

BEST

4000

Smart Practice
Questions

Difficulty Level & Chapter Wise Questions

BANKING

Quantitative Aptitude - English



TESTBOOK.COM
ERROR FREE
TESTBOOK.COM

Get  TIME TO ANSWER QUESTIONS

Analyse  SMART ANSWER KEY

Get  SOLUTIONS INSIDE

Introduction

"Change is the Only Constant" - Heraclitus, Greek Philosopher

Best 4000 Smart Practice Questions book marks 7 years of Testbook as the fastest growing platform in Education-Technology or Ed-Tech. This book is an effort to reform the conventional style of solving practice questions, where students usually focuses on quantity of questions solved, than evaluating and improving their performance.

This book contains Best 4000 Question selected from a pool of more than 1 Lakh question bank. Question selection is based on user's attempt & performance data on each question. **Testbook's Data Science Team has extracted and processed tons of data points like speed of answering, maximum time taken to answer, accuracy trend on each question, toppers & average student's performances, etc. from the students' responses on each question. They have then drawn amazing comparative insights for you.**

Why Smart Practice Questions

Smart Practice questions will reform your approach of paper solving by emphasising on key details related to problem solving. This is a difference between solving 40,000 questions one after the other, not knowing if you are headed in the right direction and solving 4000 questions, where every question:

- is unique and covers the subject in a precise manner
- has been created by experts to teach you all the possible concepts
- carries time limit (Time to Answer) to speed you up!

After solving the paper check the Smart Answer Key to:

- Check question-wise difficulty level and percentage of students who attempted it correctly or skipped it (and this is 100% accurate information!).
- After checking the smart answer key you can also see the solutions at the end of every chapter.

Now it is for you to dedicate your time and single-minded devotion to your dream. One step at a time, keep solving these Smart Questions; analysing the 'Smart Answer Keys'; **going through the Solutions** maintaining the Progress graph and beating your own score! Stay self-motivated by refusing to give up. Let this motivation fuel your intentions. Before you know, you will have reached there already.)

How to Use This Book

I. Who among

following defeated the Mughals in the Battle of Karnal?

TTA : 26 Seconds

- A) Ahmed Shah Abdali
C) Rani Scindia

- B) Nadir Shah
D) Peshwa Balaji

→ **TTA :** Ideal 'Time To Answer' this question

Smart Answer Key

Correct% - Indicates percentage of students who answered the Question Correctly

Skipped% - Indicates percentage of students who Skipped the Question

Q.	Ans.	Correct		Q.	Ans.	Correct		Q.	Ans.	Correct		Q.	Ans.	Correct		Q.	Ans.	Correct	
		Correct	Skipped			Correct	Skipped			Correct	Skipped			Correct	Skipped			Correct	Skipped
1.	B	26%	73%	31.	B	71%	22%	46.	B	29%	34%	76.	B	28%	23%	76.	B	62%	20%
		63%	37%			34%	66%			39%	51%			31%	69%			80%	16%
2.	A	77%	22%	17.	A	50%	49%	47.	D	55%	40%	62.	B	54%	39%	77.	C	40%	59%
		20%	79%			40%	59%			35%	65%			54%	46%			40%	59%

→ **Skipped :** 89% of students visited but did not attempt Q1

→ **Correct :** 3% of students answered Q1 correctly

Level 1: comprises of basic fundamental concepts of Mathematics. This level is based on the direct application of the formulae. Questions falling in this category bridge the gap between fundamental concepts and standard problems. These levels of questions were solved correctly in shortest time and are helpful in **Bank Clerk/PO Pre, Office Assistant and Grade B Examinations.**

Level 2: This level will enhance your concept of Mathematics and facilitate your understanding about the questions. Questions in this category will gradually move up a notch, consisting of the applied nature of topics in which there is a seamless and gradual development in each question. These levels of questions are of Moderate Level and will be helpful in **Bank Clerk/PO Mains, Officer Scale I, Insurance and Grade A examinations.**

Level 3: These level of questions are difficult both Concept and Calculation wise. This level consists of the questions which will enhance your skills in solving tricky and detailed questions, that you find difficult while giving exams. These levels of Questions will be helpful in **SBI PO Mains, LIC AAO, Grade A officers and Officer Scale I Mains examinations.**

The approach behind defining the levels of the questions is to help you increase your skill set from a beginner to a pro through the Best selected 4000 questions. The gradual increase in the level of the questions will not only increase your ability in tackling each type of question but also reduce the time taken to solve the questions.

Table of Content

Chapter No.	Chapter	Level	Page No.
1.	Simplification	Level I	1
		Level II	13
		Level III	24
		Smart Answer Key	30
		Solutions	33
2.	Number Series	Level I	75
		Level II	84
		Level III	94
		Smart Answer Key	104
		Solutions	107
3	Algebra	Level I	139
		Level II	142
		Level III	152
		Smart Answer Key	161
		Solutions	163
4	Percentage	Level I	191
		Level II	193
		Level III	196
		Smart Answer Key	200
		Solutions	201
5	Ratio & Proportion	Level I	211
		Level II	214
		Level III	217
		Smart Answer Key	220
		Solutions	221

Chapter No.	Chapter	Level	Page No.
6.	Average	Level I	232
		Level II	234
		Level III	237
		Smart Answer Key	240
7.	Interest	Solutions	241
		Level I	252
		Level II	254
		Level III	256
8.	Profit & Loss	Smart Answer Key	260
		Solutions	261
		Level I	274
		Level II	277
9.	Speed, Time & Distance	Level III	281
		Smart Answer Key	286
		Solutions	287
		Level I	301
10.	Mixture & Allegation	Level II	304
		Level III	309
		Smart Answer Key	314
		Solutions	315
10.	Mixture & Allegation	Level I	330
		Level II	331
		Level III	332
		Smart Answer Key	335
		Solutions	336

Chapter No.	Chapter	Level	Page No.
11.	Time & Work	Level I	343
		Level II	345
		Level III	349
		Smart Answer Key	354
		Solutions	355
12.	Permutation, Combination and Probability	Level I	368
		Level II	368
		Level III	369
		Smart Answer Key	372
		Solutions	374
13.	Mensuration	Level I	377
		Level II	379
		Level III	380
		Smart Answer Key	384
		Solutions	385
14.	Data sufficiency	Level I	393
		Level II	398
		Level III	415
		Smart Answer Key	435
		Solutions	437
15.	Data Interpretation	Level I	463
		Level II	511
		Level III	620
		Smart Answer Key	637
		Solutions	645
16.	Comparison of Quantities	Level III	760
		Smart Answer Key	787
		Solutions	788

Simplification

LEVEL 1
1 - 174 Questions

1. What approximate value should come in the place of question mark (?) in the following question? $5^{3.97} \div 9^{0.9989} = 9 \times ?$

TTA : 49 Seconds

- | | |
|-------|-------|
| A) 12 | B) 4 |
| C) 2 | D) 16 |
| E) 8 | |

2. What approximate value should come in the place of question mark '?' in the following question? (You are not expected to calculate the exact value)

$$1595 \div 25 \times 44.5 = ?$$

TTA : 46 Seconds

- | | |
|---------|---------|
| A) 3650 | B) 2440 |
| C) 2880 | D) 3800 |
| E) 3200 | |

3. What approximate value will come in place of the question mark (?) in the following questions?

$$\sqrt{5089} - \sqrt{2641} + \sqrt{1186} = ?$$

TTA : 62 Seconds

- | | |
|-------|-------|
| A) 54 | B) 90 |
| C) 43 | D) 25 |
| E) 38 | |

4. What will come in place of the question mark '?' in the following question?

$$(1/729)^{2/3} \div (1/729)^{1/3} + (1/729)^{-2/3} = ?$$

TTA : 56 Seconds

- | | |
|----------|---------|
| A) 729 | B) 81/9 |
| C) 730/9 | D) 1/9 |

E) None of these

5. What approximate value should come in place of question mark (?) in the following question? (You are not expected to calculate the exact value.)

$$(21.98)^2 - (25.02)^2 + (13.03)^2 = ?$$

TTA : 54 Seconds

- | | |
|-------|-------|
| A) 21 | B) 20 |
| C) 23 | D) 22 |

E) None of these

6. What will come in place of question mark '?' in the following question?

$$28.314 - 31.427 + 113.928 = ? + 29.114$$

TTA : 66 Seconds

- | | |
|-----------|-----------|
| A) 81.711 | B) 80.701 |
| C) 71.711 | D) 81.701 |

E) None of these

7. What will come in place of question mark (?) in the following question? $[5^3 \div (3 + 1 \div 2 + 3 \div 2)] \div ? - 1 \div 2 = 12$

TTA : 62 Seconds

- | | |
|------|------|
| A) 2 | B) 3 |
| C) 4 | D) 5 |
| E) 0 | |

8. What approximate value should come in place of the question mark (?) in the following questions?

$$78.143 - [5.08 + 3.15 \text{ of } (24.98 - 1.95 \times 9.998)] = ?$$

TTA : 33 Seconds

- | | |
|--------|--------|
| A) 58 | B) 78 |
| C) 98 | D) 118 |
| E) 228 | |

9. What approximate value should come in the place of question mark '?' in the following question? (You are not expected to calculate the exact value) $(3.01)^4 \times (2.99)^2 - 23.99 = ? \times (46.99 \times 2.91)$

TTA : 47 Seconds

- | | |
|------------------|-------|
| A) 5 | B) 11 |
| C) 13 | D) 7 |
| E) None of these | |

10. What approximate value should come in the place of question mark '?' in the following question? (You are not expected to calculate the exact value) $\{(342)^{0.33} + (360.00)^{0.5}\} \div 13.01 = ?$

TTA : 35 Seconds

- | | |
|------------------|---------|
| A) 2 | B) 2600 |
| C) 131 | D) 1301 |
| E) None of these | |

11. What approximate value should come in the place of question mark '?' in the following question? (You are not expected to calculate the exact value) $666.66 + 66.66 + 16 + 0.66 + 0.06 \div 0.001 = ?$

TTA : 49 Seconds

- | | |
|--------|--------|
| A) 810 | B) 755 |
| C) 750 | D) 756 |
| E) 850 | |

12. What should come in place of the question mark (?) in the following question?

$$(90\% \text{ of } 50 + 50\% \text{ of } 90) \times 10 = (?)^2$$

TTA : 29 Seconds

- | | |
|--------|-------|
| A) 3 | B) 9 |
| C) 0.3 | D) 30 |
| E) 27 | |

13. What approximate value should come in place of question mark (?) in the following question?

$$(701.02\% \text{ of } 490.34) \div 344.06 = ?$$

TTA : 45 Seconds

- | | |
|-------|-------|
| A) 7 | B) 6 |
| C) 10 | D) 13 |
| E) 20 | |

14. What will come in place of question mark (?) in the following question?

$$40\% \text{ of } 4500 + 60\% \text{ of } ? = 4200$$

TTA : 41 Seconds

- | | |
|---------|---------|
| A) 4000 | B) 3600 |
| C) 3000 | D) 1800 |
| E) 4500 | |

15. What will come in place of question mark (?) in the following question? $\frac{160-44\times 9\div 3}{\frac{1}{2}of 18\div 9+2} = ?$

TTA : 40 Seconds

- A) $2\frac{2}{3}$ B) $9\frac{1}{3}$
 C) $4\frac{2}{3}$ D) $6\frac{4}{5}$

E) None of these

16. What will come in place of question mark '?' in the following question? $72\% \text{ of } 2000 - ? = 300$

TTA : 23 Seconds

- A) 1148 B) 1140
 C) 1240 D) 1160

E) None of these

17. What approximate value should come in place of question mark (?) in the following question? $1675.156 + 12.192 \times 55.871 = ?$

TTA : 29 Seconds

- A) 2933 B) 2840
 C) 2347 D) 2271
 E) 2155

18. What approximate value should come in place of question mark (?) in the following question? $4341.9823 + 18625.1372 + 6225.1689 + 3361.9218 = ?$

TTA : 46 Seconds

- A) 32554 B) 28136
 C) 32612 D) 35218
 E) 29628

19. 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.)

$$(46.05)^2 - (24.9)^2 - (11.9)^2 = ?$$

TTA : 49 Seconds

- A) 1307 B) 1457
 C) 1324 D) 1347
 E) 1240

20. What approximate value should come in place of question mark (?) in the following question? $33.5\% \text{ of } 1924.2 + ? \% \text{ of } 5324.4 = 6827.5862$

TTA : 81 Seconds

- A) 136 B) 282
 C) 90 D) 116
 E) 199

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

$$420.03 - 21.07 \times 24.98 + ? = 160.23$$

TTA : 40 Seconds

- A) 234 B) 265
 C) 287 D) 326
 E) 364

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

$$8.07 \times 11.02 + \sqrt{120.91} + 3^{3.03} = ?$$

TTA : 19 Seconds

- A) 121 B) 122
 C) 124 D) 126
 E) 128

23. What approximate value will come in place of the question mark (?) in the following questions? (You are not

expected to calculate the exact value)

$$189.02 + ? - 74.95 = 23.09^2 - 7.11\% \text{ of } 1398.22$$

TTA : 60 Seconds

- A) 215 B) 276
 C) 317 D) 341

E) None of these

24. What will come in place of the question mark '?' in the following question?

$$1280\% \text{ of } 75 \div 30 + ? = 80$$

TTA : 57 Seconds

- A) 42 B) 44
 C) 46 D) 48
 E) 50

25. What will come in place of question mark (?) in the following question?

$$? \% \text{ of } 750 + \sqrt[3]{729} = 27\% \text{ of } 500 + 30\% \text{ of } 350 + \sqrt{81}$$

