



**Jayakrishnan  
EduTips**

# LATEST PATTERN QUANTITATIVE APTITUDE



## HIGHLIGHTS

- .Extensive MCQs with Detailed Solutions
- .Precisely Aligned with the Latest Banking Exam Pattern
- .Time-Saving Techniques (TST) for Faster and Accurate Problem-Solving

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## Dear Aspirant,

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Usually students do not know how to start and what to study. To crack any exam, a smart aspirant must know that the previous year exam papers can give the glimpse of the pattern of exam. Besides this targeted preparation under expert guidance coupled with unmatched study material makes the task much easier.

We help you to gain knowledge, simultaneously it also inculcates positive attitude, self-belief and high level of confidence, which is essentially required to qualify in any competitive examinations. We provide a student centric learning environment to simulate intellectual development; encourage analytical thinking that develops competitive ability.

Our goal is to enhance student's achievements by improving their knowledge base & exam taking skills. At the same time you must inculcate positive thought within and always bear in mind that only your own resolution to achieve success is more important than any other one thing.

Students are today enlightened and focused. They know what they are up to. They need just a ray of guidance. I feel I have accomplished the reason of my existence on this earth. Proud to be that faint ray of guidance, proud to be a reason of smile on certain lips, proud to be your teacher, friend and guide.

**Jayakrishnan Ramachandran**

*Latest Pattern*  
**QUANTITATIVE  
APTITUDE**



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# **SIMPLIFICATION & APPROXIMATION**

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

1.  $105.27\% \text{ of } 1200.11 + 11.80\% \text{ of } 2360.85 = 21.99\% \text{ of } ? + 1420.99$   
 (1) 500 (2) 240  
 (3) 310 (4) 550  
 (5) 960
2.  $0.98\% \text{ of } 7824 + 4842 / 119.46 - ? = 78$   
 (1) 30 (2) 60  
 (3) 40 (4) 50  
 (5) 70
3.  $(41.99^2 - 18.04^2) / ? = (13.11)^2 - 138.99$   
 (1) 48 (2) 12  
 (3) 72 (4) 84  
 (5) 128
4.  $(24.96)^2 / (34.11 / 20.05) + 67.96 - 89.11 = ?$   
 (1) 884 (2) 347  
 (3) 252 (4) 454  
 (5) 366
5.  $\sqrt{(2025.11)} \times \sqrt{(256.04)} + \sqrt{(399.95)} \times \sqrt{?} = 33.98 \times 40.11$   
 (1) 1682 (2) 1024  
 (3) 1582 (4) 678  
 (5) 1884

**Directions (6-10):** What will come in place of question mark (?) in the following questions?

6.  $689 \times 6156 \div 18\% \text{ of } 684 = 28 \times 250 \div 8 + ? + 4300$   
 (1) 27295 (2) 29275  
 (3) 29527 (4) 29725  
 (5) 27925
7.  $\sqrt{4624} + \sqrt{?} + 12 - 43 = 137$   
 (1) 10000 (2) 9801  
 (3) 10201 (4) 10101  
 (5) 11000

8.  $189820 - 22624 + 35 \times ? - 372 \times 28 = 194440$   
 (1) 1045 (2) 1087  
 (3) 1076 (4) 1095  
 (5) 1176
9.  $39 (13/17) - 47 (18/34) + 23 (11/17) - 2 (1/34) = ?$   
 (1)  $13 (5/34)$  (2)  $11 (29/34)$   
 (3)  $29 (13/34)$  (4)  $13 (29/34)$   
 (5)  $13 (27/34)$
10.  $44\% \text{ of } 1950 + 82\% \text{ of } 250 + 62\% \text{ of } ? = 7883$   
 (1) 12566 (2) 1110  
 (3) 10000 (4) 11800  
 (5) 11000

**Directions (11-14):** What should come in place of question mark '?' in the following question?

11.  $12 \times 13 + (?)^2 = (16)^2$   
 (1) 10 (2) 1000  
 (3) 100 (4) 8  
 (5) 11
12.  $4895 + 364 \times 0.75 - 49 = ?$   
 (1) 4520 (2) 5119  
 (3) 2114 (4) 4128  
 (5) 5445
13.  $? \text{ of } \frac{7}{8} \text{ of } \frac{1}{3} \text{ of } \frac{2}{7} = 12$   
 (1) 108 (2) 144  
 (3) 132 (4) 136  
 (5) None of these
14.  $14\% \text{ of } 250 \times ?\% \text{ of } 150 = 840$   
 (1) 64 (2) 48  
 (3) 32 (4) 16  
 (5) None of these
15. What approximate value should come in place the question mark (?) in the following question? (Note: You are not expected to calculate the exact value)  
 $\sqrt{2228} = ?$   
 (1) 57 (2) 47

- (3) 67 (4) 37  
(5) 27
16. What should come in place of question mark '?' in the following question?  
 $6642 - 1852 - 2864 = ?$   
 (1) 1926 (2) 1966  
 (3) 2926 (4) 2966  
 (5) None of these

**Directions (17-21):** What value will come in place of question mark (?) in the given question?

17.  $27\% \text{ of } 5/8 \text{ of } 1/9 \text{ of } 125440 = 565/15 \times 1215/45 + X$   
 (1) 1450 (2) 1275  
 (3) 1335 (4) 1455  
 (5) None of these
18.  $4^5 \times 4096 / 16 \times 2^8 = (4^2 / 64) \times 16^{1/2}$   
 (1) 32 (2) 15  
 (3) 64 (4) 4  
 (5) None of these
19.  $47.8\% \text{ of } 1245.26 + 32.18\% \text{ of } 2145.65 = 21.67\% \text{ of } 359.85 + X$   
 (1) 1307 (2) 1104  
 (3) 1206 (4) 1005  
 (5) None of these
20.  $123/15 + 21.25 \times 7.85 + 205/21 + 21.8 \times 19.6 = X + 21.2 \times 10.75$   
 (1) 607 (2) 502  
 (3) 395 (4) 403  
 (5) None of these
21.  $201.75 + 12.45 \times 21.22 - (215/27.6) = X - 232.65 \times 89.67$   
 (1) 22,550 (2) 21,420  
 (3) 23,330 (4) 27,480  
 (5) None of these

**Directions (22-26):** What approximation value will come in place of question mark (?) in the given questions? (You are not expected to calculate the exact value.)

22.  $105.27\% \text{ of } 1200.11 + 11.80\% \text{ of } 2360.85 = 21.99\% \text{ of } ? + 1420.99$   
 (1) 500 (2) 240  
 (3) 310 (4) 550  
 (5) 960
23.  $0.98\% \text{ of } 7824 + 4842 / 119.46 - ? = 78$   
 (1) 30 (2) 60

- (3) 40 (4) 50  
(5) 70
24.  $(41.99^2 - 18.04^2) / ? = (13.11)^2 - 138.99$   
 (1) 48 (2) 12  
 (3) 72 (4) 84  
 (5) 128
25.  $(24.96)^2 / (34.11 / 20.05) + 67.96 - 89.11 = ?$   
 (1) 884 (2) 346  
 (3) 252 (4) 424  
 (5) 366
26.  $\sqrt{(2025.11)} \times \sqrt{(256.04)} + \sqrt{(399.95)} \times \sqrt{?} = 33.98 \times 40.11$   
 (1) 1682 (2) 1024  
 (3) 1582 (4) 678  
 (5) 1884

**Directions (27-31):** What should come in place of the question mark (?) in the following questions?

27.  $200.1 \times 9.9 - 25 \times 62.5 + 12 \times 144 = ? - 26.49$   
 (1) 1627.98 (2) 1842.28  
 (3) 1958.8 (4) 1972.88  
 (5) 2172.98
28.  $\sqrt{48} + \sqrt{80} + \sqrt{176} + \sqrt{324} - \sqrt{121} = ? + 7 + 4\sqrt{11}$   
 (1)  $4(\sqrt{5} + \sqrt{7})$  (2)  $6(\sqrt{3} + \sqrt{5})$   
 (3)  $4(\sqrt{3} + \sqrt{5})$  (4)  $3(\sqrt{5} + \sqrt{7})$   
 (5)  $9(\sqrt{2} + \sqrt{3})$
29.  $1265 \div 25.3 + 102 \times 98 - (23)^2 = ?$   
 (1) 8517 (2) 9517  
 (3) 8717 (4) 7087  
 (5) 9087
30.  $3\sqrt{12167} + 3\sqrt{21952} \% \text{ of } 280 - 3\sqrt{704969} \% \text{ of } 56 = ?$   
 (1) 41.56 (2) 51.46  
 (3) 51.66 (4) 65.56  
 (5) None of these
31.  $\{ [ 33 (17 / 25) ] \times [ 34 (22 / 27) ] \} + \{ [ 35 (28 / 52) ] \times [ 36 (37 / 57) ] \} = ?$   
 (1) 1853.78 (2) 3259.55  
 (3) 2474.94 (4) 2650.29  
 (5) 2493.13

**Direction (32-36):** What approximate value should come in place of the question mark (?) in the following questions?

32.  $\{(4444+333+22+1) - (2 \times 3 \times 4 \times 5)\} \times 2.532 = ?$   
 (1) 11850 (2) 11950  
 (3) 11749 (4) 11860

33. (5) 11532  
 $[(1.93)^2 + (2.04)^2 / (2.04 - 1.03)] \times 10 = ?$   
 (1) 59 (2) 80  
 (3) 68 (4) 76  
 (5) 69
34. 17% of 760 + 57% of 78.99 + 77.77 = ?  
 (1) 238 (2) 222  
 (3) 251 (4) 232  
 (5) 216
35.  $35.99\sqrt{?} + 32.0032\sqrt{?} = (68 / 10.998) \times (?)$   
 (1) 81 (2) 72  
 (3) 169 (4) 121  
 (5) 144
36.  $(3.92)^2 + (9.8)^2 + (8.13)^2 + (4.24)^2 = ?$   
 (1) 196 (2) 184  
 (3) 188 (4) 178  
 (5) 170

**Direction (37-41):** What approximate value should come in place of the question mark (?) in the following question (Note: You are not expected to calculate the exact value)?

