



# SBI Clerk 2022 Approximation Ques. (Solutions PDF)

### Solutions

1. Ans. B.

As per the **BODMAS** rule, the priority in which the operations should be done is:

Priority wise operations	Symbol
B-Bracket	()
O-Of	Of
D-Division	/, ÷
M-Multiplication	*, ×
A-Addition	+
S-Subtraction	-

**Note:** Addition and subtraction can be treated on same priority (from left to right) when they are in consecutive order.

$$(10.097)^2 + (3.98)^3 \times 5.05 = 20.95 \times ?$$

Approximating the value to the nearest integer:

$$10^2 + 4^3 \times 5 = 21(?)$$

$$100 + 64 \times 5 = 21(?)$$

$$100 + 320 = 21(?)$$

$$420 = 21(?)$$

$$\frac{420}{21}$$

$$? = 21$$

$$? = 20$$

2. Ans. E.

As per the **BODMAS** rule, the priority in which the operations should be done is:

Priority wise operations	Symbol
B-Bracket	()
O-Of	Of
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S-Subtraction	-

**Note:** Addition and subtraction can be treated on same priority (from left to right) when they are in consecutive order.

$$19.98\% \text{ of } \sqrt{99.91} + \sqrt[4]{1295.92} \times \sqrt[4]{80.89} = ?$$

Approximating the value to the nearest integer:

$$20\% \times \sqrt{100} + \sqrt[4]{1296} \times \sqrt[4]{81} = ?$$

$$\frac{20}{100}$$

$$100 \times 10 + 6 \times 3 = ?$$

$$2 + 18 = ?$$

$$? = 20$$

3. Ans. A.

Substituting (?) with "x"

Approximating the values to the nearest integer

$$\sqrt{1521} \div 26 \times 18 = x - 517$$

$$39 \times \frac{18}{26} = x - 517$$

$$27 = x - 517$$

$$27 + 517 = x$$

$$x = 544$$

4. Ans. A.

$$245 \times \frac{40}{100} \times 128 - 3544 + 155$$

$$12544 - 3544 + 155$$

$$9155$$

5. Ans. D.

$$200 \times 126 \div 14 + 178 - 295$$

$$200 \times 9 + 178 - 295$$

$$1800 + 178 - 295$$

$$1683$$

6. Ans. B.

Substituting (?) with "x"

$$\sqrt{8836} \times \sqrt{961} \div 47 + x = 468$$

$$94 \times 31 \div 47 + x = 468$$

$$94 \times 31 \times \frac{1}{47} + x = 468$$

$$62 + x = 468$$

$$x = 468 - 62$$

$$x = 406$$

7. Ans. E.

Substituting (?) with "x"

$$7777 \div \sqrt{5929} \times \sqrt{49} = x + 414$$

$$7777 \div 77 \times 7 = x + 414$$

$$7777 \times \frac{1}{77} \times 7 = x + 414$$

$$707 = x + 414$$

$$x = 707 - 414$$

$$x = 293$$

8. Ans. C.

$$\frac{39}{4} \times 184 + (\sqrt{1296} \div 4)$$

$$39 \times 46 + 36 \div 4$$

$$1794 + 9$$

$$1803$$

9. Ans. E.

$$2.003^3 + 14.99 \times 98.99 \div 10.95$$

$$2^3 + 15 \times 99 \div 11$$

$$8 + 15 \times 9$$

$$8 + 135$$

$$143$$



10. Ans. B.

As per the **BODMAS** rule, the priority in which the operations should be done is:

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S-Subtraction	-

**Note:** Addition and subtraction can be treated on same priority (from left to right) when they are in consecutive order.

$$(1050.02 \div 34.98 + 187 \times 20.02) \div 12.95 = ?$$

Approximating the value to the nearest integer:

$$(1050 \div 35 + 187 \times 20) \div 13 = ?$$

$$(30 + 3740) \div 13 = ?$$

$$\underline{3770}$$

$$13 = ?$$

$$? = 290$$

11. Ans. B.

As per the **BODMAS** rule, the priority in which the operations should be done is:

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S-Subtraction	-

**Note:** Addition and subtraction can be treated on same priority (from left to right) when they are in consecutive order.

$$(20.015 \times 12.025 + 4.984 \times 8.021 \div 3.987) \div 24.955 = ?$$

Approximating the value to the nearest integer:

$$(20 \times 12 + 5 \times 8 \div 4) \div 25 = ?$$

$$(240 + 5 \times 2) \div 25 = ?$$

$$(240 + 10) \div 25 = ?$$

$$\underline{250}$$

$$? = 25$$

$$? = 10$$

12. Ans. C.

Substituting (?) with "x"

$$\underline{45}$$

$$40 \times 5 = x + 43$$

$$40 \times 9 = x + 43$$

$$360 = x + 43$$

$$360 - 43 = x$$

$$317$$

13. Ans. E.

$$? = \sqrt{5929 + (1563 - 254)} \times (1/7)$$

$$? = \sqrt{5929 + 1309} \times (1/7)$$

$$? = 77 + 187$$

$$? = 264$$

14. Ans. A.

$$(6.98)^2 \times (15.02)^2 = (14.97 + 6.024) \times ?$$

$$7^2 \times 15^2 = (15 + 6) \times ?$$

$$49 \times 225 = 21 \times ?$$

$$? = (49 \times 225) / 21$$

$$? = 7 \times 75$$

$$? = 525$$

15. Ans. B.

Substituting (?) with "x"

$$x = 18\% \times 325 - 24\% \times 200$$

$$x = \frac{18}{100} \times 325 - \frac{24}{100} \times 200$$

$$x = 58.5 - 48$$

$$x = 10.5$$

16. Ans. B.

Substituting (?) with "x"

$$21 - 6 + 13 = (3.5 + x) \times 2$$

$$28 = (3.5 + x) \times 2$$

$$\underline{28}$$

$$2 = 3.5 + x$$

$$14 = 3.5 + x$$

$$14 - 3.5 = x$$

$$x = 10.5$$

17. Ans. B.

Substituting (?) with "x"

$$12\% \times 850 + 1500\% \times 26 = 4 \times x$$

$$\underline{12} \quad \underline{1500}$$

$$100 \times 850 + 100 \times 26 = 4x$$

$$102 + 390 = 4x$$

$$492 = 4x$$

$$\underline{492}$$

$$x = 4$$

$$x = 123$$

18. Ans. B.

Approximating the values to the nearest integer

$$(12172 + 1285 + 2471) - (3742 + 2525 + 527)$$

$$15928 - 6794$$

$$9134$$

19. Ans. D.

Approximating the values to the nearest integer

$$[5^2 + 3^2] \div [6^2 - 23]$$

$$(25 + 27) \div (36 - 23)$$

$$52 \div 13$$

$$4$$

20. Ans. B.

Approximating the values to the nearest integer

$$(\sqrt{289 + (7)^2}) \div 11$$



$$(17+49) \div 11$$

$$66 \div 11$$

$$6$$

21. Ans. B.

$$(2399+451-325) \div \sqrt{625} \times 225$$

$$2525 \div 25 \times 225$$

$$101 \times 225$$

$$22725$$

22. Ans. D.

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$$25.05\% \text{ of } 2843.94 + 14.984\% \times 2399.987 = ?$$

Approximating the value to the nearest integer:

$$25\% \times 2844 + 15\% \times 2400 = ?$$

$$\frac{25}{100} \times 2844 + \frac{15}{100} \times 2400 = ?$$

$$711 + 360 = ?$$

$$? = 1071$$

23. Ans. A.

As per the **BODMAS** rule, the priority in which the operations should be done is:

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**Note:** Addition and subtraction can be treated on same priority (from left to right) when they are in consecutive order.