TTA : 66 Seconds

- A) 24 B) 32
 C) 40 D) 28
 E) 36

26. What approximate value should come in the place of question mark (?) in the following question?

$$625.12 + 32.07^2 - 48.97 = ?^2$$

TTA : 28 Seconds

- A) 20 B) 30
 C) 40 D) 50
 E) 60

27. What will come in place of question mark (?) in the following question?

$$37\% \text{ of } 700 - 39\% \text{ of } 400 = ? - 31\% \text{ of } 300$$

TTA : 37 Seconds

- A) 187 B) 168
 C) 196 D) 202
 E) 205

28. What will come in place of question mark (?) in the following question?

$$256 \times 2^{-5} \times ? = 2/25 \text{ of } 50 \times 75$$

TTA : 47 Seconds

- A) 25 B) 37.5
 C) 22.5 D) 50
 E) 16

29. What will come in place of question mark (?) in the following question?

$$(36 + ? + 121)^{1/2} + 26 = 39$$

TTA : 30 Seconds

- A) 10 B) 11
 C) 12 D) 13
 E) 14

30. What will come in place of question mark (?) in the following equation?

$$(4 \times 3)^4 \div (9 \times 16)^3 \times (64 \times 27)^5 = (12)^?$$

TTA : 71 Seconds

- A) 11 B) 12
 C) 13 D) 14
 E) 15

31. What will come in place of question mark (?) in the following equation?

$$52 \times 48 + 113 \times 87 + 35 \times 25 = ? - \sqrt{196}$$

TTA : 81 Seconds

- A) 13215 B) 13216
 C) 13217 D) 13218
 E) 13219

32. What value should come in the place of question mark (?) in the following question?

$$555 - 210 + \sqrt{?} = 19^2 + 27 \times 7 \div 21$$

TTA : 45 Seconds

- A) 144 B) 169
 C) 625 D) 225
 E) 121

33. What value should come in the place of question mark (?) in the following question?

$$11^2 + 7.5 + 9^3 - 525 = 2 \times ? + 115 - 2.5$$

TTA : 59 Seconds

- A) 100 B) 110
 C) 116 D) 121
 E) 96

34. What approximate value should come in place of question mark (?) in the following questions?

$$? = 57.04 \times 11.05 + 809.7$$

TTA : 24 Seconds

- A) 1387 B) 1491
 C) 1252 D) 1437
 E) 1324

35. What approximate value should come in place of question mark (?) in the following question?

$$(14.90\% \text{ of } 4000) \div 29.96 = ?$$

TTA : 18 Seconds

- A) 15 B) 25
 C) 30 D) 20
 E) 18

36. What approximate value will come in place of the question mark (?) in the following questions? (You are not expected to calculate the exact value) $2301 \div 20.01 \times 34.99 + 600.01 = ?$

TTA : 52 Seconds

- A) 4645 B) 4610
 C) 4665 D) 4625
 E) 4650

37. Directions: What approximate value should come in place of question mark (?) in the following equations? $(736 \div 15.96) \times 15 = ?$

TTA : 36 Seconds

- A) 724 B) 730
 C) 668 D) 690
 E) 728

38. What approximate value should come in place of the question mark (?) in the following question? (You are not expected to calculate the exact value) $\{444.04 \div 2.001 \times 21.968\} \times 3.99 = ?$

TTA : 41 Seconds

- A) 19536 B) 19671
 C) 19891 D) 19350
 E) 19120

39. What should come in place of the question mark (?) in the following question?

$$25\% \text{ of } 1600 + 17 \times 81 = ?$$

TTA : 36 Seconds

A) 1787

C) 1767

E) None of the above

B) 1677

D) 1777

40. What approximate value should come in place of the question mark (?) in the following question? $[188.701 + 100.39]^{10.5} - 6.99 = ?$

TTA : 28 Seconds

- A) 12 B) 13
 C) 8 D) 10
 E) 15

41. What approximate value should come in place of question mark (?) in the following question? (You are not expected to calculate the exact value) $1999.001 + 789.88 + 444.91 - 30.49 = ?$

TTA : 34 Seconds

- A) 3375 B) 3204
 C) 3270 D) 3276
 E) 3271

42. Directions: What approximate value will come in place of the question mark (?) in the following questions? (You are not expected to calculate the exact value) $(349.96 \times 9.98) \div 6.9901 + 1245.15 = ?$

TTA : 25 Seconds

- A) 1766 B) 1745
 C) 1676 D) 1876
 E) 1806

43. What will come in place of question mark (?) in the following question? $4.5\% \text{ of } 900 + 8.5 = 8^2 - ?$

TTA : 48 Seconds

- A) 11 B) 13
 C) 10 D) 15
 E) 25

44. What approximate value should come in place of question mark (?) in the following question? $405.03 \div 9.08 \times 14.94 = ?$

TTA : 27 Seconds

- A) 675 B) 645
 C) 575 D) 605
 E) 595

45. What approximate value should come in place of question mark (?) in the following question? $59.89\% \text{ of } 4500 + 39.96\% \text{ of } 6500 - 79.87\% \text{ of } 5500 = ?$

TTA : 57 Seconds

- A) 900 B) 700
 C) 800 D) 750
 E) 1000

46. What will come in place of question mark (?) in the following question?

$$1\frac{3}{4} + 1\frac{5}{6} - 2\frac{1}{8} = ? + 1\frac{1}{12}$$

TTA : 85 Seconds

- A) 9/24 B) 7/24
 C) 5/12 D) 7/12
 E) None of these

47. What approximate value should come in the place of question mark (?) in the following question?

$$96.98 + 709.99 - 142.93 = 3.98 \times ?$$

TTA : 41 Seconds

- A) 154 B) 150
 C) 166 D) 160
 E) 172

48. What should come in place of the question mark (?) in the following question? $16865 + 22473 + 31045 - 70102 = ?$

TTA : **36 Seconds**

- A) 485 B) 280
 C) 281 D) 845
 E) None of these

49. What will come in place of the question mark (?) in the following equation?

$$\text{?}\% \text{ of } 460 + 20\% \text{ of } 335 = 251$$

TTA : **48 Seconds**

- A) 45 B) 30
 C) 25 D) 40
 E) 50

50. What should come in place of question mark (?) in the following question?

$$1 \div [1 + 1 \div \{1 + 1 \div (1 \div 1)\}] = ?$$

TTA : **33 Seconds**

- A) $\frac{5}{3}$ B) $\frac{4}{3}$
 C) $\frac{2}{3}$ D) $\frac{1}{3}$

E) None of these

51. What approximate value should come in place of the question mark (?) in the following question?

$$\frac{3}{5} \times \frac{1125}{1228} \times 7 = ?$$

TTA : **65 Seconds**

- A) 7 B) 12
 C) 9 D) 4
 E) 15

52. What approximate value will come in place of question mark in the following question? $14.995 \times 8.001 \times 20.991 = ?$

TTA : **23 Seconds**

- A) 4150 B) 2520
 C) 3005 D) 1250

E) None of these

53. What will come in place of question mark (?) in the following questions?

$$21.743 - 32.669 + 15.198 = ?$$

TTA : **41 Seconds**

- A) 4.272 B) 3.252
 C) 4.252 D) 3.552

E) None of these

54. What should come in the place of question mark (?) in the following question?

$$261 \div ? \times 15 + 270 = 405$$

TTA : **73 Seconds**

- A) 24 B) 25
 C) 27 D) 28

E) None of these

55. What will come in place of question mark (?) in the following question?

$$48 + 48 \times 1.5 - 59 = ?$$

TTA : **30 Seconds**

- A) 65 B) 61
 C) 59 D) 57
 E) None of these

56. What should come in place of question mark (?) in the following question? $12.5 \times 6.7 \times 4.2 = ?$

TTA : **57 Seconds**

- A) 315.55 B) 376.75
 C) 351.75 D) 358.55
 E) None of these

57. What should come in place of the question mark (?) in the following questions?

$$(16)^9 \div (16)^4 \times (16)^3 = (16)^?$$

TTA : **19 Seconds**

- A) 6.75 B) 8
 C) 10 D) 12
 E) None of these

58. What should come in place of the question mark (?) in the following questions?

$$\sqrt{7921} + (?)^2 = 4\% \text{ of } 1000 + 98$$

TTA : **55 Seconds**

- A) 7 B) 49
 C) 6 D) 36
 E) None of these

59. what will come in place of the question mark (?) in the following question?

$$\frac{2}{7} \text{ of } \frac{5}{8} \text{ of } \frac{7}{9} \text{ of } 6048 = ?$$

TTA : **63 Seconds**

- A) 504 B) 820
 C) 168 D) 480
 E) None of these

60. What should come in place of question marks (?) in the following question?

$$25 \div 5 \times 15 (10 - 5) \div 25 + 75 = ?$$

TTA : **30 Seconds**

- A) $4\frac{3}{4}$ B) 90
 C) 1/900 D) 125
 E) None of these

61. What approximate value should come in place of question mark (?) in the following question? (You are not expected to calculate the exact value.)

$$(9.979)^3 - (23.99)^2 + (1.99)^5 = ?$$

TTA : **47 Seconds**

- A) 350 B) 490
 C) 390 D) 420
 E) 450

62. What approximate value will come in place of question mark (?) in the following question?

$$(4576 + 3286 + 5639) \div (712 + 415 + 212) = ?$$

TTA : **55 Seconds**

- A) 18 B) 22
 C) 34 D) 10
 E) 46

63. What approximate value will come in place of question mark (?) in the following question?

$$34.91\% \text{ of } 3760 - 45.12\% \text{ of } 702 = ?$$

TTA : **64 Seconds**

- A) 1290 B) 2010
 C) 1010 D) 2208
 E) 10010

64. What approximate value should come in place of the question mark (?) in the following question?

$$1679.9 \div 14.95 \times 5.02 = ?$$

TTA : 20 Seconds

- A) 540 B) 525
 C) 560 D) 575
 E) 520

65. What will come in place of question mark in the following equation?

$$\sqrt{[(7921 + 79) + 100]} = ?$$

TTA : 37 Seconds

- A) 89 B) 88
 C) 91 D) 87
 E) 90

66. What will come in place of question mark in the following equation?

$$? - 1936248 = 1635773$$

TTA : 30 Seconds

- A) 3572021 B) 3572031
 C) 3572028 D) 3572061
 E) None of these

67. What will come in place of question mark in the following equation?

$$986 \times 207 - 986 \times 107 = ?$$

TTA : 55 Seconds

- A) 108400 B) 98600
 C) 76500 D) 64600
 E) None of these

68. What approximate value should come in place of the question mark (?) in the following question?

$$2639.98 \div 48.08 \times 11.11 = ?$$

TTA : 38 Seconds

- A) 725 B) 605
 C) 545 D) 815
 E) 525

69. What approximate value will come in place of question mark (?) in the following question? 15.5% of 580 + 24.8% of 650 = ?

TTA : 64 Seconds

- A) 295 B) 330
 C) 270 D) 385
 E) 250

70. What will come in place of question mark (?) in the following question? $(62 \div 2 - 3) + 27 \times 2 - 33 = ?^2$

TTA : 29 Seconds

- A) 9 B) 3
 C) 7 D) 5
 E) 8

71. What approximate value should come in place of question mark in the following question? ?% of 49.999 × 14.96% of 80.03 = 114.073

TTA : 44 Seconds

- A) 29 B) 19
 C) 39 D) 49
 E) 59

72. What will come in place of question mark in the following question?
 $12.8 \times 4.5 \times 2.2 = ?$

TTA : 50 Seconds

- A) 125.75 B) 122.63
 C) 123.42 D) 126.72
 E) None of these

73. What value should come in place of the question mark (?) in the following question?

$$(25 \times (10 + 5) - 15) \div 6^2 = ?$$

TTA : 33 Seconds

- A) 20 B) 10
 C) 60 D) 0
 E) None of these

74. Simplify: $\frac{2}{5} \text{ of } \frac{3}{5} \text{ of } \frac{30}{7} \text{ of } \frac{49}{12} \text{ of } 36 - \frac{18}{5} \text{ of } \frac{1}{3}$

TTA : 70 Seconds

- A) 125 B) 140
 C) 150 D) $140\frac{2}{5}$
 E) $150\frac{2}{5}$

75. What should come in place of question mark (?) in the following question? $(200 - 10^2) \div 5 - 2000\% \text{ of } 15 \div 300\% \text{ of } 10 = ?$

TTA : 53 Seconds

- A) 5 B) -5
 C) 10 D) 0
 E) None of these

76. Simplify: $108 \div 36 \text{ of } \frac{1}{4} + \frac{2}{5} \times 3\frac{1}{4}$

TTA : 64 Seconds

- A) $13\frac{7}{10}$ B) $13\frac{3}{10}$
 C) $11\frac{3}{10}$ D) $12\frac{1}{10}$
 E) $12\frac{7}{10}$

77. What should come in place of question mark (?) in the following question? $512 \times 0.5 = 1024 \div ? \times 4$

TTA : 50 Seconds

- A) 128 B) 8
 C) 32 D) 28
 E) 16

78. What approximate value should come in place of question mark (?) in the following questions? (You are not expected to calculate the exact value)

$$? = 4005.33 \div 19.89 \times 1.9$$

TTA : 26 Seconds

- A) 470 B) 300
 C) 400 D) 360
 E) 500

79. Simplify: $34534 - 84829 + 88888 - 38593$

TTA : 58 Seconds

- A) 5420 B) 10
 C) 1340 D) 1000
 E) None of these

80. 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.) $[(13)^2]^3 = 2197$

TTA : 42 Seconds

- | | |
|---------|--------|
| A) 10.5 | B) 0.5 |
| C) 5 | D) 10 |
| E) 500 | |

81. What should come in place of the question mark (?) in the following question?

60% of 25% of $\frac{5}{6}$ th of ? = 630

TTA : 69 Seconds

- | | |
|------------------|---------|
| A) 5060 | B) 5200 |
| C) 4880 | D) 4500 |
| E) None of these | |

82. What should come in place of the question mark '?' in the following question?

$$\frac{9}{13} \text{ of } 2197 + \frac{3}{7} \text{ of } 1155 = ?$$

TTA : 88 Seconds

- | | |
|---------|---------|
| A) 2020 | B) 2016 |
| C) 2116 | D) 2061 |
| E) 2108 | |

83. What should come in place of the question mark (?) in

the following question? $(?)^2 + 60^2 = 5625$

TTA : 27 Seconds

- | | |
|------------------|-------|
| A) 55 | B) 35 |
| C) 44 | D) 45 |
| E) None of these | |

84. What value should come in the place of question mark (?) in the following question? $63 \times 9 \times 14 \div ? = 98$

TTA : 39 Seconds

- | | |
|-------|-------|
| A) 83 | B) 86 |
| C) 88 | D) 91 |
| E) 81 | |

85. What will come in place of question mark (?) in the following question? $11.7 \times 4.1 - 5.97 = ?$

TTA : 32 Seconds

- | | |
|------------------|-------|
| A) 48 | B) 42 |
| C) 46 | D) 39 |
| E) None of these | |

86. What should come in place of the question mark (?) in the following question? $342 \div 6 \times 28 = 1099 + ?$

TTA : 48 Seconds

- | | |
|--------|--------|
| A) 478 | B) 502 |
| C) 486 | D) 504 |
| E) 497 | |

87. What should come in place of the question mark (?) in the following question?

$$4 \times ? = 4062 \div 5$$

TTA : 39 Seconds

- | | |
|------------------|----------|
| A) 202.33 | B) 102.3 |
| C) 203.1 | D) 222.2 |
| E) None of these | |