37. 89.66% of 299.98 - 3.49% of 999  
 (1) 235 (2) 135  
 (3) 335 (4) 435  
 (5) 535
38.  $(78.95)^2 - (43.35)^2 = ?$   
 (1) 4400 (2) 3400  
 (3) 5400 (4) 2400  
 (5) 6400
39. 126.99% of 1539.98 + 5.5% of 149.99 + 103.98% of 7 = ?  
 (1) 1870 (2) 1970  
 (3) 2070 (4) 2170  
 (5) 2270
40.  $1002 \div 49 \times 99 - 1299 = ?$   
 (1) 700 (2) 600  
 (3) 900 (4) 250  
 (5) 400
41.  $(34.995)^2 \times 25.0021 \div 184.798 = ?$   
 (1) 85 (2) 105  
 (3) 125 (4) 145  
 (5) 165

**Direction (42-46):** What approximate value will come in place of question mark (?) in the given question? (You are not expected to calculate exact value).

42.  $16/7 \times 14\% \text{ of } 74430 - X^2 = 12.55 \times 1265 - 124 \times 1.23 + 445.55$   
 (1) 70 (2) 85  
 (3) 95 (4) 110  
 (5) None of these
43. 17.8 % of 2560.55 + 67.95% of 5430.28 = 45.89% of 2145.55 + X  
 (1) 3910 (2) 3170  
 (3) 3350 (4) 4050  
 (5) None of these
44.  $\sqrt[3]{15628 \times (201 \div 8) + 5^2} - (X)^2 = 122.5 - (21560/25) - 9.5$   
 (1) 41 (2) 37  
 (3) 45 (4) 49  
 (5) None of these
45.  $(2123.65/1.75) \times 39.65 = 2154.26 - 124.75 + 15.365 \times 236.56 + X$   
 (1) 35,800 (2) 39900  
 (3) 35100 (4) 36900  
 (5) None of these
46.  $71.71\% \text{ of } 9459.66 + (323.96)^{1/2} - 21.59 = X + (2156 / 21.95) - 12.55$   
 (1) 6900 (2) 6725  
 (3) 6790 (4) 6810  
 (5) None of these
47.  $450.64 + 1288.52 + 638.12 - 352.28 = (?)^2$   
 (1) 40 (2) 45  
 (3)  $\sqrt{45}$  (4) 25  
 (5) 35
48.  $1\frac{2}{7} + 9\frac{6}{35} - 8\frac{3}{7} = (?)$   
 (1)  $1\frac{3}{7}$  (2)  $1\frac{2}{24}$   
 (3)  $2\frac{5}{7}$  (4)  $1\frac{2}{7}$   
 (5)  $2\frac{1}{35}$
49.  $7890.6 + 46550.54 + 452.54 + 885.46 = ? + 5779.14$   
 (1) 5000 (2) 55000  
 (3) 50000 (4) 57500  
 (5) 45700
50.  $(\sqrt{648} \div 32) \times (\sqrt{225} \div 45) = ? \div 48$   
 (1) 3 (2) 9  
 (3) 12 (4) 18  
 (5) 16
51. 90% of 320 + 58% of 4200 = ?% of 7200  
 (1) 227/6 (2) 224/6  
 (3) 223/6 (4) 221/6  
 (5) 241/6

**Direction (52-61):** Find out the approximate value of the following questions.

52.  $498.02/100.42 + 349.91 + 427.32, 126/(0.5 \times 2) = ?$   
 (1) 695 (2) 656  
 (3) 625 (4) 720  
 (5) 825
53.  $19.8/24.97$  of  $(5640/19.2)$   
 $52 + 14/20 \times 4364.66 = ?$   
 (1) 3205 (2) 3265  
 (3) 3230 (4) 3150  
 (5) 3500
54.  $3.2\%$  of  $784 + 15.8\%$  of  $2145 = ?$   
 (1) 420 (2) 175  
 (3) 205 (4) 364  
 (5) 500
55.  $(40\% \text{ of } 1602) \times 150 / (15\% \text{ of } 4005) + 62.31 = ?$   
 (1) 125 (2) 144  
 (3) 324 (4) 196  
 (5) 222
56.  $\sqrt{784.002} + 4.2222 = ? / (1/4.885)$   
 (1) 15 (2) 13  
 (3) 25 (4) 7  
 (5) 30
57.  $\sqrt{2196.27}/1.3 + \sqrt{785} / 348 = ?$   
 (1) 36 (2) 20  
 (3) 14 (4) 45  
 (5) 58
58.  $[(2^2 + 6.2^2)/(2.01 + 16/2)] = ?$   
 (1) 4 (2) 8  
 (3) 12 (4) 96  
 (5) 75
59.  $1368.002/65 + 57.5\% \text{ of } 357.99 + 67.9 = ?^2$   
 (1) 17 (2) 27  
 (3) 9 (4) 45  
 (5) 72
60.  $(676877 + 90898 - 88778) / 677 = ?$   
 (1) 50 (2) 300  
 (3) 150 (4) 1003  
 (5) 250
61.  $\sqrt{6498} \times \sqrt{639} / \sqrt{153} = ?$   
 (1) 204 (2) 94  
 (3) 174 (4) 165  
 (5) 154

**Directions (62-66):** What value should come in the place of question mark in the given questions?

62.  $752/\sqrt{8836} \times ? = 1458 \times 4$

- (1) 678 (2) 729  
 (3) 786 (4) 567  
 (5) None of these
63.  $152 - 72 - \sqrt{576} + 30 = ?$   
 (1) 86 (2) 76  
 (3) 46 (4) 40  
 (5) None of these
64.  $\sqrt{(19 + \sqrt{(24 + \sqrt{(132 + \sqrt{144}))})}) = ?$   
 (1) 15 (2) 10  
 (3) 5 (4) 2.5  
 (5) None of these
65.  $\sqrt{(3570 - 1240 - 1450 - 684)} \times \sqrt{11025} = ?$   
 (1) 1470 (2) 1500  
 (3) 1250 (4) 1750  
 (5) None of these
66.  $466.66 + 198.66 + 76 + 0.66 + 0.06 = ?$   
 (1) 715.04 (2) 725.04  
 (3) 742.04 (4) 750.04  
 (5) None of these

**Directions (67-76):** What value should come in the place of question mark in the given questions?

67.  $2\frac{2}{5}$  of  $5\frac{5}{12} + 5\frac{4}{13} \times 2\frac{6}{23} = ?$   
 (1) 32 (2) 35  
 (3) 20 (4) 25  
 (5) None of these
68.  $\sqrt{(27\% \text{ of } 400 + 78\% \text{ of } 300/2)} = ?$   
 (1) 20 (2) 10  
 (3) 12 (4) 15  
 (5) None of these
69.  $? \% \text{ of } 300 + 15\% \text{ of } 1320 = ?/7 \text{ of } 63 - 3/17 \text{ of } 578$   
 (1) 50 (2) 40  
 (3) 45 (4) 80  
 (5) None of these
70.  $\sqrt{2304} + \sqrt{1089} = ?^2$   
 (1) 9 (2) 7  
 (3) 15 (4) 81  
 (5) None of these
71.  $33500/50 + 76865/5 + 7660/20 = ?$   
 (1) 10250 (2) 16426  
 (3) 10423 (4) 9923  
 (5) None of these
72.  $67\% \text{ of } 200 + 45\% \text{ of } 310 - 30\% \text{ of } 175 = ?$   
 (1) 250 (2) 221  
 (3) 225.5 (4) 242.5  
 (5) None of these
73.  $? \text{ of } 3/7 - 21\% \text{ of } 500 = 315$

