5}{100} \times 240$

$936 - 48 + 12 = (30)^?$

$900 = (30)^?$

$? = 2$

S45. Ans.(a)

Sol. 18% of 600 + 13% of 500 – 20% of 20 = $?^2$

$108+65 - 4 = ?^2$

$169 = ?^2$

$13 = ?$

S46. Ans.(a)

Sol. $\frac{56}{100} \times 450 + \frac{60}{100} \times 290 + \frac{420}{3} = ?$

$252 + 174 + 140 = ?$

$? = 566$

S47. Ans.(d)

Sol. $\sqrt{(38 \div 2 + 53 + 56 \div 2)} = ?$

$\sqrt{(19 + 53 + 28} = ?$

$? = \sqrt{100}$

$? = 10$

S48. Ans.(e)

Sol. $\frac{1}{6} \times \frac{?}{4} of \frac{48}{24} \times ? = 10$

$?^2 = 10 \times 12$

$? = 11$

S49. Ans.(c)

Sol. $\frac{420}{10} \times 44 - \frac{456}{8} \times 10 = ?$

$1848 - 570 = ?$

$? = 1278$

S50. Ans.(a)

Sol. $(625 - 256) \times \frac{1}{20} + ? = 100$

$18.45 + ? = 100$

$? = 81.55 \approx 82$