88. What should come in place of the question mark (?) in the following question?

$$\frac{14}{8} \text{ of } \frac{4}{56} \text{ of } \frac{16}{18} \text{ of } 1134 = ?$$

TTA : 50 Seconds

A) 176

C) 126

E) 189

B) 191

D) 182

89. What should come in place of the question mark (?) in the following question?

$$\sqrt[3]{50653} - ? = 19$$

TTA : 47 Seconds

- | | |
|------------------|-------|
| A) 18 | B) 13 |
| C) 15 | D) 11 |
| E) None of these | |

90. What will come in place of question mark(?) in the following question?

$$345 \div 30 + 450 \div 36 = ? - 12\% \text{ of } 30$$

TTA : 80 Seconds

- | | |
|---------|---------|
| A) 18.2 | B) 20.5 |
| C) 13.5 | D) 27.6 |
| E) 29.8 | |

91. What will come in place of question mark (?) in the following question?

$$80 + 8 \times 10 \div (180 \div 36) = ?$$

TTA : 27 Seconds

- | | |
|------------------|-------|
| A) 86 | B) 80 |
| C) 96 | D) 92 |
| E) None of these | |

92. What approximate value should come in place of the question mark (?) in the following question?

$$(27.1)^2 + (49.6)^2 - (39.9)^2 = ? + 124.969$$

TTA : 59 Seconds

- | | |
|---------|---------|
| A) 1500 | B) 1340 |
| C) 1600 | D) 1900 |
| E) 1000 | |

93. What should come in the place of question mark (?) in this question?

$$4 \text{ of } \frac{2}{3} \text{ of } \frac{5}{9} \text{ of } \frac{27}{50} \text{ of } 23 = ?$$

TTA : 43 Seconds

- | | |
|---------|---------|
| A) 67 | B) 43 |
| C) 23/5 | D) 92/5 |
| E) 4/17 | |

94. What approximate value should come in the place of the question mark (?) in the following question? $88.88 + 164.70 - 50.11 = 50.89 \times ?$

TTA : 31 Seconds

- | | |
|------|------|
| A) 4 | B) 3 |
| C) 5 | D) 8 |
| E) 1 | |

95. What approximate value will come in the place of the question mark '?' in the following question?

$$(? \div 9.97) \times 12.08 = 20.12\% \text{ of } 1319.98$$

TTA : 36 Seconds

- | | |
|--------|--------|
| A) 220 | B) 260 |
| C) 250 | D) 200 |
| E) 240 | |

96. What approximate value will come in the place of the question mark '?' in the following question?

$$34.03\% \text{ of } 550.08 \div ? = 297.08 + \sqrt{728.97} - \sqrt{89998}$$

TTA : 104 Seconds

- A) 14
C) 8
E) 12

- B) 21
D) 17

97. What approximate value will come in the place of the question mark '?' in the following question?

$$339.98 \div ? = \sqrt{143.98} + \sqrt{64.02}$$

TTA : 21 Seconds

- A) 20
C) 10
E) 40
- B) 17
D) 23

98. What approximate value will come in the place of the question mark '?' in the following question?

$$2^2 = 32.01 \div 128.01 \times 1023.97 \div 7.97$$

TTA : 50 Seconds

- A) 7
C) 5
E) 6
- B) 3
D) 9

99. What approximate value should come in place of question mark (?) in the following question? $2(11.925 \times 6.05) + (5 \times 85.87) = ?$

TTA : 33 Seconds

- A) 569
C) 574
E) 523
- B) 468
D) 497

100. What should come in place of the question mark (?) in the following question? $25.57 + 39.59 + 43.92 = 150\% \text{ of } ? + 34.08$

TTA : 49 Seconds

- A) 150
C) 75
E) 35
- B) 50
D) 45

101. What will come in place of question Mark '?' in the following question? $81\% \text{ of } 2300 - 34\% \text{ of } 596 = ?$

TTA : 90 Seconds

- A) 1060.63
C) 1660.36
E) 1600.36
- B) 1060.36
D) 1006.63

102. What will come in place of question Mark '?' in the following question?

$$\frac{1287}{1645} \times \frac{235}{572} \div 3\frac{15}{16} = ?$$

TTA : 135 Seconds

- A) $\frac{52}{441}$
C) $\frac{4}{49}$
E) $\frac{33}{441}$
- B) $\frac{55}{441}$
D) $\frac{35}{441}$

103. What will come in place of question mark '?' in the following question? $64^2 - 36^2 = ? \times 25$

TTA : 62 Seconds

- A) 118
C) 112
E) 106
- B) 212
D) 134

104. Find out the approximate value which should replace the question mark (?) in the following question.

$$2.93 \times \sqrt[3]{357} - \sqrt{1850} \times 0.492 = ?$$

TTA : 62 Seconds

- A) 50.5
C) 65.5
E) None of these
- B) 35.5
D) 15.5

105. What should come in place of the question mark (?) in the following question? (You do not have to calculate the exact value.)

$$19750.015 \div 979.82 \times 201.04 = ?$$

TTA : 56 Seconds

- A) 450
C) 4050
E) 2000
- B) 200
D) 1050

106. What approximate value should come in place of the question mark (?) in the following question?

$$\sqrt{483.991 + (7.0215)^2} = ? \times 6.0212 - (1.0215)^3$$

TTA : 36 Seconds

- A) 25
C) 44
E) 50
- B) 12
D) 35

107. Find the value of x in the following equation: $5^{3.5} \times 5^{4.8} \times 5^{2.4} \div 5^x = 5^{5.1}$

TTA : 34 Seconds

- A) 5.4
C) 5.6
E) 5.3
- B) 5.2
D) 5.5

108. What will come in place of question mark '?' in the following number question? $14\% \text{ of } 800 + 37\% \text{ of } 300 = 45\% \text{ of } 600 - ?$

TTA : 46 Seconds

- A) 76
C) 36
E) 99
- B) 47
D) 55

109. What approximate value should come in place of question mark ? in the following question? $31.87 + 87.80 - 55.11 = 12.84 \times ? - 25.88$

TTA : 40 Seconds

- A) 7
C) 10
E) 3
- B) 4
D) 9

110. Directions: Determine the approximate value of '?' in the following question. (You are not expected to calculate the exact value) $69.90 \div 2.15 + 35.20 = 59.79 \div ? + 39.91$

TTA : 29 Seconds

- A) 5
C) 7
E) 8
- B) 1
D) 2

111. What will come in place of question mark (?) in the following question?

$$3^{(2/3)} \times 3^{(1/3)} \times 3 = 9^{(?)}$$

TTA : 31 Seconds

- A) 1/3
C) 2/3
E) 2
- B) 1
D) 1/2

112. What approximate value should come in place of the question mark (?) in the following questions?

$$18.96 + (33.33/11.11) \times (22.22/3.33) - 9.01 = ?$$

TTA : 46 Seconds

- A) 32
C) 76
E) 56

- B) 45
D) 22

113. What should come in place of the question mark '?' in the following question?

$$48 \div \left[\left\{ (402 - 398) + 5\frac{3}{5} \right\} \div \frac{6}{5} \right] = ?$$

TTA : 42 Seconds

- A) 6
C) 8
E) None of these
- B) 5
D) 3

114. What will come in place of question mark '?' in the following question? $64^{12} \div 4^{18} = 64^?$

TTA : 40 Seconds

- A) 9
C) 12
E) 7
- B) 3
D) 6

115. What will come in place of question mark (?) in the following question?

$$19\% \text{ of } 900 + 34\% \text{ of } 400 = ?^2 + 18$$

TTA : 40 Seconds

- A) 45
C) 17
E) 23
- B) 29
D) 27

116. What value should come in the place of question mark (?) in the following question?

$$16\% \text{ of } 1250 + 64\% \text{ of } 625 = 1400 - ?\% \text{ of } 5000$$

TTA : 69 Seconds

- A) 12
C) 32
E) 48
- B) 26
D) 16

117. What should come in place of question mark '?' in the following number series? 84, 177, 346, 699, ?

TTA : 97 Seconds

- A) 1269
C) 1392
E) 1092
- B) 1246
D) 1400

118. What should come in place of question mark '?' in the following question?

$$\left(\frac{3}{4} \times \frac{5}{6} \right) \times \left(\frac{16}{15} \times \frac{45}{2} \right) = 144 + 9\frac{5}{5} - ?$$

TTA : 68 Seconds

- A) 159
C) 139
E) 160
- B) 199
D) 141

119. Find out the approximate value which should replace the question mark (?) in the following question.

$$449.92\% \times 250.102 - \frac{4002.33 \times 1.98}{19.89} = ?$$

TTA : 51 Seconds

- A) 500
C) 600
E) 725
- B) 120
D) 200

120. Directions: Determine the approximate value of '?' in the following question. (You are not expected to calculate the exact value) $(44.96)^2 - (25.02)^2 + (76.02)^2 - (25.98)^2 = ?$

TTA : 62 Seconds

- A) 5000
C) 6500
E) 1000
- B) 3680
D) 2000

121. What will come in place of question mark (?) in the following question?

$$60\% \text{ of } 750 - 30\% \text{ of } 103 + 20\% \text{ of } 200 = ?$$

TTA : 55 Seconds

- A) 444.5
C) 455.6
E) 488.5
- B) 459.1
D) 466.8

122. What approximate value should come in place of the question mark (?) in the following question? $3.07 \times 14.96 + (15.02)^2 - (11.03)^2 = ?$

TTA : 32 Seconds

- A) 160
C) 149
E) 125
- B) 168
D) 172

123. What will come in the place of the question mark '?' in the following question?

$$36 - 2(20 + 12 \div 4 \times 3 - 2 \times 2) + 10 = ?$$

TTA : 42 Seconds

- A) -4
C) 2
E) None of these.
- B) 4
D) -2

124. What will come in the place of the question mark '?' in the following question?

$$67\% \text{ of } \sqrt{676} \div 0.01 = ? + 577$$

TTA : 57 Seconds

- A) 1163
C) 1165
E) 1264
- B) 1267
D) 1168

125. What should come at the place of '?' in the following question? $\sqrt{144} \times \sqrt{81} - (6)^2 = ? + (8)^2$

TTA : 24 Seconds

- A) 6
C) 10
E) 16
- B) 8
D) 12

126. What should come at the place of '?' in the following question?

$$12^2 - ? = \sqrt{784}$$

TTA : 31 Seconds

- A) 126
C) 125
E) 120
- B) 136
D) 116

127. What should come at the place of '?' in the following question?

$$2^3 \times 3^2 \div (90 \div ?) = \sqrt{64}$$

TTA : 36 Seconds

- A) 10
C) 20
E) 18
- B) 12
D) 15

128. What approximate value should come in place of the question mark (?) in the following question?

$$\sqrt[3]{7.9} \times (4.03)^2 - 12.04 = ?$$

TTA : 18 Seconds

- A) 18 B) 19
 C) 20 D) 21
 E) 22

129. What will come in place of question mark (?) in the following question?

$$1903 \div 11 + 333 = ?$$

TTA : 26 Seconds

- A) 508 B) 506
 C) 570 D) 521
 E) None of these

130. What will come in place of question mark (?) in the following question?

$$8^2 + (7^2 - 20) \times 5 = ?$$

TTA : 21 Seconds

- A) 209 B) 112
 C) 118 D) 120
 E) None of these

131. Directions: What will come in place of the question mark (?) in the following questions?

$$\sqrt{8} + 2\sqrt{32} - 3\sqrt{128} + 4\sqrt{50} = ?$$

Given $\sqrt{2} = 1.414$.

TTA : 83 Seconds

- A) 8.484 B) 8.526
 C) 8.426 D) 8.876
 E) 8.672

132. If $n + \frac{2}{3}n + \frac{1}{2}n + \frac{1}{7}n = 97$, then the value of n is

TTA : 56 Seconds

- A) 40 B) 42
 C) 44 D) 46
 E) 48

133. What will come in place of question mark '?' in the following question?

$$0.5 \times 5 + 0.25 \times 0.5 + 0.5 \times 4 + 0.5 \times 0.75 = ?$$

TTA : 50 Seconds

- A) 5 B) 10
 C) 15 D) 20
 E) 25

134. What value should come in place of the question mark '?' in the following question? $120 \div x = 14 \times 6 - 4^3$

TTA : 24 Seconds

- A) 4 B) 6
 C) 12 D) 8
 E) 10

135. What approximate value should come in the place of question mark (?) in the following question?

$$(1875.96 \div 27.98) - (671.92 \div 55.96) = ?$$

TTA : 64 Seconds

- A) 51 B) 45
 C) 55 D) 32
 E) 37

136. What approximate value should come in the place of question mark (?) in the following question?

$$\{44.95 - (16.97 \times 2.93 - 2.99 \times 1.92)\} = ?$$

TTA : 27 Seconds

- A) 4 B) 0
 C) -4 D) 7
 E) -7

137. What approximate value should come in the place of question mark (?) in the following question?

$$[(1279.98)^2 \div 32.23 \times 23.94] \div 47.98 = ?^2$$

TTA : 78 Seconds

- A) 120 B) 96
 C) 150 D) 84
 E) 160

138. What approximate value should come in the place of question mark (?) in the following question?

$$851.99 - 12.93 \times 7.98 - 101.88 \times 2.93 - 0.91 = ?^2$$

TTA : 51 Seconds

- A) 17 B) 31
 C) 21 D) 29
 E) 19

139. What approximate value should come in the place of question mark (?) in the following question?

$$383.9 \div 1.92^5 \times 2.93 + 7.88 = ?$$

TTA : 33 Seconds

- A) 27 B) 38
 C) 52 D) 44
 E) 61

140. What approximate value should come in the place of question mark (?) in the following question?

$$4.95^2 + 19.92 \times 3.94 - \sqrt{255.9} = ?$$

TTA : 34 Seconds

- A) 89 B) 59
 C) 78 D) 97
 E) 38

141. What approximate value should come in place of the question mark (?) in the following question?

$$(\sqrt{63.99}) \times 149.99\% - 175.99 \div 22.22 = ?$$

TTA : 41 Seconds

- A) 4 B) 6
 C) 2 D) 8
 E) 12

142. What approximate value should come in place of the question mark (?) in the following question?

$$(76.87 \times 10.99 \div 6.97 + 1.99) \div \sqrt[3]{26.99} = ?$$

TTA : 45 Seconds

- A) 35 B) 39
 C) 41 D) 53
 E) 49

143. What approximate value should come in place of question mark (?) in following question?

$$3.99 \times 11.895 + \sqrt{225} - ? = 13$$

TTA : 23 Seconds

- A) 38 B) 50
 C) 54 D) 35
 E) 31

144. What approximate value should come in place of question mark (?) in following question?

$$4.89 \times 20.19 \div 9.99 = ? - 4$$

TTA : 18 Seconds

- A) 14 B) 10
 C) 15 D) 19
 E) 20

145. $(16\% \text{ of } 500) \div (? \% \text{ of } 200) = 4$

TTA : 25 Seconds

- A) 10 B) 12
 C) 14 D) 13
 E) 15

146. $\frac{40 \times 2 \div 4^2 \times 3}{90 \div 5 \times 2}$

TTA : 41 Seconds

- A) 3/8 B) 5/12
 C) 4/7 D) 8/9
 E) 9/11

147. $\frac{1}{17} \left[2\frac{3}{4} + 3\frac{5}{8} \right]$

TTA : 33 Seconds

- A) 2/8 B) 3/8
 C) 5/8 D) 6/8
 E) 9/8

148. What value should come in place of the question mark '?' in the following question?

$$\sqrt{81 + ? + 95} = 16$$

TTA : 29 Seconds

- A) 90 B) 70
 C) 60 D) 80
 E) 110

149. What value should come in place of the question mark '?' in the following question? $256 \div 2^3 \times ? = 16\% \text{ of } 3000$