- (1) 750 (2) 980  
(3) 1050 (4) 500  
(5) None of these
74.  $9/19$  of  $95/343$  of  $686 = ?$   
(1) 65 (2) 90  
(3) 85 (4) 125  
(5) None of these
75.  $234.46 + 545.43 + 453.11 - 545 = ?$   
(1) 325 (2) 317  
(3) 295 (4) 688  
(5) None of these
76.  $\sqrt{?} - 141/3 \times 13 + 11\%$  of  $5000 = 1/6$  of  $114$   
(1) 6400 (2) 80  
(3) 4900 (4) 75  
(5) None of these

**Direction (77-81)** Find the approximate value of the following questions.

77.  $20.05\%$  of  $2855.01 + 14.95\% \times 2400 = ?$   
(1) 1110 (2) 931  
(3) 990 (4) 1055  
(5) 1125
78.  $1080.22/36 + 187 \times 19.95 = ?$   
(1) 3650 (2) 3770  
(3) 3825 (4) 3800  
(5) 3700
79.  $125\%$  of  $4875 + 87.99 \times 15.01 = ?$   
(1) 7395 (2) 7490  
(3) 7510 (4) 7375  
(5) 7414
80.  $39.15 \times 15.05 - 28.01 \times 10.05 = (36 + ?) \times 5$   
(1) 22 (2) 29  
(3) 34 (4) 32  
(5) 25
81.  $157.98 \times 4.06 + 20.12\%$  of  $849.86 + ? = 950.23$   
(1) 350 (2) 480  
(3) 280 (4) 148  
(5) 198

**Directions (82-86):** What value should come in the place of question mark in the given questions?

82.  $12\%$  of  $960 + 60\%$  of  $135 + 24\%$  of  $20 = x$   
(1) 190 (2) 195  
(3) 198 (4) 201  
(5) 205
83.  $x\%$  of  $180/36 + 14\%$  of  $1250 = 2/7$  of  $315$   
(1) - 1600 (2) - 1700

- (3) - 1800 (4) - 1750  
(5) - 1850
84.  $841/58 \times 2 + 256 \sqrt{x} = 2164/4$   
(1) 4 (2) 9  
(3) 16 (4) 25  
(5) 36
85.  $136 \times 12 - 8\%$  of  $400 = x^2$   
(1) 36 (2) 38  
(3) 32 (4) 29  
(5) 40
86.  $\sqrt{289} \times 4/34$  of  $26 + 1024 \times 5/4 = x$   
(1) 1261 (2) 1332  
(3) 1164 (4) 1020  
(5) 1380

**Directions (87-91)** What should come in place of question mark (?) in the questions given below? (you are not expected to get exact values).

87.  $3454.008 + 454.89 \times 24.95 = ?$   
(1) 11735 (2) 19050  
(3) 18690 (4) 16980  
(5) 14803
88.  $4454.98 / 454.99 \times 1.006 = ?$   
(1) 21 (2) 33  
(3) 32 (4) 10  
(5) 28
89.  $60.01\%$  of  $7084.991 - 4/11$  of  $1077.97 = ?$   
(1) 2215 (2) 2315  
(3) 3860 (4) 3157  
(5) 3351
90.  $231 + 15.009 \times 28.001 + 40.01 = ?$   
(1) 652 (2) 718  
(3) 661 (4) 753  
(5) 691
91.  $25.01\%$  of  $\sqrt{(2303.998)} + \sqrt{48.45} \times \sqrt{63.57} = ?$   
(1) 28 (2) 68  
(3) 35 (4) 24  
(5) 19

**Direction (92-96):** Find the approximate value of the following questions.

92.  $(4239.75/39.91) + (645.05/25.13) + (400.12/39.99) = ?$   
(1) 142 (2) 151  
(3) 132 (4) 160  
(5) 125
93.  $(15.95 \times 81.05) / (9.15 \times 26.97 \times 31.85) = ?$

- (1)  $\frac{2}{3}$  (2)  $\frac{1}{6}$   
 (3)  $\frac{4}{5}$  (4)  $\frac{1}{9}$   
 (5)  $\frac{7}{3}$
94.  $90.17 + 279.8 / 3.97 - 145.23 = \sqrt{?}$   
 (1) 225 (2) 125  
 (3) 625 (4) 275  
 (5) 400
95.  $79.85\% \text{ of } 179.87 + 44.83\% \text{ of } 29.91 = ?$   
 (1) 195 (2) 142  
 (3) 165 (4) 158  
 (5) 110
96.  $23.93\% \text{ of } 739.92 + ? = (124.83\% \text{ of } 12.12)^2$   
 (1) 75 (2) 59  
 (3) 22 (4) 47  
 (5) 32

**Direction (97-106):** Find the value of the following questions.

97.  $\sqrt{1849} + \sqrt{8836} - \sqrt{5776} = ?$   
 (1) 21 (2) 71  
 (3) 61 (4) 41  
 (5) None of these
98.  $15^3 \times 35^7 / 125^3$   
 (1) 111178305 (2) 1116558305  
 (3) 123178305 (4) 121278305  
 (5) None of these
99.  $572/13 \times 6 - 200 = 2^?$   
 (1) 8 (2) 6  
 (3) 12 (4) 2  
 (5) None of these
100.  $(2 \times 8)^3 / (256/4)^4 \times (16 \times 16)^4 = (2+2)^{?+4}$   
 (1) 8 (2) 6  
 (3) 13 (4) 3  
 (5) None of these
101.  $[(15.5 \times 15) / 7.5 - 625/25] = ? \times 2$   
 (1) 3 (2) 12  
 (3) 15 (4) 6  
 (5) None of these
102.  $\sqrt{23040000} / \sqrt{?} + 2 = 962$   
 (1) 36 (2) 25  
 (3) 49 (4) 16  
 (5) None of these
103.  $10 - 2882/11 + 423/3 = ? - 200$   
 (1) 56 (2) 76  
 (3) 89 (4) 96  
 (5) None of these
104.  $5319 + 250.8 + 1467.28 - 6328.68 + 1264.6 = ?$   
 (1) 2025 (2) 2016

- (3) 1950 (4) 1973  
 (5) None of these
105.  $(5 \times 3 \times 30 \times 7.5) / (6+6+6+6+6) = ?$   
 (1) 75.5 (2) 92.5  
 (3) 175.5 (4) 110.5  
 (5) None of these
106.  $? \text{ of } 420 + 372/6 + 162/3 = 2216$   
 (1) 10 (2) 5  
 (3) 15 (4) 35  
 (5) None of these

**Direction (107-111):** Find the approximate value of the following questions.

107.  $3.01\sqrt{2706} + (2.93 \times 7.01) - ? = 60.98$   
 (1) 107 (2) 127  
 (3) 116 (4) 95  
 (5) 155
108.  $0.2\% \text{ of } 360.97 \times 0.8\% \text{ of } 778.961 = ?$   
 (1) 4.5 (2) 2  
 (3) 7.5 (4) 12.5  
 (5) 9
109.  $3333.333 + 3.003 + 0.333 + 1.3 = ?$   
 (1) 3338 (2) 3360  
 (3) 3375 (4) 2395  
 (5) 150
110.  $(\sqrt{4361.987} + \sqrt{325.97}) \times 20.012 = ? \times 210.35$   
 (1) 3 (2) 20  
 (3) 12 (4) 8  
 (5) 15
111.  $(2913.99 \div 30.91) / (1.99 \div 2.91) \times 510.01 \div 169.99 = ?$   
 (1) 508 (2) 328  
 (3) 125 (4) 188  
 (5) 107

**Direction (112-116):** Find the approximate value of the following questions.

112.  $2.98^2 \times 55.92^2 / 29.99 = ?$   
 (1) 515 (2) 640  
 (3) 1059 (4) 875  
 (5) 940
113.  $401.33\% \text{ of } 455.86 + 598\% \text{ of } 599 = ? - 245.51$   
 (1) 5600 (2) 5665  
 (3) 6500 (4) 7200  
 (5) 6150
114.  $(231.95 \text{ of } 14.96 / 29.35 \text{ of } 48.03) / (152.8 / 16.9) = ?$

- (1) 0.3 (2) 1  
(3) 0 (4) 5  
(5) 7.5
115.  $5.876\%$  of 240 +  $1.83\%$  of 480 = ?  
(1) 39 (2) 30  
(3) 24 (4) 21  
(5) 9
116.  $(27.94 \times 5.05 + 15 \times 6.05) / (7^2 + \sqrt{256.4} + 13) = ?$   
(1) 0 (2) 12  
(3) 5 (4) 3  
(5) 18

**Directions (117-121):** Find the exact value of the following questions.

117.  $(3/11) \times 297 - (204/12) + 231 = ? - 354$   
(1) 235 (2) 649  
(3) 276 (4) 125  
(5) 784
118.  $12.2 \times 5 + 2.5 - 24.1 = ? + 17.4$   
(1) 25 (2) 24  
(3) 13 (4) 22  
(5) 52
119.  $(3/11) \times (1/3) \times (5/7) \times (42 \times 1331) = ?$   
(1) 4630 (2) 3853  
(3) 4660 (4) 3630  
(5) 2360
120.  $24 \times 3^4 - (1/? ) \times 8870 + (4200/70) = 230$   
(1) 4 (2) 1  
(3) 3 (4) 8  
(5) 5
121.  $440\%$  of 3240 -  $112\%$  of 6700 + 241 = ?  
(1) 2460 (2) 6993  
(3) 6624 (4) 7924  
(5) 8923