$$49.984\% \text{ of } 5085.875 - 3 \div 7 \text{ of } 902.897 = ?$$

Approximating the value to the nearest integer:

$$50\% \times 5086 - 3 \div 7 \times 903 = ?$$

$$\frac{50}{100} \times 5086 - \frac{3}{7} \times 903 = ?$$

$$2543 - 387 = ?$$

$$? = 2156$$

24. Ans. B.

$$x = 15\% \times 5840 + 9450 \div 150 + 453$$

$$\frac{15}{100} \times 5840 + \frac{9450}{150} + 453$$

$$x = 100 \times 5840 + 150 + 453$$

$$x = 876 + 63 + 453$$

$$x = 1392$$

25. Ans. B.

Approximating the values to the nearest integer

$$25\% \times 592 + 15\% \times 860$$

$$\frac{25}{100} \times 592 + \frac{15}{100} \times 860$$

$$100 \times 592 + 100 \times 860$$

$$\frac{1}{4} \times 592 + \frac{3}{20} \times 860$$

$$148 + 3 \times 43$$

$$148 + 129$$

$$277$$

26. Ans. C.

Approximating the values to the nearest integer

$$(14 \div 10 \times 15 \div 3) + 12 \times 15$$

$$\frac{14}{10} \times \frac{15}{3} + 180$$

$$7 + 180$$

$$187$$

27. Ans. C.

$$(25\% \times \sqrt{1600}) \times \sqrt{169} + 75\% \times 1432$$

$$\frac{25}{100} \times 40 \times 13 + \frac{75}{100} \times 1432$$

$$(100 \times 40) \times 13 + 100 \times 1432$$

$$10 \times 13 + 1074$$

$$130 + 1074$$

$$1204$$

28. Ans. D.

Substituting (?) with "x"

$$\sqrt{9025} \times \sqrt{81} \div 15 + x = 19868$$

$$95 \times 9 \div 15 + x = 19868$$

$$\frac{1}{15} \times 855 + x = 19868$$

$$57 + x = 19868$$

$$x = 19868 - 57$$

$$x = 19811$$

29. Ans. D.

Substituting (?) with "x"

$$(3895 - 1993 - 1900) \times 350 \times x = 31000 + 500$$

$$2 \times 350 \times x = 31500$$

$$700 \times x = 31500$$

$$\frac{31500}{700}$$

$$x = 45$$

$$x = 45$$



30. Ans. C.

Substituting (?) with "x"

$$\frac{680 \cdot 19}{17} = x - 15^2$$

$$760 = x - 225$$

$$x = 760 + 225$$

$$x = 985$$

31. Ans. A.

Approximating the values to the nearest integer

$$[785 + 55 \times (86 - 54)] \div 5$$

$$[785 + 55 \times (32)] \div 5$$

$$(785 + 1760) \div 5$$

$$2545 \div 5$$

$$509$$

32. Ans. E.

Substituting (?) with "x"

$$12121 - 1212 + 121 + 21 = x + 212$$

$$11051 = x + 212$$

$$11051 - 212 = x$$

$$x = 10839$$

33. Ans. B.

$$2544 \div 424 \times \sqrt{144} + 4521 \div 3$$

$$2544 \times \frac{1}{424} \times \sqrt{144} + 4521 \div 3$$

$$2544 \times \frac{1}{424} \times 12 + \frac{4521}{3}$$

$$72 + 1507$$

$$1579$$

34. Ans. D.

$$\begin{array}{r} 777.777 \\ 7.007 \\ 0.777 \\ + 1.7 \\ \hline \end{array}$$

$$7.007$$

$$0.777$$

$$+ 1.7$$

$$\hline$$

$$787.261$$

$$\hline$$

Hence, ?  $\approx$  787

35. Ans. E.

$$(34.995)^2 \times 25.0021 \div 174.798 = ?$$

$$(35)^2 \times 25 \div 175 = ?$$

$$1225 \times 25 \div 175 = ?$$

$$30625 \div 175 = ?$$

$$? = 175$$

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