TTA : 35 Seconds

- A) 10 B) 30
 C) 20 D) 15
 E) 12

150. Find out the approximate value which should replace the question mark (?) in the following question. $1/7.99 + 1/11.96 - 1/3.94 + 1/? = 0$

TTA : 55 Seconds

- A) 24 B) 26
 C) 34 D) 36
 E) 44

151. Directions: Determine the approximate value of '?' in the following question. (You are not expected to calculate the exact value)

$$\sqrt{143} \times \sqrt{323} \div 4.001 = ? \times (3.01)^2$$

TTA : 29 Seconds

- A) 4 B) 3
 C) 8 D) 6
 E) 5

152. Direction: What approximate value will come in place of (x) in the following questions? $67\% \text{ of } 801 - 231.17 = ? - 23\% \text{ of } 789$

TTA : 65 Seconds

- A) 490 B) 440
 C) 540 D) 520
 E) 590

153. What will come in place of question mark '?' in the following question?

$$60\% \text{ of } 80 \div 16 \times 30\% \text{ of } 70 = ?$$

TTA : 31 Seconds

- A) 60 B) 61
 C) 62 D) 63
 E) 65

154. What will come in place of question mark (?) in the following question?

$$21.6 - 18.8 - 3 + 3.8 \times 3 = ?$$

TTA : 46 Seconds

- A) 14.2 B) 12.4
 C) 12.6 D) 12.2
 E) 11.2

155. What should come in place of the question mark '?' in the following equation?

$$8\frac{2}{3} \text{ of } 8\frac{1}{13} = ?$$

TTA : 30 Seconds

- A) 35 B) 105
 C) 90 D) 70
 E) None of these

156. What will come in place of the question mark '?' in the following question?

$$1347 + 254 + 457 - 3382 + 8745 - 5723 = ?$$

TTA : 75 Seconds

- A) 1709 B) 1608
 C) 1702 D) 1698
 E) None of these

157. What will come in place of the question mark '?' in the following question? $1124 + [24 + \{23 - (27 + 6 \times 9) + 91\} + 66.67\% \text{ of } 75] = ?^2 + 270$

TTA : 93 Seconds

- A) 31 B) 32
 C) 33 D) 21
 E) 29

158. What will come in place of the question mark '?' in the following question? $(87.5\% \text{ of } 256) \div 14 + \{(14 \times 8 + 18 - 111) + 2 \times 28\} = ?$

TTA : 83 Seconds

- A) 83 B) 78
 C) 89 D) 91
 E) None of these

159. What value should come in the place of question mark (?) in the following question?

$$8 \div [2 \times 2 - \{14 + (2 \div 4 \times 4) - 13\}] = \frac{3}{4} + ?$$

TTA : 47 Seconds

- A) 16 B) 8
 C) 2 D) 29/4
 E) 11/6

160. Directions: Determine the approximate value of '?' in the following question. (You are not expected to calculate the exact value) $(17.28 \div 0.144)\% \text{ of } [3.5 \times (20 \div 0.5)] = ?^2 - (1.25 \times 0.8)$

TTA : 92 Seconds

- A) 12.50 B) 13
 C) 14.35 D) 16
 E) None of these

161. What will come in place of question mark '?' in the following question? (You do not have to calculate the exact value) $(57.71 \div 3.89) \times 2.22 + 51.17 = 157.69 - ?$

TTA : 49 Seconds

- A) 49 B) 58
 C) 80 D) 78
 E) 37

162. What will come in place of question mark '?' in the following number question? $(757 + 876 - 457) \div 4 = 356 - 31 \times ?$

TTA : 72 Seconds

- | | |
|------|------|
| A) 6 | B) 5 |
| C) 1 | D) 2 |
| E) 8 | |

163. What approximate value should come in place of question mark '?' in the following question?

$$(200.10 \div 49.89) \times 14.80 = 69.15 - ?$$

TTA : 24 Seconds

- | | |
|-------|-------|
| A) 10 | B) 20 |
| C) 30 | D) 40 |
| E) 50 | |

164. Directions: Determine the approximate value of '?' in the following question. (You are not expected to calculate the exact value) $(1.987/4.914) + (4.895/6.958) - (0.999/9.989) = ?$

TTA : 57 Seconds

- | | |
|----------|----------|
| A) 11/10 | B) 21/20 |
| C) 36/35 | D) 51/50 |
| E) 71/70 | |

165. Direction: What should come in place of question mark (?) in the following question? (You do not have to calculate the exact value.)

$$89.898\% \text{ of } 699.89 + 50.002\% \text{ of } 1000.101 - 169.90 = (?)$$

TTA : 36 Seconds

- | | |
|--------|--------|
| A) 460 | B) 960 |
| C) 860 | D) 990 |
| E) 760 | |

166. Direction: What should come in place of question mark (?) in the following question? (You do not have to calculate the exact value.)

$$(?)\% \text{ of } 200 + 12\% \text{ of } 450 = 83$$

TTA : 38 Seconds

- | | |
|-------|-------|
| A) 20 | B) 10 |
| C) 18 | D) 21 |
| E) 15 | |

167. What approximate value should come in place of the question mark (?) in the following question?

$$(45.102)^2 + (20.101)^2 = (?)^2 + (6.007)^3$$

TTA : 56 Seconds

- | | |
|-------|-------|
| A) 47 | B) 67 |
| C) 57 | D) 37 |
| E) 17 | |

168. What approximate value should come in place of question mark ? in the following question?

$$\sqrt{2498} \times \sqrt{626} \div \sqrt{99} = (?)$$

TTA : 50 Seconds

- | | |
|--------|--------|
| A) 115 | B) 125 |
| C) 150 | D) 110 |
| E) 180 | |

169. Direction: What should come in place of question mark (?) in the following question? (You do not have to calculate the exact value.)

$$21.003 \times 39.998 - 209.91 = 126 \times (?)$$

TTA : 32 Seconds

- | | |
|-------|-------|
| A) 15 | B) 25 |
| C) 5 | D) 10 |
| E) 20 | |

170. Direction: What should come in place of the question mark (?) in the following question? (You do not have to calculate the exact value.)

$$\sqrt{899} \times (12.02)^2 + (?) = 5000.01$$

TTA : 34 Seconds

- | | |
|--------|--------|
| A) 680 | B) 660 |
| C) 650 | D) 670 |
| E) 640 | |

171. What should come in place of question mark (?) in the following question?

$$1234 + 2345 = (?) + 3456 - 4567$$

TTA : 39 Seconds

- | | |
|---------|---------|
| A) 4610 | B) 4490 |
| C) 4890 | D) 4690 |
| E) 4640 | |

172. Directions: Determine the approximate value of '?' in the following question. (You are not expected to calculate the exact value) $(5.995)^3 \div (3.1281)^3 \times (1.9988)^2 = ?$

TTA : 34 Seconds

- | | |
|-------|-------|
| A) 16 | B) 24 |
| C) 32 | D) 48 |
| E) 64 | |

173. What will come in place of question mark (?) in the following question?

$$185 + 376 - 120 = 979 - ?$$

TTA : 37 Seconds

- | | |
|--------|--------|
| A) 538 | B) 458 |
| C) 288 | D) 528 |
| E) 568 | |

174. What will come in place of question mark (?) in the following question? $25^7 \times 5^6 = 125 \times 5^4 \times 625^2$

TTA : 67 Seconds

- | | |
|---------|-------|
| A) 17/2 | B) 16 |
| C) 9/2 | D) 5 |
| E) 14 | |

LEVEL 2

175 - 334 Questions

175. What will come in place of question mark '?' in the following question?

$$6\frac{5}{6} \times 5\frac{1}{3} + 10\frac{3}{5} \times 4\frac{1}{2} = ?$$

TTA : 105 Seconds

- | | |
|----------------------|-----------------------|
| A) $84\frac{13}{90}$ | B) $84\frac{1}{9}$ |
| C) $225\frac{1}{90}$ | D) $115\frac{13}{90}$ |
| E) None of these | |

176. What approximate value should come in place of the question mark (?) in the following question?

$$(\sqrt{288.32} \times \sqrt{527.99}) \div 38.903 + 24.8\% \text{ of } 751 = ?$$

TTA : 80 Seconds

- | | |
|--------|--------|
| A) 198 | B) 207 |
| C) 188 | D) 212 |
| E) 178 | |

177. What approximate value should come in the place of question mark '?' in the following question? (You are not expected to calculate the exact value) $1785.78 + 548.82 - 210.89 = ?$

TTA : 40 Seconds

- | | |
|---------|---------|
| A) 2115 | B) 2130 |
| C) 2132 | D) 2124 |
| E) 2135 | |

178. What will come in the place of the question mark '?' in the following question?

$$22^2 + \sqrt{?} = 516$$

TTA : 29 Seconds

- | | |
|------------------|---------|
| A) 1028 | B) 1024 |
| C) 1124 | D) 1128 |
| E) None of these | |

179. What should come in place of the question mark (?) in the following question? (You do not have to calculate the exact value.)

$$\sqrt{2498} \times \sqrt{626} \div \sqrt{99} = ?$$

TTA : 39 Seconds

- | | |
|--------|--------|
| A) 110 | B) 90 |
| C) 200 | D) 160 |
| E) 125 | |

180. What should come in place of the question mark (?) in the following question?

$$15 \times 184 + 27 - 59 = ? + 156/12$$

TTA : 85 Seconds

- | | |
|---------|---------|
| A) 2175 | B) 2517 |
| C) 2715 | D) 3000 |
| E) 2500 | |

181. What approximate value should come in the place of question mark '?' in the following question? (You are not expected to calculate the exact value) $\sqrt{2551} + \sqrt[3]{(2000 -$

$$(16.5)^2) + \sqrt{110.2} \div 3 = ?$$

TTA : 117 Seconds

- | | |
|------------------|-------|
| A) 64 | B) 34 |
| C) 66 | D) 95 |
| E) None of these | |

182. What approximate value should come in the place of question mark '?' in the following question? (You are not expected to calculate the exact value)

$$150\% \text{ of } 454.80 - 30\% \text{ of } 329.7 = 25\% \text{ of } 30\% \text{ of } x$$

TTA : 93 Seconds

- | | |
|---------|---------|
| A) 7020 | B) 7903 |
| C) 7780 | D) 7990 |
| E) 7635 | |

183. What will come in place of question mark '?' in the following question?

$$3/5 \text{ of } 285 \div 9 + 9^2 = ?$$

TTA : 45 Seconds

- | | |
|---------|--------|
| A) 105 | B) 100 |
| C) 19 | D) 1.9 |
| E) 1.71 | |

184. What should come in place of the question mark (?) in the following question?

$$(67 \times 38) \div 40 \times 12 = ?$$

TTA : 67 Seconds

- | | |
|------------------|----------|
| A) 645.28 | B) 760.6 |
| C) 763.8 | D) 825.2 |
| E) None of these | |

185. Find the value of $6 \text{ of } \left\{ \frac{1}{3} + 4\frac{5}{6} - \left(4\frac{2}{3} - 5\frac{1}{3} \right) \right\}$

TTA : 66 Seconds

- | | |
|-------|-------|
| A) 35 | B) 50 |
| C) 46 | D) 40 |
| E) 45 | |

186. What approximate value should come in place of the question mark ? in the following question? (You are not expected to calculate the exact value) $46324 \div 484 = ?$

TTA : 47 Seconds

- | | |
|--------|-------|
| A) 109 | B) 81 |
| C) 96 | D) 47 |
| E) 15 | |

187. What approximate value should come in place of question mark (?) in the following question? $268.875 \div 8.835 \times 24.105 = ?$

TTA : 40 Seconds

- | | |
|---------|--------|
| A) 720 | B) 800 |
| C) 700 | D) 820 |
| E) 1440 | |

188. What approximate value should come in place of question mark '?' in the following question? (You are not expected to calculate the exact value) $67.1 \times 451.89 \div 403 = ?$

TTA : 57 Seconds

- | | |
|--------|--------|
| A) 80 | B) 70 |
| C) 720 | D) 750 |
| E) 75 | |

189. Find the value of

$$\left(36 + 78 \div 52 - 8 \times \frac{3}{16} \right) \times 5 \div 10 = ?$$

TTA : 69 Seconds

- | | |
|------------------|---------|
| A) 18 | B) 36 |
| C) 1/2 | D) 5/16 |
| E) None of these | |

190. What should come in place of question mark (?) in the following question? $56 + 12 \times 0.45 - 3 = ?$

TTA : 45 Seconds

- | | |
|------------------|---------|
| A) 28.5 | B) 47.6 |
| C) 86.6 | D) 58.4 |
| E) None of these | |

191. What approximate value should come in the place of question mark '?' in the following question? (You are not expected to calculate the exact value) $15.5\% \text{ of } 850 + 24.8\% \text{ of } 650 = ?$

TTA : 57 Seconds

- | | |
|--------|--------|
| A) 295 | B) 330 |
| C) 270 | D) 375 |
| E) 220 | |

192. What should come in place of question mark (?) in the following question? $15083 + 25\% \text{ of } ? + 289 = 16385.5$

TTA : 58 Seconds

- | | |
|------------------|---------|
| A) 4044 | B) 4054 |
| C) 4154 | D) 4104 |
| E) None of these | |

193. What should come in place of question mark in the following question? $78 \times 4 \div 13 + 8 - 24 = ?$

TTA : 28 Seconds

- | | |
|-------|------|
| A) 5 | B) 8 |
| C) 7 | D) 9 |
| E) 10 | |

194. What should come in place of the question mark (?) in the following question? $13 \times 119 \div (34 - 22 + 5) + 3 = ?$