**Directions (122-131):** Find the approximate value of the following questions.

122.  $(3/5) \times 110 + (5/9) \times 567.345721 = ? / 3.82$   
(1) 2357 (2) 2351  
(3) 2457 (4) 5724  
(5) 1524
123.  $456.23 + 35.8932 \times 67.239 - 72.8976 = ?$   
(1) 2659 (2) 2795  
(3) 2975 (4) 2597  
(5) 2245
124.  $(7684 + 5454 + 8610) \div (602 + 296 + 552) + (453 + 987) = ?$

- (1) 1435 (2) 1425  
(3) 1455 (4) 1465  
(5) 1495
125.  $5457.01 + 4643.01 + 13131.01 - 3532.01 = ? - 4674.01$   
(1) 23633 (2) 23265  
(3) 22595 (4) 22590  
(5) 24373
126.  $(152.05)^{0.7} \times (38 \times 4)^{1.3} = (19.01 \times 8.02)^?$   
(1) 5 (2) 1  
(3) 6 (4) 9  
(5) 2
127.  $174.9 \times 27.785 + 28.02 \times 274.87 = ?$   
(1) 35220 (2) 35120  
(3) 34640 (4) 12600  
(5) 23560
128.  $62.236 + 2135.236 - 52.367 / 3.562 - 723.62 = ?$   
(1) 1653 (2) 2362  
(3) 1460 (4) 1362  
(5) 1633
129.  $51.32\%$  of  $62.23\%$  of  $10\%$  of 300001 = ?  
(1) 9247 (2) 2743  
(3) 7248 (4) 9486  
(5) 8324
130.  $7.4 + 35.6 + 46.2 - 13.7 + 64.2 - 24.13 = ? - 35.3$   
(1) 542 (2) 325  
(3) 150 (4) 634  
(5) 732
131.  $25.2\%$  of 2532 +  $241.2\%$  of 520 = ?  
(1) 1633 (2) 1881  
(3) 1623 (4) 1365  
(5) 1363

**Directions (132-138):** What value should come in the place of question mark in the given questions?

132.  $2/7$  of  $5/6$  of  $3/8$  of ? = 790  
(1) 8848 (2) 8448  
(3) 8748 (4) 8248  
(5) None of these
133.  $(140\% \text{ of } 550) + (12.5\% \text{ of } 400) + (33.33\% \text{ of } 306) = ?$   
(1) 780 (2) 922  
(3) 824 (4) 775  
(5) None of these
134.  $\sqrt{5929} + \sqrt{3364} + \sqrt{4761} = ?$   
(1) 204 (2) 224  
(3) 254 (4) 234  
(5) None of these
135.  $? / 10$  of  $\sqrt{676} = 130 / ?$  of  $\sqrt{64}$

- (1) 30 (2) 20  
(3) 18 (4) 40  
(5) None of these
136.  $(762 \div 3) \times (120\% \times 80) + 2116 = ?$   
(1) 24500 (2) 26500  
(3) 23800 (4) 27850  
(5) None of these
137.  $4898 - 6234 + 5325 - 1294 = ?$   
(1) 2595 (2) 2495  
(3) 2965 (4) 2695  
(5) None of these
138.  $(20\% \times 280) + (\sqrt{729} \times 9) + 123 = ?$   
(1) 332 (2) 542  
(3) 324 (4) 422  
(5) None of these

**Directions (139-143):** What approximate value should come in the place of question mark in the given questions?

139.  $32.123 \times 41.98 \times 23.9 = ?$   
(1) 32256 (2) 39623  
(3) 32983 (4) 38526  
(5) 31256
140.  $(9/3) + (5/27) + (3/243) + (7/9) = ?$   
(1) 2 (2) 5  
(3) 4 (4) 1  
(5) 7
141.  $353.02 \times 1.93 - 242.34 + (565/5) + 130.923 = ?$   
(1) 729 (2) 753  
(3) 708 (4) 792  
(5) 630
142.  $(16.6\% \text{ of } 1296) - (10.8\% \text{ of } 898) = ?$   
(1) 149 (2) 122  
(3) 115 (4) 106  
(5) 132
143.  $34.867 - 15.975 - 8.1491 - 1.543 = ?$   
(1) 12 (2) 9  
(3) 15 (4) 18  
(5) 21

**Directions (144-153):** What approximate value should come in the place of question mark in the given questions?

144.  $19.87\% \text{ of } 498.56 + 24.65\% \text{ of } (?) = 219.89$   
(1) 120 (2) 360  
(3) 480 (4) 540  
(5) 640

145.  $3920.36 - 1824.02 - 832.34 = ? - 1225$   
(1) 2489 (2) 2470  
(3) 2525 (4) 2250  
(5) 2315
146.  $59.97\% \text{ of } 901.12 - 39.56\% \text{ of } 649.72 = ?$   
(1) 295 (2) 225  
(3) 305 (4) 280  
(5) 325
147.  $(\sqrt{(45 + \sqrt[3]{64})})\% \text{ of } 4599.74 = ?$   
(1) 450 (2) 350  
(3) 270 (4) 322  
(5) 480
148.  $33.56 + 498.456 + 199.87 + 798.56 = ?$   
(1) 1534 (2) 1682  
(3) 1476 (4) 1983  
(5) 2148
149.  $1/41.89 \text{ of } 1/89.23 \text{ of } 747600 = ?$   
(1) 120 (2) 200  
(3) 240 (4) 280  
(5) 320
150.  $7928.152 - 3059.84 - 219.726 = ?$   
(1) 4025 (2) 4590  
(3) 4648 (4) 4750  
(5) 4625
151.  $1563.72 \div 10.23 + 55.12\% \text{ of } 280.33 = ?$   
(1) 350 (2) 283  
(3) 330 (4) 310  
(5) 263
152.  $\sqrt{(21 + \sqrt{49} + \sqrt{64})} \% \text{ of } 4999 = ?$   
(1) 120 (2) 300  
(3) 450 (4) 500  
(5) 600
153.  $22.28 + 1651.987 + 1564.79 + 456.18 = ?$   
(1) 3695 (2) 3465  
(3) 3255 (4) 3495  
(5) 3525

**Directions (154-161):** What value should come in the place of question mark in the given questions?

154.  $(22\% \text{ of } 1320) - (15\% \text{ of } \times \frac{1}{2} \text{ of } 1600) = ?$   
(1) 172 (2) 185  
(3) 177.5 (4) 155  
(5) None of these
155.  $(10.25\% \text{ of } 856) - (7.25\% \text{ of } 500) = ?$   
(1) 45 (2) 52.156  
(3) 54 (4) 51.49  
(5) None of these
156.  $15.2\% \text{ of } 10500 + 16\% \text{ of } ? = 3650$

- (1) 11500.5 (2) 12025.25  
(3) 12837.5 (4) 15000  
(5) None of these
157. 250% of 32 + ? = 42.5% of 500  
(1) 125 (2) 132.5  
(3) 75 (4) 137.5  
(5) None of these
158. 27.5% of 25% of 800 + 5/6 of 660 = ? + 95  
(1) 350 (2) 510  
(3) 332 (4) 289  
(5) None of these
159. 222.44 + 11.22 + 11 + 0.11 + 0.02 = ?  
(1) 244.79 (2) 225  
(3) 265.25 (4) 249.75  
(5) None of these
160.  $15.5 \times 4 + 10.25 - 21.25 = ? + 32.25$   
(1) 18.75 (2) 22.4  
(3) 20.5 (4) 17.25  
(5) None of these
161. 52% of 360 + ? % of 400 = 550  
(1) 35.9 (2) 50.5  
(3) 90.7 (4) 40.3  
(5) None of these

**Directions (162-168):** What approximate value should come in the place of question mark in the given questions?

162.  $451.76 + 91.54 + 7186.68 + 12.95 = ?^2$   
(1) 72 (2) 88  
(3) 64 (4) 56  
(5) 80
163. 49.89% of 79.57% of 449.89 +  $\sqrt{2024} = ?$   
(1) 245 (2) 225  
(3) 280 (4) 275  
(5) 325
164. (30.125% of 4529.87) - (21.94% of 4600.29) = ? + 124.63  
(1) 196 (2) 304  
(3) 245 (4) 212  
(5) 222
165. 15.25% of 680.38 + 18.92% of 220.89 = ?  
(1) 125 (2) 144  
(3) 165 (4) 95  
(5) 205
166.  $819.91 - (21.23 \times 33.33) + ? = 239.67$   
(1) 113 (2) 175  
(3) 120 (4) 125  
(5) 90

167.  $\sqrt{530} + \sqrt[3]{730} + \sqrt{680} + \sqrt[3]{515} = ?^2$   
(1) 12 (2) 16  
(3) 8 (4) 15  
(5) 20
168.  $\sqrt{624} \% \text{ of } 478.59 + \sqrt[3]{124} \% \text{ of } 119.67 = ?$   
(1) 148 (2) 156  
(3) 184 (4) 126  
(5) 210