TTA : 41 Seconds

- | | |
|--------|--------|
| A) 97 | B) 94 |
| C) 114 | D) 108 |
| E) 102 | |

195. What will come in place of question mark '?' in the following question? $3 - [19 + \{14 - (16 - 3 - 21)\}] = ?$

TTA : 50 Seconds

- | | |
|--------|--------|
| A) -41 | B) -38 |
| C) 38 | D) 40 |
| E) -40 | |

196. What approximate value will come in place of question mark in the following question? $24.082 \times 9.964 \times 23.980 = ?$

TTA : 18 Seconds

- | | |
|---------|---------|
| A) 5720 | B) 5820 |
| C) 5760 | D) 5932 |
| E) 5786 | |

197. 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.)

$$23.001 \times 19.999 \times 8.998 = ?$$

TTA : 32 Seconds

- | | |
|---------|---------|
| A) 4200 | B) 4140 |
| C) 4100 | D) 4000 |
| E) 2500 | |

198. What will come in place of question mark '?' in the following question?

$$81 \div 9 \div 3 \div 3 = ?$$

TTA : 17 Seconds

- | | |
|------------------|-------|
| A) 1 | B) 9 |
| C) 27 | D) 21 |
| E) None of these | |

199. What will come in place of question mark '?' in the following question?

$$\{(3654 + 1346) \times 2\} \div 100 = ?$$

TTA : 30 Seconds

- | | |
|--------|-------|
| A) 0.1 | B) 1 |
| C) 10 | D) 11 |
| E) 100 | |

200. What approximate value will come in place of the question mark '?' in the following questions? (You are not expected to calculate the exact value)

$$(25.67)^2 + 33\frac{1}{3} \text{ of } 540 - (3.99)^3 \times (3245.07 \div 4.95) = ?$$

TTA : 136 Seconds

- | | |
|----------|-----------|
| A) 22860 | B) -22860 |
| C) 21864 | D) -21864 |
| E) 23000 | |

201. What will come in place of question mark (?) in the following question?

$$(56)^2 + (43)^2 - ? = 4700$$

TTA : 54 Seconds

- | | |
|--------|--------|
| A) 295 | B) 556 |
| C) 245 | D) 335 |
| E) 285 | |

202. What approximate value should come in the place of question mark (?) in the following question?

$$818.99 \div 62.93 + 18.9 \times 21.98 = 34.95 \times 19.92 - ?^2 - (9.98)^2$$

TTA : 83 Seconds

- | | |
|-------|-------|
| A) 16 | B) 19 |
| C) 21 | D) 13 |
| E) 26 | |

203. What approximate value should come in the place of question mark (?) in the following question?

$$24.85^2 - 24.97 = ? \times (436.97 \div 18.89 + 777.07 \div 36.7 + 5.89)$$

TTA : 72 Seconds

- | | |
|-------|-------|
| A) 16 | B) 26 |
| C) 34 | D) 12 |
| E) 8 | |

204. What approximate value should come in the place of question mark (?) in the following question?

$$(24.89 \times 8.21) - (11.99 \times 5.96) - 64.85 = ? \times 8.97$$

TTA : 37 Seconds

- | | |
|-------|-------|
| A) 14 | B) 7 |
| C) 26 | D) 19 |
| E) 31 | |

205. What approximate value should come in the place of question mark (?) in the following question?

$$3.94 \times 4.99^2 - 3.13^2 \times 6.97 + 5.96^2 = ? + 23.84$$

TTA : 53 Seconds

- | | |
|-------|-------|
| A) 34 | B) 49 |
| C) 38 | D) 52 |
| E) 29 | |

206. What approximate value should come in the place of question mark (?) in the following question?

$$45574.95 - [5.35 + 6.98 \text{ of } (72.93 \times 96.97 - 23.14 \times 26.87)] = ?$$

TTA : 118 Seconds

- | | |
|--------|--------|
| A) 140 | B) 420 |
| C) 180 | D) 260 |
| E) 350 | |

207. What approximate value should come in the place of question mark (?) in the following question?

$$(73424.95 - 33266.87 - 22417.98 - 17649.90) \times \sqrt{11024.9} = ?$$

TTA : 114 Seconds

- | | |
|---------|---------|
| A) 9540 | B) 9650 |
| C) 9560 | D) 9450 |
| E) 9750 | |

208. What approximate value should come in the place of question mark (?) in the following question?

$$40.04\% \text{ of } 264.85 + (8.9)^3 \times 3.84 - 4847.88 \div 23.84 \times 8.04 = ?$$

TTA : 86 Seconds

- | | |
|---------|---------|
| A) 1358 | B) 1284 |
| C) 1406 | D) 1528 |
| E) 1628 | |

209. What will come in place of question mark '?' in the following question?

$$2 \times 8 + 4 + 42 \div 6 + 3 - 5 = ?$$

TTA : 29 Seconds

- A) 30 B) 25
 C) 35 D) 20
 E) 40

210. What approximate value will come in place of the question mark '?' in the following questions? (You are not expected to calculate the exact value)

$$\frac{\sqrt{5} \times \sqrt{199} \times \sqrt[3]{515}}{(2^8 \times 7^2)^{\frac{1}{2}}} = ?$$

TTA : 70 Seconds

- A) 2 B) 1
 C) 4 D) 3
 E) 6

211. What approximate value should come in place of the question mark (?) in the following question?

$$386.265 + 1.02713 \times 92.18 - 54.711 = ?$$

TTA : 52 Seconds

- A) 462 B) 242
 C) 423 D) 234
 E) 244

212. What approximate value will come in place of the question mark '?' in the following question? (You are not expected to calculate the exact value)

$$(459.04 \div 21.01) \times 8.99 = ?$$

TTA : 62 Seconds

- A) 165 B) 111
 C) 244 D) 198
 E) 160

213. Directions: What will come in place of the question mark (?) in the following questions?

$$\sqrt{259081} + \sqrt{13456} = 25 \times ?$$

TTA : 77 Seconds

- A) 24 B) 38
 C) 42 D) 55
 E) 25

214. What should come in the place of question mark '?' in the following question?

$$\frac{15}{2} - \left[? \div \left\{ \frac{5}{4} - \frac{1}{2\left(\frac{3}{2} - \frac{1}{3} - \frac{1}{6}\right)} \right\} \right] = \frac{9}{2}$$

TTA : 76 Seconds

- A) 2.25 B) 4.50
 C) 3.25 D) 5.50
 E) None of These

215. What should come in the place of question mark '?' in the following question?

$$\frac{\frac{13}{4} - \frac{4}{5} \times \frac{5}{6}}{\frac{13}{3} \div \frac{1}{5} - \left(\frac{3}{10} + \frac{106}{5} \right)} = \frac{31}{?}$$

TTA : 98 Seconds

- A) 1 B) 2
 C) 3 D) 4
 E) None of These

216. Directions: What approximate value will come in place of the question mark (?) in the following questions? (You are not expected to calculate the exact value) $(52.02^2 - 34.01^2) \div 17.99 \times \sqrt{?} = 1720$

TTA : 85 Seconds

- A) 400 B) 20
 C) 25 D) 625
 E) None of these

217. What approximate value should come in place of the question mark '?' in the following question? (You are not expected to calculate the exact value)

$$(91.87)^2 - (30.58)^2 = ? \times 12.20$$

TTA : 65 Seconds

- A) 122 B) 615
 C) 123 D) 61
 E) 610

218. Directions: What will come in place of the question mark (?) in the following questions?

$$\text{If } \left(\frac{1}{5}\right)^{4x} = 0.0016, \text{ then } 0.55^x = ?$$

TTA : 37 Seconds

- A) 0.552 B) 0.55
 C) 0.555 D) 0.5
 E) None of these

219. What will come in place of question mark '?' in the following question?

$$(8^6 \times 8^4) \div (8^5 \times 8) = 8^9 \times 8^{14} \div 8^?$$

TTA : 53 Seconds

- A) 22 B) 19
 C) 10 D) 23
 E) 20

220. What should come in place of the question mark (?) in the following question?

$$75\% \text{ of } 2640 \div 36 + 4 \times \sqrt{1024} = ?$$

TTA : 71 Seconds

- A) 183 B) 220
 C) 252.25 D) 150
 E) None of these

221. What approximate value should come in place of the question mark (?) in the following question?

$$841.952 \times 1.999 \div 7.014 = ? \times 1.99$$

TTA : 46 Seconds

- A) 135 B) 185
 C) 120 D) 1290
 E) 300

222. What should come in place of question mark (?) in the following question?

$$49\% \text{ of } 2647 + 27\% \text{ of } 7589 = ?$$

TTA : 84 Seconds

- A) 4133.06 B) 3222.6
 C) 2111.06 D) 3346.06
 E) None of these

223. What will come in place of question mark (?) in the following question?

$$64.5\% \text{ of } 800 + 36.4\% \text{ of } 1500 = (?)^2 + 38$$

TTA : 73 Seconds

- A) 99 B) 664
 C) 1024 D) 32
 E) None of these

224. What will come in place of question mark (?) in the following question?

$$36\% \text{ of } 245 - 40\% \text{ of } 210 = 10 - ?$$

TTA : 81 Seconds

- A) 4.2 B) 6.8
 C) 4.9 D) 5.6
 E) None of these

225. What will come in place of question mark (?) in the following question?

$$36\% \text{ of } 245 - 40\% \text{ of } 210 = 10 - ?$$

TTA : **79 Seconds**

- A) 5.8 B) 10.6
 C) 45 D) 22.5
 E) None of these

226. What will come in place of the question mark (?) in the following equation?

$$? \% \text{ of } 1400 - 18\% \text{ of } 750 = 159$$

TTA : **65 Seconds**

- A) 27% B) 29%
 C) 17% D) 21%
 E) None of these

227. What will come in place of question mark (?) in the following question?

$$14.2\% \text{ of } 5500 + 15.6\% \text{ of } ? = 1795$$

TTA : **99 Seconds**

- A) 4580 B) 9870
 C) 4256 D) 6500
 E) None of these

228. What approximate value will come in place of question mark in the following question?

$$17.995 \times 16.005 + 15.999 \times 15.001 = ?$$

TTA : **29 Seconds**

- A) 444 B) 528
 C) 120 D) 666
 E) 612

229. What will come in place of the question mark (?) in the following question?

$$14\% \text{ of } 250 \times ? \% \text{ of } 150 = 840$$

TTA : **78 Seconds**

- A) 15 B) 18
 C) 16 D) 12
 E) None of these

230. What will come in place of the question mark '?' in following equation?

$$3920 \div 16 \times 9 = ? + 684$$

TTA : **64 Seconds**

- A) 2700 B) 1521
 C) 1860 D) 1621
 E) None of these

231. What will come in place of question mark '?' in the following question? $623.15 - 218.82 - 321.43 = ?$

TTA : **63 Seconds**

- A) 89.2 B) 87.9
 C) 88.99 D) 89.9
 E) None of these

232. What should come in place of the question mark '?' in the following question?

$$60\% \text{ of } 25\% \text{ of } 5/6 \text{ th of } ? = 630$$

TTA : **63 Seconds**

- A) 5060 B) 5200
 C) 4880 D) 4500
 E) None of these

233. What will come in place of question mark '?' in the following question? $(1/11) \text{ of } \{(17424)^{1/2} \div (66)^2 \times (3)^3\} = ?^2$

TTA : **91 Seconds**

- A) 4/11 B) 2/27
 C) 3/11 D) 1/27
 E) None of these

234. what will come in place of the question mark (?) in the following question?

$$140\% \text{ of } 320 - ? \% \text{ of } 400 = 25\% \text{ of } 720$$

TTA : **67 Seconds**

- A) 65 B) 68
 C) 62 D) 60
 E) None of these

235. What approximate value should come in place of the question mark (?) in the following questions? (You are not expected to calculate the exact value)

$$42.07 \times 7.998 + (?)^2 = 20^2$$

TTA : **31 Seconds**

- A) 6 B) 12
 C) 32 D) 64
 E) 8

236. What approximate value should come in the place of question mark (?) in the following question?

$$5248 \div 2 \div 3.5 = ?$$

TTA : **60 Seconds**

- A) 747 B) 752
 C) 744 D) 756
 E) 750

237. What will come in place of question mark in the following equation?

$$? \div 32 \times 16 = 284$$

TTA : **42 Seconds**

- A) 572 B) 566
 C) 554 D) 548
 E) None of these

238. What will come in place of question mark in the following question?

$$(5134 \div 17) \div 2 \times \sqrt[3]{9} = ? + 90 \times 2$$

TTA : **74 Seconds**

- A) 277 B) 348
 C) 196 D) 189
 E) None of these

239. What will come in place of question mark in the following equation?

$$0.5 \times 3.9 \div 1.3 = ? + 0.5$$

TTA : **37 Seconds**

- A) 0.01 B) 0.3
 C) 0.2 D) 1.0
 E) None of these

240. What will come in place of question mark in the following equation?

$$283 \times 56 + 252 = 20 \times ?$$

TTA : **56 Seconds**

- A) 800 B) 803
 C) 807 D) 809
 E) None of these

241. What should come in place of question mark (?) in the following question?

$$153 \times 193 + 15552 = ?$$

TTA : 60 Seconds

- A) 41251 B) 43251
 C) 42351 D) 44281
 E) None of these

242. What should come in place of the question mark (?) in the following question?

$$16 - \frac{4}{6} \times \frac{6}{5} \text{ of } 20 \div 4 = ?$$

TTA : 24 Seconds

- A) 21 B) 12
 C) 24 D) 20
 E) None of these

243. What value should come in the place of question mark (?) in the following question? $24\% \text{ of } 6730 = ?$

TTA : 50 Seconds

- A) 1615.2 B) 1619.4
 C) 1613.8 D) 1617.2
 E) None of these

244. Which of the following has the fractions in descending order?

TTA : 50 Seconds

- A) $\frac{5}{7}, \frac{9}{11}, \frac{7}{9}, \frac{3}{5}$ B) $\frac{3}{5}, \frac{5}{7}, \frac{7}{9}, \frac{9}{11}$
 C) $\frac{9}{11}, \frac{7}{9}, \frac{5}{7}, \frac{3}{5}$ D) $\frac{9}{11}, \frac{5}{7}, \frac{3}{5}, \frac{7}{9}$

E) None of these

245. What will come in place of the question mark (?) in the following question?

$$51 + 2 \times 0.35 - 5.70 = ?$$

TTA : 35 Seconds

- A) 97 B) 67
 C) 46 D) 47
 E) None of these

246. What will come in place of question mark (?) in the following question? $3.5 \times (60 \div 2.5) = ?$

TTA : 37 Seconds

- A) 54 B) 84
 C) 116 D) 1002
 E) None of these

247. What will come in place of the question mark (?) in the following question?

$$\sqrt{25 - 12 + 155 + 1} = ?$$

TTA : 24 Seconds

- A) 79 B) 48
 C) 132 D) 13
 E) None of these

248. What will come in place of the question mark (?) in the following equation?

$$\sqrt{210\frac{1}{4}} = ?$$

TTA : 48 Seconds

- A) $\pm 15\frac{1}{2}$ B) $-12\frac{1}{2}$
 C) $14\frac{1}{2}$ D) $13\frac{1}{2}$
 E) None of these

249. What will come in place of the question mark (?) in the following question? $352.085 + 42.791 + 15.505 = ?$

TTA : 38 Seconds

- A) 425.561 B) 410.381
 C) 426.558 D) 410.581
 E) None of these

250. What will come in place of the question mark (?) in the following question? $\sqrt[3]{2809} = ?$

TTA : 26 Seconds

- A) 43 B) 47
 C) 57 D) 53
 E) None of these

251. What will come in place of question mark in the following question? $(43)^2 + 841 = (?)^2 + 1465$

TTA : 55 Seconds

- A) 43 B) 35
 C) 45 D) 125
 E) None of these

252. What should come in place of the question mark (?) in the following question?

$$\sqrt[3]{132651} = ?$$

TTA : 34 Seconds

- A) 51 B) 59
 C) 53 D) 49
 E) None of these

253. What should come in place of the question mark '?' in the following question? $19992 \div 147 \times 7 = ?$

TTA : 60 Seconds

- A) 925 B) 852
 C) 952 D) 895
 E) 955

254. What will come in place of the question mark (?) in the following question?

$$\frac{2}{5} \text{ of } \frac{7}{9} \text{ of } (?) = 294$$

TTA : 54 Seconds

- A) 955 B) 845
 C) 805 D) 745
 E) None of these

255. What should come in place of the question mark (?) in the following question? $199 + 5^3 \div 4 \times 4^2 = ?$

TTA : 77 Seconds

- A) 969 B) 655
 C) 966 D) 799
 E) None of these

256. The arrangement of fractions $5/8, 6/8, 7/9, 11/13$ in ascending order is

TTA : 67 Seconds

- A) $5/8, 6/8, 7/9, 11/13$ B) $6/8, 7/9, 5/8, 11/13$
 C) $11/13, 5/8, 7/9, 6/8$ D) $11/13, 7/9, 6/8, 5/8$
 E) Insufficient data

257. What should come in place of question mark (?) in the following question? $30492 \div \sqrt{?} = 77 \times 12$

TTA : 66 Seconds

- A) 33 B) 1225
 C) 1089 D) 35
 E) None of these

258. What should come in place of the question mark (?) in the following question?

$$\frac{6 \div ? \times 4.5}{(6 \times 5) \div 3} = 0.9$$

TTA : 45 Seconds

- A) 2 B) 6
 C) 10 D) 3
 E) None of these

259. What should come in place of the question mark '?' in the following question? $444 \times 44 \times 4 = ?$

TTA : 49 Seconds

- A) 62694 B) 76294
 C) 78144 D) 89264
 E) None of these

260. What will come in place of the question mark (?) in the following question?

$$\left(999\frac{999}{1000} \times 9 \right) = ?$$

TTA : 67 Seconds

- A) $8993\frac{7}{1000}$ B) $8000\frac{9}{1000}$
 C) $8633\frac{9}{1000}$ D) $8999\frac{991}{1000}$
 E) $8733\frac{990}{1000}$

261. What should come in place of the question mark (?) in the following question? $1056 \times ? = (264)^2$

TTA : 45 Seconds

- A) 65 B) 66
 C) 67 D) 68
 E) None of these

262. What value should come in the place of question mark (?) in the following question? $\sqrt{676} + \sqrt{529} = ?^2$

TTA : 25 Seconds

- A) 7 B) 6
 C) 8 D) 4
 E) None of these

263. What approximate value should come in the place of question mark (?) in the following question?

$$5.99 \times 3.94 + 7.98 \div 1.92 \times 2.99 - 11.99 \div 2.93 \times 4.95 = ?$$

TTA : 37 Seconds

- A) 16 B) 22
 C) 26 D) 32
 E) 12

264. What approximate value should come in the place of question mark (?) in the following question?

$$278.9 + 810.99 - 37.88 \times 5.09 = 17.07 \times ? - 69.21$$

TTA : 69 Seconds

- A) 63 B) 57
 C) 45 D) 39
 E) 72

265. What approximate value should come in the place of question mark (?) in the following question?

$$980.91 \div 8.99 \times 3.94 + 143.94 = 20.91 \times 27.98 - ?$$

TTA : 59 Seconds

- A) 14 B) 18
 C) 8 D) 22
 E) 32

266. Directions: Determine the approximate value of '?' in the following question. (You are not expected to calculate

the exact value) $331.80 \div 3.80 + 47.80 = 41.17\% \text{ of } 400 - ?$

TTA : 61 Seconds

- A) 28 B) 6
 C) 40 D) 15
 E) 33

267. Directions: Determine the approximate value of '?' in the following question. (You are not expected to calculate the exact value) $87.87 \div 22.22 \times 8.88 + 14.09 = 10.11 + ?$

TTA : 31 Seconds

- A) 55 B) 40
 C) 45 D) 30
 E) 60

268. What approximate value should come in place of question mark ? in the following question? (You are not expected to calculate the exact value) $(180.20 - 59.74) \div 40.04 = 79.81 - 61.72 - ?$

TTA : 45 Seconds

- A) 7 B) 15
 C) 18 D) 9
 E) 10

269. What will come in place of question mark '?' in the following question?

$$\left(\frac{13}{27} \times \frac{9}{26} \right) \div \frac{3}{52} \times \frac{2}{9} = ?$$

TTA : 68 Seconds

- A) 52/81 B) 76/9
 C) 52/18 D) 64/9
 E) 9

270. What approximate value should come in place of the question mark (?) in the following question?

$$(25 \times 3.05 + 50.4 \div 24) \times 74.33\% + 24.78\% (311 \div 31) = ?$$

TTA : 84 Seconds

- A) 60 B) 45
 C) 25 D) 35
 E) 29

271. What approximate value should come in place of the question mark (?) in the following question? $(\sqrt{1030} + 27.80) \div 20.04 = 3.96 \times 1.50 - ?$

TTA : 61 Seconds

- A) 6 B) 7
 C) 4 D) 5
 E) 3

272. What approximate value will come in the place of the question mark '?' in the following question?

$$\% \text{ of } 179.98 = \sqrt{(24.03)^2 + (17.99)^2} + (60.02\% \text{ of } 659.96)$$

TTA : 89 Seconds

- A) 60 B) 20
 C) 70 D) 30
 E) 10

273. What will come in place of the question mark '?' in the following question?

$$\sqrt{9409} \times 63 + 748 = ?^3$$

TTA : 85 Seconds

- A) 12 B) 17
 C) 21 D) 23
 E) None of the above

274. What will come in place of question mark (?) in the following question? $11.25 - 2.75 \times (7.66 + 2.34) + 3.35 \times 3 = ?$

- A) 6460 B) 6420
 C) 6320 D) 6630
 E) 6340

290. Directions: What will come in place of the question mark (?) in the following questions?

$$4\frac{6}{37} \times 6\frac{21}{52} \times 14\frac{6}{7} + 1\frac{3}{4} = ?$$

TTA : 87 Seconds

- A) 393.75 B) 397.75
 C) $395\frac{3}{4}$ D) $399\frac{3}{4}$

E) None of these

291. What approximate value should come in place of the question mark (?) in the following question? $(17.002)^3 + (22.99)^3 - (19.99)^3 = ?$

TTA : 89 Seconds

- A) 9080 B) 10080
 C) 8770 D) 9120
 E) 8860

292. What will come in the place of question mark (?) in the following question?

$$4^3 + [(11^2 + 24) + (8^2 \div 4)] = ?$$

TTA : 47 Seconds

- A) 8 B) 225
 C) 2020 D) 145
 E) 9103

293. What should come in place of question mark '?' in the following question? $(25)^{7.5} \times (5)^{2.5} \div (125)^3 = ?$

TTA : 49 Seconds

- A) 5.5 B) 6.5
 C) 4.5 D) 8.5
 E) 9.5

294. What should come in place of question mark (?) in the following question?

$$\{(12)^2 \times (3)^2\} \div (6)^3 + ? = 5 \times 3.4$$

TTA : 57 Seconds

- A) 17 B) 8
 C) 14 D) 10
 E) 11

295. What will come in place of question mark '?' in the following question? $\frac{270}{30} \times \frac{432}{36} + \frac{1}{3} \text{ of } \{1700 \div (506 \div 23 \times 3 - 7^2) - ?\} = 75$

TTA : 137 Seconds

- A) 209 B) 199
 C) 175 D) 225
 E) 190

296. What approximate value should come in the place of question mark '?' in the following question?

$$1441 \div 36 + 2/9 \times 4049 - 125.01 = ?$$

TTA : 89 Seconds

- A) 805 B) 755
 C) 725 D) 715
 E) 815

297. What approximate value will come in the place of the question mark '?' in the following question? $38.11 \times 55.42 - ?^3 + 84.79 \times 14.01 = 37.32 \times 22.35 - 277.87$

TTA : 111 Seconds

- A) 31 B) 16
 C) 27 D) 14
 E) 13

298. What approximate value should come in place of the question mark (?) in the following question?

$$47.88 + 84.07 - 99.95 = 7.86 \times ?$$

TTA : 35 Seconds

- A) 4 B) 3
 C) 8 D) 2
 E) 6

299. What approximate value should come in place of the question mark (?) in the following question?

$$54.86 + 19.98 + (?)^2 = 28.01\% \text{ of } 700$$

TTA : 40 Seconds

- A) 121 B) 11
 C) 10 D) 12
 E) 15

300. What approximate value should come in place of question mark '?' in the following question?

$$1132.757 - 2315.996 - 1753.829 + 2 \times 2846.639 = ?$$

TTA : 77 Seconds

- A) 2746 B) 2757
 C) 2656 D) 2646
 E) None of these

301. What should come in place of question mark '?' in the following question?

$$\frac{9}{5} \times 2\frac{3}{4} \div \frac{5}{8} + \frac{9}{2} \times \frac{5}{7} - \frac{18}{25} = ?$$

TTA : 113 Seconds

- A) $\frac{179}{70}$ B) $\frac{729}{70}$
 C) $\frac{269}{70}$ D) $\frac{169}{70}$

E) None

302. What approximate value should come in place of the question mark '?' in the following question? (You are not expected to calculate the exact value)

$$119.8\% \text{ of } 2419 + 40.03\% \text{ of } 142 = ?$$

TTA : 63 Seconds

- A) 2736 B) 2800
 C) 2960 D) 2546
 E) None of these

303. What approximate value should come in place of the question mark (?) in the following question? (You are not expected to calculate the exact value)

$$29.88\% \text{ of } 5103 - (17.48)^2 + (32.52)^2 = ?$$

TTA : 77 Seconds

- A) 1885 B) 2100
 C) 2283 D) 2139
 E) 2126

304. What will come in place of question mark '?' in the following question? $87.14 + 11.1 + 1.94 = 191.15 - ?$

TTA : 52 Seconds

- A) 100 B) 98.0
 C) 90.97 D) 92
 E) 91.90

305. Directions: Determine the approximate value of '?' in the following question. (You are not expected to calculate the exact value)

$$\frac{(23.01)^2 - (12.92)^2}{(33.92)^2 - (15.98)^2} = ?$$

TTA : 64 Seconds

- A) 1 B) 2
 C) 0.4 D) 0.9
 E) 100

306. What approximate value should come in place of x in the following question? $[17.96 \times (215.87)^{1/3} \div 2.98] = x\%$ of $199.99 + (3.97)^2$

TTA : 42 Seconds

- A) 10 B) 23
 C) 20 D) 17
 E) 19

307. What approximate value should come in place of the question mark (?) in the following question? $(32.99 + 18.02) \div 2.99 + ?^3 = 3^2 + 4^2$

TTA : 37 Seconds

- A) 0 B) 2
 C) 3 D) -2
 E) 4

308. What approximate value should come in place of the question mark (?) in the following question? $(\sqrt{2115.95} \div 23) + (14^2 - 16.01 \times 10.04) - 22 = ?$

TTA : 57 Seconds

- A) 16 B) 18
 C) 10 D) 15
 E) 21

309. What should come in place of the question mark (?) in the following number series?

$$(25)^{6.5} \times (5)^{3.5} \div (125)^{4.5} = 5^?$$

TTA : 47 Seconds

- A) 3 B) 2
 C) 1 D) 0
 E) None of these

310. What will come in the place of question mark (?) in the following question? $34^2 - 25^2 + 18^2 - 9^2 = ? - 15^2$

TTA : 61 Seconds

- A) 991 B) 999
 C) 899 D) 1099
 E) 1199

311. What should come at the place of '?' in the following question? $225 \div 25 \times 21 - 30 = ? + \sqrt{2209} - \sqrt{7744}$

TTA : 82 Seconds

- A) 200 B) 250
 C) 120 D) 150

312. What will come in place of the question mark '?' in the following question?

$$\left(\sqrt{2} + \sqrt{7 - 2\sqrt{10}}\right) = ?$$

TTA : 46 Seconds

- A) $\sqrt{2}$ B) $\sqrt{7}$
 C) $\sqrt{5}$ D) $2\sqrt{5}$
 E) 5

313. What approximate value should come in place of x in the following question? $11\frac{1}{9}\% \text{ of } (29.99)^2 + (7.979)^2 \div (511.98)^{1/3} = -(x)^2 + (11.979)^2$

TTA : 60 Seconds

- A) 11 B) 9
 C) 6 D) 7
 E) 8

314. What approximate value should come in place of x in the following question? $(9.09)^2 \times (26.89)^{1/3} \div 8.99 + (16.97)^2 = x$