**Directions (169-175):** What will come in the place of question mark (?) in the given expression?

169.  $280 \div 14 \times 15 + 25^2 = ?^2 + 20\% \text{ of } 125$   
(1) 25 (2) 30  
(3) 35 (4) 40  
(5) 45
170.  $40\% \text{ of } 540 + 18^2 = ?\% \text{ of } 1200$   
(1) 25 (2) 30  
(3) 35 (4) 40  
(5) 45
171.  $34^2 - 26^2 = ?^2 - 30\% \text{ of } 320$   
(1) 12 (2) 18  
(3) 24 (4) 30  
(5) 36
172.  $(420 \div 12 \times 35 + 45^2 - 15^2) = ?^2$   
(1) 25 (2) 35  
(3) 45 (4) 55  
(5) 65
173.  $45\% \text{ of } 480 + 18^2 = ?^2 - 17^2 + 10^2$   
(1) 20 (2) 23  
(3) 27 (4) 31  
(5) 35
174.  $\sqrt{361} = ? - 14^2 - 17 \times 7$   
(1) 20 (2) 23  
(3) 27 (4) 334  
(5) 364
175. 12.5% of 240 + 200% of 27 = ?  $\times$  12  
(1) 5 (2) 6  
(3) 7 (4) 8  
(5) 9

**Direction (176-180):** What approximate value will come in place of the question mark (?) in the following question? (Note: You are not expected to calculate the exact value.)

176. 19.99% of 119.98 = ?<sup>2</sup> - 199.99% of 20  
(1) 76 (2) 41  
(3) 32 (4) 100

177.  $(34.98)^2 = ?^3 + (14.99)^2$   
 (1) 10 (2) 42  
 (3) 84 (4) 76  
 (5) 18

178.  $49.99\%$  of  $399.99 + 399.98\%$  of  $70.98 = ?^2$   
 (1) 85 (2) 22  
 (3) 216 (4) 118  
 (5) 70

179.  $75.001\%$  of  $239.98 = ?^2 - (12.001)^2$   
 (1) 86 (2) 62  
 (3) 18 (4) 44  
 (5) 110

180.  $49.98 \times 11.98 = ?^2 + 0.24 \times 95.98$   
 (1) 94 (2) 48  
 (3) 60 (4) 24  
 (5) 8

**Direction (181-184)** What will come in the place of question mark (?) in the given expression?

181.  $\sqrt{2704} \times 3 + 246 - 332 - 189 \div 9 = ?$   
 (1) 49 (2) 43  
 (3) 55 (4) 41  
 (5) 62

182.  $38^2 + 60\%$  of  $1350 - 16 \times 28 = ?$   
 (1) 1842 (2) 1956  
 (3) 1620 (4) 1806  
 (5) 1672

183.  $84^2 - 79^2 + \sqrt{1936} - 20\%$  of  $980 = ?$   
 (1) 672 (2) 696  
 (3) 648 (4) 602  
 (5) 663

184.  $\sqrt{(656 \div 16 - 552 \div 24 + 14 \times 17)} = ?$   
 (1) 22 (2) 19  
 (3) 16 (4) 21  
 (5) 18

**Directions (185-187)** What will come in the place of question mark (?) in the given expression?

185.  $? = 25\%$  of  $1300 - (30 \times 78 \div 13)$   
 (1) 110 (2) 145  
 (3) 235 (4) 175  
 (5) None of these

186.  $? = (14^2 \times \sqrt[3]{512}) - 6^3$   
 (1) 1424 (2) 1352  
 (3) 1398 (4) 1446  
 (5) None of these

187.  $? = 14/6 + 23/3 + 9/18$   
 (1) 12.5 (2) 10.5  
 (3) 14 (4) 16  
 (5) None of these

**Directions (188-190)** What approximate value will come in place of the question mark (?) in the following question? (Note: You are not expected to calculate the exact value.)

188.  $? = (40.16\%$  of  $24.95\%$  of  $1479.58) + 254.33$   
 (1) 268 (2) 312  
 (3) 354 (4) 402  
 (5) 584

189.  $? = 28.03 \times 44.81 \div 5.03 + (7.93)^{2.001}$   
 (1) 316 (2) 228  
 (3) 94 (4) 438  
 (5) 189

190.  $? = (23.12 + 36.88)\%$  of  $33.33\%$  of  $2439.78$   
 (1) 356 (2) 618  
 (3) 556 (4) 412  
 (5) 488

**Directions (191-198)** What will come in the place of question mark (?) in the given expression?

191.  $45\%$  of  $500 - 25\%$  of  $184 = ?$   
 (1) 168 (2) 172  
 (3) 196 (4) 184  
 (5) 179

192.  $(\sqrt{256} + \sqrt{576})\%$  of  $1560 = ?$   
 (1) 624 (2) 656  
 (3) 608 (4) 564  
 (5) 684

193.  $\{(168 \times 96)/144\} + 32 = ?^2$   
 (1) 9 (2) 12  
 (3) 14 (4) 16  
 (5) 18

194.  $\sqrt{1764} + 148 - 102 = ?$   
 (1) 98 (2) 64  
 (3) 76 (4) 88  
 (5) 102

195.  $(2.5)^2 + 58/4 + 9/4 = ?$   
 (1) 21.5 (2) 22  
 (3) 22.5 (4) 23  
 (5) 23.5

196.  $184 + 712 - 336 - 4^3 = ?$   
 (1) 472 (2) 484  
 (3) 496 (4) 512

197. (5) 538  
 $(12.5\% \text{ of } 1296) - 3^3 = ?$   
 (1) 135 (2) 148  
 (3) 156 (4) 121  
 (5) None of these
198.  $7/3 + 18/7 + 23/21 = ?$   
 (1) 5 (2) 6  
 (3) 5.5 (4) 7.5  
 (5) 7

**Direction (199-201)** What approximate value will come in place of the question mark (?) in the following question?

(Note: You are not expected to calculate the exact value.)

199.  $142.07 + 21.89 - (128.12 \div 7.81 - 12.09 \times 6.98) = ?$   
 (1) 376 (2) 299  
 (3) 164 (4) 232  
 (5) 101
200.  $54.97\% \text{ of } 620.08 + 16.13 \times 11.11 - 829.91 \div 5 = ?$   
 (1) 351 (2) 267  
 (3) 456 (4) 198  
 (5) 112
201.  $1025.08 + 1623.13 - 1784.91 + 2564.31 - 2897.98 = ?$   
 (1) 622 (2) 418  
 (3) 529 (4) 301  
 (5) 702

**Direction (202-204)** What will come in the place of question mark (?) in the given expression?

202.  $\sqrt{1024} + \sqrt{1764} \times 2 - \sqrt{3600} = ?$   
 (1) 42 (2) 56  
 (3) 61 (4) 48  
 (5) 33
203.  $26^2 - 19^2 = ? - 21^2$   
 (1) 823 (2) 812  
 (3) 792 (4) 708  
 (5) 756
204.  $\{336 \div 14 + 19 \times 7 - 124 - (16 \times 9 - 181)\} = ?$   
 (1) 70 (2) 80  
 (3) 60 (4) 55  
 (5) 95

**Directions (205-209)** What will come in the place of question mark (?) in the given expression?

205.  $1755 \div 27 \times 4 + 15^2 + 31.25\% \text{ of } 560 = ?$   
 (1) 620 (2) 640  
 (3) 660 (4) 680  
 (5) 700
206.  $(600 \div 24) \times 25 + 25^2 + 125\% \text{ of } 280 = ?^2$   
 (1) 25 (2) 30  
 (3) 35 (4) 40  
 (5) 45
207.  $750 \times (\sqrt{10.24}) = ?\% \text{ of } 480$   
 (1) 100 (2) 600  
 (3) 350 (4) 400  
 (5) 500
208.  $(75\% \text{ of } 1820) - 25^2 = ?^2 - 25\% \text{ of } 176$   
 (1) 12 (2) 20  
 (3) 28 (4) 36  
 (5) 45
209.  $(\sqrt{484} + 224 \div 2^3) \% \text{ of } 960 = ?\% \text{ of } 640$   
 (1) 75 (2) 100  
 (3) 125 (4) 150  
 (5) None of these

**Direction (210-212)** What will come in the place of question mark (?) in the given expression?

210.  $12\% \text{ of } 800 - 20\% \text{ of } 400 = 25\% \text{ of } ?$   
 (1) 64 (2) 72  
 (3) 80 (4) 88  
 (5) None of these
211.  $[(2160 \div 12) \div 6] \div 2 + 8^2 = ?$   
 (1) 76 (2) 79  
 (3) 82 (4) 85  
 (5) None of these
212.  $8^3 + ? - 16^2 = 7^3 + 11^2$   
 (1) 182 (2) 192  
 (3) 202 (4) 212  
 (5) None of these

**Direction (213-220)** What approximate value will come in place of the question mark (?) in the following question? (Note: You are not expected to calculate the exact value.)