TTA : 36 Seconds

- A) 299 B) 343
 C) 316 D) 233
 E) 330

315. What approximate value should come in the place of question mark (?) in the following question?

$$(7.98 + 3.94 - 1.92) \times (16.97 - 11.92) \times 9.91 - 88.99 = ?$$

TTA : 43 Seconds

- A) 383 B) 397
 C) 467 D) 427
 E) 411

316. What approximate value should come in the place of question mark (?) in the following question?

$$2111.99 + 691.92 \times 1.98 - 1111.11 \times 5.05 + 7323.94 \times 7.98 = ?$$

TTA : 94 Seconds

- A) 56333 B) 56353
 C) 56533 D) 55633
 E) 53633

317. What value should come in place of the question mark '?' in the following question?

$$\frac{\sqrt{484} - 525 \div 35}{\sqrt[3]{64} \times 7 - 21} = ?$$

TTA : 59 Seconds

- A) 3 B) -1
 C) -2 D) 1
 E) 2

318. What value should come in place of the question mark '?' in the following question?

$$\frac{[22 + (7 + 3) \div 5] \times 2^8}{4^3} = ?$$

TTA : 64 Seconds

- A) 106 B) 96
 C) 88 D) 132
 E) 68

319. What value should come in place of the question mark '?' in the following question?

$$48 - 55 \div 5 \times 11 + (\sqrt{289}) = ?$$

TTA : 61 Seconds

- A) 15 B) 7
 C) 55 D) - 56
 E) - 44

320. What value should come in place of the question mark (?) in the following question?

$$55\% \text{ of } 6620 + \sqrt[3]{681472} \times (1/11) - 32^2 = ?$$

TTA : 96 Seconds

- A) 2625 B) 2764
 C) 2714 D) 2845
 E) 2645

321. What approximate value should come in place of the question mark (?) in the following question?

$$(16.99) \times (6.01)^2 - (4.99) \times (7.99) = ?$$

TTA : 39 Seconds

- A) 561 B) 572
 C) 471 D) 671
 E) 461

322. What approximate value should come at the place of '?' in the following question? $(456.18 - 345.69) \div 11.10 \times 24$.

$$91 = 443.80 - 328.08 + ?$$

TTA : 54 Seconds

- A) 129 B) 134
 C) 150 D) 110
 E) 146

323. Find out the approximate value which should replace the question mark (?) in the following question.

$$(12.17)^2 + (4.93)^2 \times 4.98 - \sqrt[3]{127} - 6018.18 \div 5.91 = ?^3$$

TTA : 88 Seconds

- A) 10 B) -9
 C) 12 D) 13
 E) 14

324. What approximate value should come in place of the question mark (?) in the following question? $(80)^{1/4} + (4.01)^3 -$

$$71.98 \times 2.02 + (10.98)^2 = ?$$

TTA : 50 Seconds

- A) 48 B) 45
 C) 46 D) 43
 E) 44

325. Find out the approximate value which should replace the question mark (?) in the following question. $(1472.2 \div$

$$23.13)^{1/3} + (71.8 \times 2.05)^{1/2} = (?)^2$$

TTA : 54 Seconds

- A) 5 B) 4
 C) 3 D) 6
 E) 7

326. What will come in place of question mark '?' in the following question? $(12/5)^2 \times (37.5 \times 56) \div (984/41) = ?$

TTA : 103 Seconds

- A) 500 B) 502
 C) 498 D) 496
 E) 504

327. What will come in place of the question mark '?' in the following question? $100 \times 297 \div 33 - 5.2 \times 85 + 432 \div 5.4 \times 2.7$

$$= (?)^2 - 482$$

TTA : 109 Seconds

- A) 33 B) 32
 C) 34 D) 35
 E) 36

328. What will come in place of question mark '?' in the following question?

$$(2\sqrt{2} - 7)^2 + \sqrt{1568} - 21 = (6)^?$$

TTA : 73 Seconds

- A) 1 B) 2
 C) 4 D) 3
 E) None of these

329. What will come in place of question mark '?' in the following question?

$$24.5\% \text{ of } 360 + ? = 21\% \text{ of } 450 + 17\% \text{ of } 340$$

TTA : 105 Seconds

- A) 64.1 B) 82.3
 C) 43.5 D) 10.4
 E) None of these

330. What approximate value should come in place of the question mark (?) in the following question? $1/17 \times \sqrt[3]{4913.28} + 25\% \text{ of } 401\% \text{ of } 300.008 + 1/13.0008 \times \sqrt[3]{2197.0008} = ?$

TTA : 65 Seconds

- A) 302 B) 444
 C) 333 D) 781
 E) 310

331. What approximate value should come in place of the question mark (?) in the following question?

$$\sqrt[3]{726.034 + 888.012 - \sqrt[3]{?}} = 39.97$$

TTA : 66 Seconds

- A) 196 B) 14
 C) 2744 D) 18
 E) 1262

332. What approximate value should come in place of the question mark (?) in the following question? $(5899.10 -$

$$288.70) \div 29.96 = 12.81 \times 11.80 + ?$$

TTA : 63 Seconds

- A) 28 B) 40
 C) 45 D) 31
 E) 25

333. What value should come in place of the question mark (?) in the following question?

$$[5 \times 8 + 60 \div 4 - 9 \times 5 + 2] = ?$$

TTA : 29 Seconds

- A) 6 B) 8
 C) 10 D) 12
 E) 16

334. What should come in place of question mark (?) in the following question?

$$415.25 - 627.10 + 958.55 = ?$$

TTA : 58 Seconds

- A) 747.5 B) 674.7
 C) 750.7 D) 747.9
 E) None of these

LEVEL 3

335 - 401 Questions

335. What will come in the place of the question mark '?' in the following question? $(25)^3 \times (4)^3 - (800)^2 = ?^2$

TTA : 86 Seconds

- A) 360000 B) 60000
 C) 6000 D) 600
 E) None of these

336. What should come in place of the question mark (?) in the following question? $23\% \text{ of } 8040 + 42\% \text{ of } 545 = ?\% \text{ of } 3000$

TTA : 102 Seconds

- A) 71.04 B) 63.54
 C) 69.27 D) 56.17
 E) None of the above

337. What should come in place of the question mark (?) in the following question? $15.8 \times 3 + 8.1 - 21.5 = ? + 14.6$

TTA : 54 Seconds

- A) 19.4 B) 18.4
 C) 20.1 D) 14.9
 E) None of the above

338. What should come in place of the question mark (?) in the following question?

$$3 - \left\{ 2 \text{ of } \left(3\frac{4}{5} - 1\frac{2}{3} \right) \div \frac{33}{15} + (? \% \text{ of } 45) \right\} = 0$$

TTA : 117 Seconds

- A) $2\frac{10}{29}$ B) $2\frac{16}{27}$
 C) $2\frac{106}{297}$ D) $4\frac{106}{297}$

E) None of these

339. If the twice the numerator of a fraction is decreased by 50% and the thrice the denominator is increased by 200%, the resultant fraction is $\frac{141}{170}$. What was the original fraction?

TTA : 99 Seconds

- A) $47/34$ B) $1194/170$
 C) $1269/170$ D) $51/470$

E) None of these

340. Directions: Determine the approximate value of '?' in the following question. (You are not expected to calculate the exact value)

$$(783.81 \div 3.91) - (1.5 \times 3.99) = 170.15 + ?$$

TTA : 55 Seconds

- A) 12 B) 10
 C) 30 D) 20
 E) 8

341. Directions: Determine the approximate value of '?' in the following question. (You are not expected to calculate the exact value)

$$141.79 + (79.02 \times 2.04) = (?)^2 \times 2.90$$

TTA : 48 Seconds

- A) 4 B) 10
 C) 30 D) 12
 E) 20

342. What will come in place of question mark (?) in the following question?

$$\sqrt{13^2 + 28 \div 4 - 3^3 + 107} = (?)^2$$

TTA : 55 Seconds

- A) 2 B) 256
 C) 16 D) 4
 E) None of these

343. What will come in place of the question mark (?) in the following question? $68.032 - 13.108 - 17.096 = ?$

TTA : 52 Seconds

- A) 37.628 B) 38.728
 C) 37.836 D) 35.526
 E) None of these

344. What will come in place of the question mark (?) in the following equation? $(38)^2 + (63)^2 + (?)^2 = 6089$

TTA : 81 Seconds

- A) 26 B) 24
 C) 28 D) 32
 E) None of these

345. What value should come in the place of question mark (?) in the following question? $1682 \div 58 \times ? = 377$

TTA : 104 Seconds

- A) 13 B) 15
 C) 16 D) 14
 E) None of these

346. What will come in place of the question mark (?) in the following question? $(0.45\% \text{ of } 150) \times (3.25\% \text{ of } 240) = ?$

TTA : 106 Seconds

- A) 4.135 B) 5.265
 C) 6.185 D) 9.715
 E) 15.895

347. What approximate value should come in place of question mark (?) in the following question? (You are not expected to calculate the exact value.)

$$8787 \div 77 \times 92 = ? \times 13$$

TTA : 78 Seconds

- A) 720 B) 780
 C) 840 D) 810
 E) 750

348. What should come in place of x in the following question? $(66 + 14)^2 = \sqrt{x}$

TTA : 59 Seconds

- A) 20180000 B) 10240000
 C) 64000000 D) 25600000
 E) None of these

349. What will come in place of the question mark (?) in the following equation? $\sqrt[3]{0.09} = ?$

TTA : 18 Seconds

- A) 0.03 B) 0.003
 C) 0.3 D) 0.0003
 E) None of these

350. What will come in place of the question mark (?) in the following equation? $468.4 \div 20 = ?$

TTA : 32 Seconds

- A) 234.2 B) 23.42
 C) 11.71 D) 2.342
 E) None of these

351. What will come in place of question mark in the following question?

$$\frac{\sqrt{4356} \times \sqrt{?}}{\sqrt{6084}} = 11$$

TTA : 99 Seconds

- A) 529 B) 512
 C) 121 D) 169
 E) None of these

352. What will come in place of the question mark (?) in the following question? $(80 \times 0.40)^3 \div (40 \times 1.6) \times (128)^3 = (2)^? + 7$

TTA : 101 Seconds

- A) 23 B) 11
 C) 12 D) 18
 E) None of these

353. What should come in place of the question mark (?) in the following question? $37\% \text{ of } 450 - ? \% \text{ of } 375 = 76.5$

TTA : 102 Seconds

- A) 14 B) 19
 C) 24 D) 15
 E) None of these

354. What should come in the place of the question mark (?) in the following question? $83\% \text{ of } 1700 + 42\% \text{ of } 2150 = (?)^3 + 117$

TTA : 84 Seconds

- A) 13 B) 14
 C) 16 D) 15
 E) None of these

355. What should come in place of the question mark (?) in the following question? $(8742 \div 188) - 5.5 = \sqrt{(?)}$

TTA : 91 Seconds

- A) 1600 B) 1681
 C) 1764 D) 1521
 E) None of these

356. What will come in place of question mark '?' in the following question?

$$24\% \text{ of } 150 \times 5\% \text{ of } 40 \times 50\% \text{ of } 6.5 = 12.5\% \text{ of } ?$$

TTA : 120 Seconds

- A) 2150 B) 2170
 C) 2260 D) 2160
 E) None of these

357. What will come in place of question mark '?' in the following question?

$$\sqrt{441} - \sqrt{121} = \sqrt{?}$$

TTA : 40 Seconds

- A) 100 B) 120
 C) 110 D) 240
 E) 360

358. What will come in place of the question mark '?' in the following question?

$$\frac{1}{6} + \frac{1}{4} \times \frac{1}{3} \div \frac{1}{5} - \frac{1}{8} \times \frac{1}{2} + \frac{1}{9} = ?$$

TTA : 128 Seconds

- A) 37/72 B) 55/72
 C) 91/144 D) 113/144
 E) 143/144

359. What approximate value should come in place of the question mark (?) in the following question?

$$10.002 \times (13.564)^2 + 14.032 \times 15.087 - 8.563 \times 2.96 = ?$$

TTA : 62 Seconds

- A) 2200 B) 2007
 C) 2190 D) 3090
 E) 5465

360. Directions: Determine the approximate value of '?' in the following question. (You are not expected to calculate the exact value)

$$(81.49 \times 8.88 + 181.09) \div 12.77 = 43.74 + 1.23 \times ?$$

TTA : 64 Seconds

- A) 15 B) 26
 C) 65 D) 13
 E) 2

361. Directions: Determine the approximate value of '?' in the following question. (You are not expected to calculate the exact value) $34.08 + 76.81 + 10.18 = 14.18\% \text{ of } 1199.80 - ?$

TTA : 59 Seconds

- A) 39 B) 47
 C) 42 D) 57
 E) 75

362. Directions: Determine the approximate value of '?' in the following question. (You are not expected to calculate the exact value) $(311.85 \div 7.91) + 70.80 = 33.11 \times 3.90 - ?$

TTA : 68 Seconds

- A) 11 B) 22
 C) 27 D) 15
 E) 23

363. Directions: Determine the approximate value of '?' in the following question. (You are not expected to calculate the exact value) $182.20 + 77.80 - 70.89 = 18.75 \times 8.88 + ?$

TTA : 63 Seconds

- A) 11 B) 45
 C) 18 D) 21
 E) 23

364. What should come in place of question mark '?' in the following question?

$$[1729 \div (5^3 \times 2^3 + 3^3 \div 3^{-3}) + 1729] = (39 - 390) \div 1.3 + ? \times 10^2$$

TTA : 121 Seconds

- A) 18 B) 19
 C) 20 D) 22
 E) 21

365. What will come in place of question mark '?' in the following question? $\left(\frac{28}{5} \text{ of } \frac{25}{7}\right) \text{ of } \frac{11}{10} = 57 - \frac{?}{2}$

TTA : 66 Seconds

- A) 80 B) 110
 C) 130 D) 140
 E) 70

366. .What will come in place of question mark '?' in the following question?

$$5\frac{1}{6} - 3\frac{4}{9} + ? = \frac{7}{3} \times 4\frac{1}{6}$$

TTA : 80 Seconds

- A) 8 B) 9
 C) 7 D) 6
 E) 4

367. What will come in place of question mark (?) in the following question?

$$25.5\% \text{ of } 1500 + 3.2\% \text{ of } 1800 = (?)^2 \times 15$$

TTA : 101 Seconds

- A) $\sqrt{21.34}$ B) $\sqrt{24.12}$
 C) $\sqrt{27.44}$ D) $\sqrt{29.34}$
 E) None of these

368. Directions: What will come in place of the question mark (?) in the following questions?

$$(50)^2 - \sqrt{625} = ?$$

TTA : 39 Seconds

- A) 2450 B) 2475
 C) 2500 D) 2525
 E) None of these

369. Directions: What will come in place of the question mark (?) in the following questions?

$$? = (2.5)^3 + (1.5)^3 / (2.5)^3 - (1.5)^3$$

TTA : 72 Seconds

- A) 3/5 B) 6233/2000
 C) 6233/1000 D) 6233/500
 E) 6533/500

370. What should come in place of the question mark (?) in the following questions?

$$\sqrt{30976} \times \sqrt{2401} - (79)^2 = (?)^2 + (43)^2 + 5$$

TTA : 206 Seconds

- A) 27 B) 33
 C) 34 D) 28
 E) 23

371. What will come in place of question mark '?' in the following question? $(4444 \div 44) + (635 \div 25) + (3835 \div 25) = ?$