213.  $(9.98\% \text{ of } 599.98) \div 14.99 = ? - 11.98\% \text{ of } 299.99$   
 (1) -14 (2) 96  
 (3) 17 (4) 73  
 (5) 40
214.  $19.98\% \text{ of } 819.99 = 24.98\% \text{ of } ?$   
 (1) 580 (2) 656  
 (3) 748 (4) 832

- (5) 964
215. What approximate value will come in place of the question mark (?) in the following question? (Note: You are not expected to calculate the exact value.)  
 $(749.98\% \text{ of } 639.897) \div 23.97 = ? - 279.98\% \text{ of } 19.99$   
 (1) 8 (2) 16  
 (3) 24 (4) 32  
 (5) 40
216. What approximate value will come in place of the question mark (?) in the following question? (Note: You are not expected to calculate the exact value.)  
 $44.98\% \text{ of } 399.98 = ? \times 19.98 - (39.98\% \text{ of } 2499.98)$   
 (1) 410 (2) 225  
 (3) 3 (4) 59  
 (5) 124
217. What will come in the place of question mark (?) in the given expression?  
 $(990 \div 18 \times 55 + 45^2 - 240\% \text{ of } 62.5) = ?^2$   
 (1) 35 (2) 55  
 (3) 70 (4) 95  
 (5) 120
218. What will come in the place of question mark (?) in the given expression?  
 $40\% \text{ of } 840 - 18^2 = \sqrt{?} - \sqrt[3]{216}$   
 (1) 144 (2) 132  
 (3) 256 (4) 324  
 (5) 460
219. What will come in the place of question mark (?) in the given expression?  
 $(\sqrt{196} + 432 \div 12)\% \text{ of } 720 = ?\% \text{ of } 900$   
 (1) 75 (2) 40  
 (3) 35 (4) 45  
 (5) 50
220. What will come in the place of question mark (?) in the given expression?  
 $(\sqrt{256} + \sqrt{1024}) \div 4 = ?\% \text{ of } 150$   
 (1) 8 (2) 15  
 (3) 24 (4) 32  
 (5) 48

**Direction (221-223)** What approximate value will come in place of the question mark (?) in the following question? (Note: You are not expected to calculate the exact value.)

221.  $?\% \text{ of } 599.99 = 40.01\% \text{ of } 499.99 + 199.98\% \text{ of } 49.99$   
 (1) 15 (2) 50

- (3) 125 (4) 230  
 (5) 1
222.  $(500.01\% \text{ of } 24.89) \div 24.98 = \sqrt{?} - \sqrt{63.98}$   
 (1) 64 (2) 100  
 (3) 169 (4) 256  
 (5) 361
223.  $(19.99)^2 + 24.98\% \text{ of } 127.98 = ?^2 \times 75.01\%$   
 (1) 6 (2) 94  
 (3) 70 (4) 24  
 (5) 130

**Direction (224-226)** What will come in the place of question mark (?) in the given expression?

224.  $35\% \text{ of } 840 + 16^2 = ?^2 - 25\% \times 300$   
 (1) 20 (2) 25  
 (3) 40 (4) 50  
 (5) 35
225.  $\{(\sqrt{529} + (6^3 \div 18))\}\% \text{ of } 800 = ?\% \text{ of } 224$   
 (1) 150 (2) 125  
 (3) 140 (4) 175  
 (5) None of these
226.  $\{(750 \div 15) \times 15 + 15^2 + 20\% \text{ of } 125\} = ?^3$   
 (1) 10 (2) 9  
 (3) 8 (4) 7  
 (5) 6

**Direction (227-231):** What approximate value will come in place of question mark (?) in the following question?

227.  $140.05/6.97 + 3.03 \times 14.05 = ? + 559.94/8.02 - 19.06$   
 (1) 18 (2) 11  
 (3) 24 (4) 12  
 (5) 36
228.  $160.02 \times 14.97 = ? - 280.01 \times 3.02$   
 (1) 3210 (2) 3240  
 (3) 3320 (4) 3260  
 (5) 3280
229.  $29.01^2 - 1088.98^{1/2} + 1000.01^{1/3} = ?$   
 (1) 842 (2) 818  
 (3) 833 (4) 809  
 (5) 836
230.  $14.03 \times \sqrt{841.05} = ? \times \sqrt{41208.99}$   
 (1) 2 (2) 11  
 (3) 8 (4) 14  
 (5) 5
231.  $35.07 \times 20.93 - 15.07 = ? \times 29.95$

(1) 11  
(3) 43  
(5) 27

(2) 24  
(4) 29

(3) 8.4  
(5) none of these

(4) 9

**Direction (232-236):** Find the exact value of the following question.

232.  $4321 + 348.8 + 1065.28 - 6126.68 + 964.6 = ?$

(1) 593  
(3) 463  
(5) None of these  
(2) 543  
(4) 573

233.  $310 \times 2.5 - 2871/11 + 417/3 = ?$

(1) 653  
(3) 623  
(5) None of these  
(2) 553  
(4) 583

234.  $2520/\sqrt{?} + 3 = 363$

(1) 36  
(3) 64  
(5) None of these  
(2) 49  
(4) 25

235.  $[(14.5 \times 20)/10 - 1150/50] = ? \times 2$

(1) 7  
(3) 3  
(5) None of these  
(2) 2  
(4) 11

236.  $[(18 \times 2)/3] / [(512/8)4] \times [(32 \times 8)/4] = [(2+2)?] + 4$

(1) 4  
(3)  $\frac{1}{4}$   
(5) None of these  
(2)  $\frac{1}{2}$   
(4)  $-\frac{1}{4}$

**Direction (237-241):** Find the Approximation value.

237.  $\sqrt{5080+118^2} - 25\% \text{ of } 118 + 330^2 = ?$

(1) 11345  
(3) 121486  
(5) none of these  
(2) 13456  
(4) 122866

238.  $50\% \text{ of } 348 - 74\% \text{ of } 3375 + 89.7\% \text{ of } 2298 = ? - 134.97$

(1) -119  
(3) 342  
(5) none of these  
(2) -240  
(4) -169

239.  $\frac{1}{8} \text{ of } 3986 + 6\left(\frac{1}{4}\right) \text{ of } 78 - 7\left(\frac{2}{3}\right) \text{ of } 430 = ?$

(1) 2372  
(3) -2310  
(5) none of these  
(2) -2456  
(4) 4567

240.  $789 \times 899 - 1122 \times 999 + 699 \times 798 = ?$

(1) 156100  
(3) 123618  
(5) none of these  
(2) 147600  
(4) 156789

241.  $1.3^2 + 2.6^2 - \sqrt{1.42} = ?$

(1) 7.2  
(2) 6.4

**Directions (242-247):** What value should come in place of question mark (?) in the following questions?

242.  $36\% \text{ of } 420 - 56\% \text{ of } 350 = x - 112 - 55^2$

(1) 3092.2  
(3) 4018.4  
(5) None of these  
(2) 2984.6  
(4) 1987.8

243.  $17\frac{2}{3} \text{ of } 180 + \frac{1}{4} \text{ of } 480 = ?$

(1) 4200  
(3) 4800  
(5) None of these  
(2) 2900  
(4) 3300

244.  $\{9801 \div \sqrt{14641}\} \times \sqrt{(42.25)} = x \div 6$

(1) 1987  
(3) 3159  
(5) None of these  
(2) 2456  
(4) 2983

245.  $56 \times 12 - 48 \times 896 \div 112 = ?$

(1) 426  
(3) 344  
(5) None of these  
(2) 288  
(4) 572

246.  $1\frac{5}{3} \div (3/11) \times (x/11) = 2\frac{2}{3} \times (7/5) \times (6/7)$

(1) 4.8  
(3) 3.6  
(5) None of these  
(2) 6.2  
(4) 5.4

247. The digit in the unit's place of  $\{(341)^{98} + (211)^{59} - (45)^{100} + (105)^{35} - 164 + 259\}$  is

(1) 1  
(3) 5  
(5) None of these  
(2) 4  
(4) 7

**Direction (248-252):** What approximate value should come in the place of question mark in the following questions?

248.  $24.99\% \text{ of } 34598.79 + 49.89\% \text{ of } 7249.87 = ? - 79.89\% \text{ of } 1258.67$

(1) 12560  
(3) 15675  
(5) 10140  
(2) 13285  
(4) 14875

249.  $(3/5) \times 3579.98 + \sqrt{(530.23)} + 72.32\% \text{ of } 4199.87 = ?$

(1) 5890  
(3) 5195  
(5) 8795  
(2) 6250  
(4) 5475

250.  $402.23/79.69 \times 24.89 \times (11.999)^2 = ?$

(1) 12000  
(3) 15000  
(2) 18000  
(4) 16000

- (5) 19500  
251.  $\sqrt{6725} + \sqrt[3]{2199} + \sqrt{2400} = (?)^2$   
(1) 10 (2) 14  
(3) 15 (4) 21  
(5) 12

252.  $64.89\% \text{ of } 12099.89 + 39.78\% \text{ of } 4569 = (?)^2 + 89$   
(1) 94 (2) 92  
(3) 90 (4) 98  
(5) 100

### Solution

**Ans.1(4)**  $105.27\% \text{ of } 1200.11 + 11.80\% \text{ of } 2360.85$   
 $= 21.99\% \text{ of } ? + 1420.99$   
 or,  $[(105 \times 1200) / 100] + [(12 \times 2361) / 100] = [(22 \times ?) / 100] + 1421$   
 or,  $[(22 \times ?) / 100] = 1260 + 283.32 - 1421$   
 $\approx 1543 - 1421 = 122$   
 $? = [(122 \times 100) / 22] = [(122 \times 50) / 11]$   
 $= 11 \times 50 = 550$

**Ans.2(3)**  $0.98\% \text{ of } 7824 + 4842 / 119.46 - ? = 78$   
 or,  $1\% \text{ of } 7824 + 4842 / 120 - 78 = ?$   
 or,  $? = [(1 \times 7824) / 100] + (4842 / 120) - 78$   
 $\approx 78 + 40 - 78 = 40$

**Ans.3(4)**  $[(41.99)^2 - (18.04)^2] / ? = (13.11)^2$   
 $138.99 \text{ or, } [(42)^2 - (18)^2] / ? = (13)^2 -$   
 $139 \text{ or, } [(42 + 18)(42 - 18)] / ? = 169 -$   
 $139 \text{ or, } 60 \times 24 / ? = 30 \text{ or, } ? = 60 \times 24 /$   
 $30 = 48$

**Ans.4(4)**  $? = (24.96)^2 / (34.11 / 20.05) + 67.96 -$   
 $89.11 \approx (25)^2 / (34 / 20) + 67.96 - 89 \approx$   
 $(625 / 1.7) + 68 - 89 \approx 368 + 68 - 89$   
 $\approx 347$

**Ans.5(2)**  $\sqrt{(2025.11)} \times \sqrt{(256.04)} + \sqrt{(399.95)} \times \sqrt{?}$   
 $= 33.98 \times 40 \text{ or, } \sqrt{(2025)} \times \sqrt{(256)} + \sqrt{(400)}$   
 $\times \sqrt{?} = 1360 \text{ or, } 20 \times \sqrt{?} = 1360 - 720$   
 $= 640 \text{ or, } \sqrt{?} = (640 / 20) = 32 ? = 32 \times 32$   
 $= 1024$

**Ans.6(2)**  $689 \times 6156 \div 18\% \text{ of } 684 = 28 \times 250 \div 8 + ?$   
 $+ 4300$   
 Or,  $689 \times 6156 \div 123.12 = 28 \times 31.25 + ? +$   
 $4300$   
 Or,  $(689 \times 6156 \times 100) / 123.12 = 875 + ? +$   
 $4300$   
 $= ? + 5175$   
 $? = 34450 - 5175 = 29275$

**Ans.7(1)**  $\sqrt{?} = 137 + 43 - 12 - \sqrt{4624}$   
 $= 168 - 68 = 100$   
 $? = 100 \times 100 = 10000$

**Ans.8(3)**  $189820 - 22624 + 35 \times ? - 372 \times 28 =$   
 $194440$

**Ans.9(4)**  $? = 39 \frac{13}{17} - 47 \frac{18}{34} + 23 \frac{11}{17} - 2$   
 $\frac{1}{34}$

$= (39 - 47 + 23 - 2) [(13/17) - (18/34) +$   
 $(11/17) - (1/34)]$   
 $= (62 - 49) [(26 - 18 + 22 - 1) / 34] = 13 \frac{29}{34}$   
**Ans.10(5)**  $44\% \text{ of } 1950 + 82\% \text{ of } 250 + 62\% \times ?$   
 $= 7883$

Solving by breaking method:  
 $40\% \text{ of } 1950 + 4\% \text{ of } 1950 + (80 + 2)\% \text{ of}$   
 $250 + 62\% \text{ of } ? = 7883$   
 or,  $780 + 78 + 200 + 5 + 62\% \text{ of } ? = 7883$   
 or,  $1063 + 62\% \text{ of } ? = 7883$   
 or,  $62\% \text{ of } ? = 7883 - 1063 = 6820$   
 $? = (6820 / 62) \times 100 = 11000$

**Ans.11(1)**  $12 \times 13 + (?)^2 = (16)^2$   
 $\Rightarrow 156 + (?)^2 = 256$   
 $\Rightarrow (?)^2 = 256 - 156 = 100$   
 $\Rightarrow (?)^2 = 100 = (10)^2$   
 $\Rightarrow ? = 10$

**Ans.12(2)**  $4895 + 364 \times 0.75 - 49 = ?$   
 $\Rightarrow ? = 4895 + 273 - 49$   
 $\Rightarrow ? = 5168 - 49$   
 $\Rightarrow ? = 5119$

**Ans.13(2)** Given Expression is,  
 $\Rightarrow ? \text{ of } \frac{7}{8} \text{ of } \frac{1}{3} \text{ of } \frac{2}{7} = 12$   
 $\Rightarrow ? \times \frac{7}{8} \times \frac{1}{3} \times \frac{2}{7} = 12$   
 $\Rightarrow ? \times 2 = 12$   
 $\Rightarrow ? = 144$

**Ans.14(4)**  $14\% \text{ of } 250 \times ?\% \text{ of } 150 = 840$   
 $\Rightarrow \frac{14}{100} \times 250 \times \frac{?}{100} \times 150 = 840$   
 $\Rightarrow 35 \times 1.5 \times ? = 840$   
 $\Rightarrow ? = 840 / (35 \times 1.5) = 16$

**Ans.15(2)**  $40^2 < 2228 < 50^2$   
 $\sqrt{2228} = 47.20$

- Ans.16(1)**  $\approx 47$   
 $\Rightarrow 6642 - 1852 - 2864 = ?$   
 $\Rightarrow 4790 - 2864 = ?$   
 $\Rightarrow ? = 1926$
- Ans.17(3)**  $27\% \text{ of } 5/8 \text{ of } 1/9 \text{ of } 125440 = 565/15 \times 1215/45 + X$   
 $2352 = 1017 + X$   
 $X = 1335$
- Ans.18(2)**  $4^5 \times (4096/16) \times 2^8 = 4^? / 64 \times 16^{1/2}$   
 $4^5 \times 256 \times 2^8 = (4^?/64) \times 4$   
 $4^5 \times 4^4 \times 4^4 = 4^?/16$   
 $4^{13} \times 16 = 4^?$   
 $4^{13} \times 4^2 = 4^?$   
 $4^{15} = 4^?$
- Ans.19(3)**  $47.8\% \text{ of } 1245.26 + 32.18\% \text{ of } 2145.65 = 21.67\% \text{ of } 359.85 + X$   
 $X = 1206.$
- Ans.20(4)**  $123/15 + 21.25 \times 7.85 + 405/21 + 21.8 \times 19.6$   
 $= X + 21.2 \times 10.75$   
 $8 + 167 + 19 + 440 = X + 231$   
 $X = 403.$
- Ans.21(2)**  $201.75 + 12.45 \times 21.22 - (215/27.6) = X - 232.65 \times 89.67$   
 $X = 21,416 = 21,420$
- Ans.22(4)**  $105.27\% \text{ of } 1200.11 + 11.80\% \text{ of } 2360.85 = 21.99\% \text{ of } ? + 1420.99$   
or,  $[(105 \times 1200) / 100] + [(12 \times 2360) / 100] = [(22 \times ?) / 100] + 1421$   
or,  $[(22 \times ?) / 100] = 1260 + 283.20 - 1421 \approx 1543 - 1421 = 122$   
 $? = [(122 \times 100) / 22] = [(122 \times 50) / 11] = 11 \times 50 = 550$
- Ans.23(3)**  $0.98\% \text{ of } 7824 + 4842 / 119.46 - ? = 78$   
or,  $1\% \text{ of } 7824 + 4842 / 120 - 78 = ?$   
or,  $? = [(1 \times 7824) / 100] + (4842 / 120) - 78$   
 $\approx 78 + 40 - 78 = 40$
- Ans.24(1)**  $[(41.99)^2 - (18.04)^2] / ? = (13.11)^2 - 138.99$   
or,  $[(42)^2 - (18)^2] / ? = (13)^2 - 139$   
or,  $[(42 + 18)(42 - 18)] / ? = 169 - 139$   
or,  $60 \times 24 / ? = 30$   
or,  $? = 60 \times 24 / 30 = 48$
- Ans.25(2)**  $? = (24.96)^2 / (34.11 / 20.05) + 67.96 - 89.11$   
 $\approx (25)^2 / (34/20) + 67.96 - 89$   
 $\approx 625/1.7 + 68 - 89$   
 $\approx 367 + 68 - 89 \approx 346$
- Ans.26(2)**  $\sqrt{(2025.11)} \times \sqrt{(256.04)} + \sqrt{(399.95)} \times \sqrt{?}$   
 $= 33.98 \times 40$   
or,  $\sqrt{(2025)} \times \sqrt{(256)} + \sqrt{(400)} \times \sqrt{?} = 1360$   
or,  $20 \times \sqrt{?} = 1360 - 720 = 640$   
or,  $\sqrt{?} = (640 / 20) = 32$   
 $? = 32 \times 32 = 1024$
- Ans.27(5)**  $1980.99 - 1562.5 + 1728 = ? - 26.49$   
 $3735.48 - 1562.5 = ?$   
 $2172.98 = ?$
- Ans.28(3)**  $\sqrt{(16 \times 3)} + \sqrt{(16 \times 5)} + \sqrt{(16 \times 11)} + 18 - 11 = ? + 7 + 4\sqrt{11}$   
 $4\sqrt{3} + 4\sqrt{5} + 4\sqrt{11} + 7 = ? + 7 + 4\sqrt{11}$   
 $4(\sqrt{3} + \sqrt{5}) = ?$
- Ans.29(2)**  $1265/25.3 + 9996 - 529 = ?$   
 $50 + 9996 - 529 = ?$   
 $10046 - 529 = ?$   
 $9517 = ?$
- Ans.30(5)**  $23 + 28/100 \times 280 - 89/100 \times 56 = ?$   
 $23 + 78.4 - 49.84 = ?$   
 $51.56 = ?$
- Ans.31(3)**  $\{33(17/25) \times 34(22/27)\} + \{35(28/52) \times 36(37/57)\} = ?$   
 $(842/25 \times 940/27) + (1848/52 \times 2089/57) = ?$   
 $(33.68 \times 34.81) + (35.54 \times 36.65) = ?$   
 $2474.94 = ?$
- Ans.32(1)**  $? = (4800 - 120) \times 2.532$   
 $= 4680 \times 2.532$   
 $= 11849.76$ ; Approx = 11850
- Ans.33(2)**  $[(1.93)^2 + (2.04)^2 / (2.04 - 1.03)] \times 10 = ?$   
 $(4 + 4)/1 \times 10 = ?$   
 $? = 80$
- Ans.34(3)**  $? = [(17 / 100) \times 760] + [(55 / 100) \times 80] + 78$   
 $= 129 + 44 + 78 = 251$
- Ans.35(4)**  $36\sqrt{?} + 32\sqrt{?} = (68 / 11) \times (?)$   
If  $? = 121$
- Ans.36(1)**  $? = (3.92)^2 + (9.80)^2 + (8.03)^2 + (4.04)^2 = ?$   
 $? = 16 + 100 + 64 + 16 = 196$
- Ans.37(1)**  $89.66\% \text{ of } 299.98 - 3.49\% \text{ of } 999 = 90\% \text{ of } 300 - 3.5\% \text{ of } 1000$   
 $= 270 - 35 = 235$
- Ans.38(1)**  $(78.95)^2 - (43.35)^2 = ?$   
 $(79)^2 - (43)^2 = ?$   
 $(79 + 43)(79 - 43) = ?$   
 $122 \times 36 = 4392 = 4400$
- Ans.39(2)**  $? = \left(\frac{127}{100} \times 1540\right) + \left(\frac{5.5}{100} \times 150\right) + \left(\frac{104}{100} \times 7\right)$

- ? = 1955.8 + 8.25 + 7.28  
 $\therefore ? = 1971.33 \approx 1970$
- Ans.40(1)** ? =  $1000/50 \times 100 - 1300$   
 ? =  $20 \times 100 - 1300$   
 ? =  $2000 - 1300$   
 = 700
- Ans.41(5)**  $(34.995)^2 \times 25.0021 \div 184.798 = ?$   
 $(35)^2 \times 25 \div 185 = ?$   
 $1225 \times 25 \div 185 = ?$   
 $30625 \div 185 = ?$   
 ? = 165.54  $\approx$  165
- Ans.42(2)**  $74430 \cdot 16/7 \times 14\% - X^2 = 12.55 \times 1265 - 124 \times 1.23 + 445.55$   
 $16/7 \times (14/100) \times 74430 - X^2 = 13 \times 1265 - 124 + 446$   
 $X^2 = 7039$   
 $X = 84 \sim 85$
- Ans.43(2)** 17.8 % of 2560.55 + 67.95% of 5430.28 =  
 45.89% of 2145.55 + X  
 $X = 3166 \sim 3170$
- Ans.44(2)**  $(?)^2 = 15628 \times (201 \div 8)$   
 $(\because 15628 \approx 15625 \approx 25) \approx 25 \times 25.125 \approx 25 \times 25$   
 $25 \times 25 + 25 - X^2 = 740 - 9.5$   
 $749 + 650 = X^2$   
 $1399 = X^2$   
 $X = 37$
- Ans.45(4)**  $(2123.65/1.75) \times 39.65 = 2154.26 - 124.75 + 15.365 \times 236.56 + X$   
 $X = 36896 \approx 36900$
- Ans.46(2)** 71.71% of 9459.66 +  $(323.96)^{1/2} - 21.59 =$   
 $X + (2156 / 21.95) - 12.55$   
 $X = 6722.2 \approx 6725$
- Ans.47(2)**  $450.64 + 1288.52 + 638.12 - 352.28 = (?)^2$   
 $2025 = (?)^2$   
 $45 = ?$
- Ans.48(5)**  $1\frac{2}{7} + 9\frac{6}{35} - 8\frac{3}{7} = (?)$   
 $2(6/35 - 1/7) = ?$   
 $2(1/35) = ?$
- Ans.49(3)**  $7890.6 + 46550.54 + 452.54 + 885.46 = ? + 5779.14$   
 $50000 = ?$
- Ans.50(2)**  $(\sqrt{648} \div 32) \times (\sqrt{225} \div 45) = ? \div 48$   
 $3/16 \times (48) = ?$   
 $9 = ?$
- Ans.51(1)** 90% of 320 + 58% of 4200 = ?% of 7200  
 $288 + 2436 = 72 \times ?$   
 $2724/72 = ?$
- Ans.52(2)**  $227/6 = ?$   
 $500/100 + 350 + 427 - 126/(0.5 \times 2) = ?$   
 $? = 782 - 126$
- Ans.53(3)** ? =  $20/25 \times 282 - 52 + 4365 \times 14/20$   
 =  $225.6 - 52 + 3055.5$   
 = 3230
- Ans.54(4)** 3.2% of 784 + 15.8% of 2145 = 364
- Ans.55(5)** ? =  $(1600 \times 40/100) \times 150/(4000 \times 15/100) + 62$   
 =  $640 \times 150/600 + 62$   
 =  $160 + 62 = 222$
- Ans.56(2)**  $\sqrt{784.002} + 4.2222 = ?/(1/4.885)$   
 = 7
- Ans.57(3)**  $\sqrt{2196.27/1.3} + \sqrt{785/348} = 36$
- Ans.58(1)** ? =  $(4 + 36)/10$   
 =  $40/10 = 4$
- Ans.59(1)** ?<sup>2</sup> =  $1368.002/65 + 57.5\% \text{ of } 357.99 + 67.9$   
 ?<sup>2</sup> = 294  
 ? = 17
- Ans.60(4)**  $(676877 + 90898 - 88778) / 677 = 1002.94 = 1003$
- Ans.61(4)**  $\sqrt{6498} \times \sqrt{639}/\sqrt{153} = 165$
- Ans.62(2)**  $752/\sqrt{8836} \times ? = 1458 \times 4$   
 ? = 729
- Ans.63(1)**  $152 - 72 - \sqrt{576} + 30 = 86$
- Ans.64(3)**  $\sqrt{(19 + \sqrt{(24 + \sqrt{(132 + \sqrt{144}))})})} = \sqrt{25} = 5$
- Ans.65(1)**  $\sqrt{(3570 - 1240 - 1450 - 684)} \times \sqrt{11025} = ?$   
 ? =  $\sqrt{196} \times 105$   
 =  $14 \times 105 = 1470$
- Ans.66(3)**  $466.66 + 198.66 + 76 + 0.66 + 0.06 = 742.04$
- Ans.67(4)**  $2\frac{2}{5} \text{ of } 5\frac{5}{12} + 5\frac{4}{13} \times 2\frac{6}{23} = ?$   
 = 25
- Ans.68(4)** 27% of 400 + 78% of  $300/2 = ?$   
 ? =  $\sqrt{(108 + 117)} = 15$
- Ans.69(1)** ?  $\times 300/100 + 15/100 \times 1320 = ?/7 \times 63 - 3/17 \times 578$   
 $\rightarrow 198 + 102 = 9x - 3x$   
 $\rightarrow X = 50$
- Ans.70(1)** ?<sup>2</sup> =  $48 + 33 = 81$   
 ? = 9
- Ans.71(2)**  $33500/50 + 76865/5 + 7660/20 = 16426$
- Ans.72(2)** 67% of 200 + 45% of 310 - 30% of 175 = 221
- Ans.73(2)** ?  $\times 3/7 = 315 + 500 \times 21/100$   
 ?  $\times 3/7 = 420$