TTA : 118 Seconds

- A) 280.8 B) 279.8
 C) 279.4 D) 282.8
 E) None of these

372. What will come in place of question mark '?' in the following question?

$$32\% \text{ of } (14\% \text{ of } 1200) = 64\% \text{ of } ?$$

TTA : 56 Seconds

- A) 114 B) 84
 C) 72 D) 64
 E) 1200

373. What will come in place of question mark (?) in the following question?

$$? \% \text{ of } 1100 + 40 \% \text{ of } 680 = 98 \% \text{ of } 600 + 12 \% \text{ of } 300$$

TTA : 74 Seconds

- A) 3.2 B) 32
 C) 55 D) 1.6
 E) 16

374. What will come in place of question mark '?' in the

$$\text{following question? } \left\{ \left(9 + \frac{1}{2} \right) \div \frac{38}{3} \right\} + 1 = \frac{5}{4} + ?$$

TTA : 65 Seconds

- A) 1/2 B) 1/6
 C) 1/4 D) 1/8
 E) 1/10

375. What will come in place of question mark '?' in the following question?

$$4 - 5 \times \frac{1}{5} + 20 = ? - 16$$

TTA : 58 Seconds

- A) 40 B) 28
 C) 39 D) 44
 E) None of these

376. What will come in place of question mark '?' in the

$$\text{following question? } 27 + (15 \times 4 \div 8 \times 6) = \frac{9}{25} \times ?$$

TTA : 71 Seconds

- A) 400 B) 250
 C) 120 D) 200
 E) 100

377. What will come in place of question mark '?' in the following question? $[(6.5)^2 - (1.2)^2] = ?^2 - 8.19$

TTA : 67 Seconds

- A) 15 B) 21
 C) 12 D) 17
 E) 7

378. What should come in place of question mark (?) in the following question? $800 \div \{(76 \div 13 - 5) \text{ of } 2/9\} = ?$

TTA : 77 Seconds

- A) 4948.76 B) 4898.77
 C) 4257.97 D) 4254.54
 E) 4435.65

379. What should come in place of question mark (?) in the following question? (approximately) $6 \times \{(768 + 123 - 6787 \div 17) \text{ of } 4/7\} = ?$

TTA : 100 Seconds

- A) 2200 B) 2400
 C) 1686 D) 1768
 E) None of Above

380. What will come in place of question mark '?' in the following question?

$$62.5\% \text{ of } 40 - 2.5\% \text{ of } 160 = 12.5\% \text{ of } 240 - ?$$

TTA : 82 Seconds

- A) 7 B) 12
 C) 10 D) 9
 E) 5

381. What will come in place of question mark (?) in the following question?

$$14.2 - 0.4 \text{ of } (8.3 - 5.1) + 4.5 \times 2.03 = ?$$

TTA : 89 Seconds

- A) 7.655 B) 34.00
 C) 32.550 D) 22.055
 E) None of the above

382. What should come in place of question mark '?' in the following question?

$$\frac{27}{35} + 7\frac{1}{7} + 5\frac{3}{5} + 14\frac{2}{5} - 7\frac{3}{7} = \frac{?}{35}$$

TTA : 90 Seconds

- A) 717 B) 617
 C) 707 D) 607
 E) None of these

383. What will come in place of question mark '?' in the following question?

$$85.4\% \text{ of } 198600 + 97\% \text{ of } 2346800 = ? + 34\% \text{ of } 23460$$

TTA : 182 Seconds

- A) 2438024 B) 2445780
 C) 3456979 D) 1123878
 E) 2238767

384. What will come in place of question mark '?' in the following question? $7.2\% \text{ of } 800 + 11.5\% \text{ of } 600 = 11^2 + 1.4\% \text{ of } ?$

TTA : 83 Seconds

- A) 100 B) 210
 C) 300 D) 270
 E) 400

385. What approximate value should come in place of the question mark (?) in the following question? $24.63\% \text{ of } 660 + 81\% \text{ of } 900.15 = ? - 63$

TTA : 51 Seconds

- A) 836 B) 957
 C) 713 D) 831
 E) 791

386. The product of $2/3^{\text{rd}}$ of a number and 125% of another number is approximately what percent more or less than the products of the given numbers?

TTA : 72 Seconds

- A) 17% B) 18%
 C) 19% D) 16%
 E) 15%

387. What approximate value should come in place of the question mark (?) in the following question? $33.33\% \text{ of } 288 + 9.09\% \text{ of } \sqrt[3]{1331.22} + 19.12\% \text{ of } \sqrt[4]{624} = ?$

TTA : 65 Seconds

- A) 98 B) 100
 C) 111 D) 222
 E) 333

388. What approximate value should come in place of the question mark (?) in the following question? $1/12.12 \times 4116.23 + 7/15 \times 945.33 + 200\% \text{ of } 1 = ? + 339$

TTA : 74 Seconds

- A) 233 B) 444
 C) 447 D) 555
 E) 232

389. What will come in place of '?' in the following question?

$$\frac{1}{3} + \frac{1}{6} + \frac{1}{8} = ?$$

TTA : 59 Seconds

- A) 12 B) 6
 C) 8 D) 10
 E) 1

390. What will come in place of '?' in the following question?

$$\sqrt{49} + 6^2 = 39 + 10^2 - ?$$

TTA : 45 Seconds

- A) 96 B) 100
 C) 120 D) 92
 E) 88

391. What will come in place of '?' in the following question?

$$3\frac{1}{4} + 5\frac{1}{2} + 7\frac{1}{8} = ?$$

TTA : 64 Seconds

- A) 15.8 B) 16.2
 C) 19.4 D) 18.2
 E) 11.8

392. What will come in place of '?' in the following question?

$$1903 \div 11 + 2331 \div 7 = ?$$

TTA : 50 Seconds

- A) 508 B) 506
 C) 570 D) 521
 E) None of these

393. What will come in place of '?' in the following question?

$$4.5 \times 2 + 18 \times 3 = ? - 120$$

TTA : 42 Seconds

- A) 182 B) 156
 C) 146 D) 177
 E) 183

394. What will come in place of question mark '?' in the following question? $\sqrt[3]{4.913 \div 0.085} \times 7.8 + 23\% \text{ of } 1250 \div 23 = ? \text{ of } 337$

TTA : 108 Seconds

- A) 50
 C) 0.65
 E) 0.75

- B) 65
 D) 0.5

395. What will come in place of question mark '?' in the following question?

$$45\% \text{ of } \sqrt{(255 \div 34 \times 146 - 6)} + \frac{7}{12} \text{ of } (5.4)^2 = ?$$

TTA : 135 Seconds

- A) 35.86
 C) 33.86
 E) 36.85

396. What will come in place of question mark '?' in the following question?

$$[(23 \times 2^2 \times 24^2)] \div (2 \times \sqrt{1296}) = (3)^? + 7$$

TTA : 111 Seconds

- A) 4
 C) 2
 E) None of these

397. What approximate value should come in the place of question mark (?) in the following question? $639.929 + 31.972 \times 20.891 - 45.951 = \sqrt[4]{?} + 6^4$

TTA : 82 Seconds

- A) 810000
 C) 27000
 E) None of these

398. What will come in place of question mark '?' in the following question? (You do not have to calculate the exact value) $\sqrt{[3992.87 \div 1330.95 \times \sqrt{120.98}]} = (?)^2$

TTA : 54 Seconds

- A) $\sqrt[4]{33}$
 C) $\sqrt{33}$
 E) None of these

399. What will come in place of question mark (?) in the following question? $\frac{2^4 \times 3^2 \div 4^2 + 6}{5^2 \times 2^2 - 2} = ?$

TTA : 61 Seconds

- A) $17/80$
 C) $15/98$
 E) None of these

400. Direction: What should come in place of question mark (?) in the following question? (You do not have to calculate the exact value.)

$$(34.978)^2 - [(46.0501)^2 \div (23.101)] + 13.905^2 = (?)^2 - 39.806$$

TTA : 91 Seconds

- A) 47
 C) 57
 E) 17

401. Direction: What should come in place of question mark (?) in the following question? (You do not have to calculate the exact value.)

$$(59.91\% \text{ of } 1649.97 - 32.02\% \text{ of } 1124.89) \div 62.97 = (?)$$

TTA : 69 Seconds

- A) 40
 C) 50
 E) 10

Simplification

Q. Ans	Correct														
	Skipped														
1 E	5%	29 C	79%	57 B	91%	85 B	90 %	113 A	61%	141 A	90%	169 C	91%		
	42%		16 %		5%		3%		29%		3%		6%		
2 C	88%	30 C	35%	58 A	82%	86 E	95 %	114 D	70 %	142 C	88%	170 A	95%		
	4%		56 %		9%		2%		11%		5%		3%		
3 A	57%	31 B	59%	59 E	81%	87 C	84 %	115 C	94 %	143 B	92%	171 D	89%		
	35 %		20 %		4%		5%		3%		4%		7%		
4 C	29%	32 C	80%	60 B	95%	88 C	82 %	116 D	57 %	144 A	90%	172 C	81%		
	51 %		15 %		2%		13%		35%		5%		4%		
5 E	82%	33 B	68%	61 E	69%	89 A	61 %	117 C	60 %	145 A	96%	173 A	95%		
	9 %		24 %		15%		31%		33%		3%		1%		
6 D	58%	34 D	95%	62 D	74%	90 D	71 %	118 C	80 %	146 B	89%	174 C	63%		
	12 %		3 %		18%		14%		10%		9%		20%		
7 A	68%	35 D	98%	63 C	72%	91 C	94 %	119 E	87 %	147 B	92%	175 A	33%		
	21 %		1 %		13%		1%		9%		6%		44%		
8 A	64%	36 D	88%	64 C	93%	92 A	80 %	120 C	62 %	148 D	77%	176 A	43%		
	28 %		5 %		5%		8%		32%		16%		38%		
9 A	72%	37 D	89%	65 E	81%	93 D	92 %	121 B	85 %	149 D	88%	177 D	87%		
	17 %		2 %		7%		5%		11%		8%		8%		
10 A	28%	38 A	88%	66 A	94%	94 A	90 %	122 C	89 %	150 A	79%	178 B	94%		
	66 %		8 %		1%		2%		5%		17%		3%		
11 A	43%	39 D	84%	67 B	80%	95 A	88 %	123 A	82 %	151 D	82%	179 E	77%		
	23 %		6 %		10%		8%		5%		10%		17%		
12 D	88%	40 D	84%	68 B	83%	96 C	40 %	124 C	82 %	152 A	58%	180 C	77%		
	7 %		10 %		10%		51%		12%		27%		18%		
13 C	85%	41 B	88%	69 E	79%	97 B	90 %	125 B	97 %	153 D	95%	181 C	38%		
	9 %		9 %		10%		4%		0%		3%		38%		
14 A	92%	42 B	96%	70 C	97%	98 C	82 %	126 D	96 %	154 E	69%	182 C	40%		
	4 %		2 %		1%		7%		1%		15%		42%		
15 B	82%	43 D	84%	71 B	76%	99 C	90 %	127 A	93 %	155 D	88%	183 B	93%		
	8 %		6 %		17%		2%		3%		4%		4%		
16 B	92%	44 A	94%	72 D	78%	100 B	61 %	128 C	88 %	156 D	50%	184 C	75%		
	3 %		1 %		12%		27%		10%		23%		10%		
17 C	95%	45 A	87%	73 B	91%	101 C	64 %	129 B	96 %	157 A	20%	185 A	60%		
	3 %		2 %		1%		21%		1%		54%		34%		
18 A	88%	46 A	56%	74 C	42%	102 C	19 %	130 A	97 %	158 D	52%	186 C	73%		
	6 %		16 %		45%		69%		0%		36%		13%		
19 D	71%	47 C	94%	75 C	83%	103 C	81 %	131 A	21 %	159 D	62%	187 A	64%		
	16 %		1 %		6%		8%		73%		33%		16%		
20 D	37%	48 C	95%	76 B	47%	104 B	51 %	132 B	45 %	160 B	26%	188 E	48%		
	55 %		1 %		42%		26%		50%		54%		23%		
21 B	90%	49 D	90%	77 E	86%	105 C	54 %	133 A	59 %	161 D	56%	189 A	54%		
	4 %		4 %		8%		25%		33%		22%		33%		
22 D	93%	50 C	74%	78 C	92%	106 B	95 %	134 B	88 %	162 D	79%	190 D	88%		
	4 %		11 %		3%		4%		7%		11%		3%		
23 C	60%	51 D	58%	79 E	66%	107 C	88 %	135 C	83 %	163 A	95%	191 A	64%		
	17 %		35 %		13%		8%		8%		3%		20%		
24 D	80%	52 B	95%	80 B	57%	108 B	91 %	136 B	96 %	164 E	71%	192 B	76%		
	7 %		2 %		39%		5%		1%		17%		11%		
25 B	74%	53 A	86%	81 E	68%	109 A	63 %	137 E	60 %	165 B	91%	193 B	97%		
	17 %		3 %		13%		18%		30%		1%		1%		
26 C	86%	54 E	68%	82 B	82%	110 D	95 %	138 C	89 %	166 E	82%	194 B	89%		
	11 %		18 %		7%		2%		7%		10%		8%		
27 C	88%	55 B	93%	83 D	91%	111 B	64 %	139 D	93 %	167 A	89%	195 B	78%		
	8 %		1 %		1%		13%		2%		4%		11%		
28 B	66%	56 C	72%	84 E	94%	112 A	85 %	140 A	92 %	168 B	59%	196 C	93%		
	30 %		10 %		3%		6%		3%		29%		3%		

Q.	Ans	Correct		Q.	Ans	Correct		Q.	Ans	Correct		Q.	Ans	Correct		Q.	Ans	Correct	
		Skipped	Skipped																
197	B	94%	1%	225	A	65%	15 %	253	C	84%	8%	281	D	70 %	25%	309	A	64 %	24%
198	A	79%	1%	226	D	73%	10 %	254	E	79%	6%	282	C	87 %	7%	310	B	67 %	17%
199	E	93%	3%	227	D	51%	35 %	255	E	81%	6%	283	B	87 %	4%	311	A	70 %	16%
200	B	62%	26 %	228	B	96%	1 %	256	A	49%	32%	284	D	83 %	9%	312	C	14 %	61%
201	E	76%	18 %	229	C	79%	8 %	257	C	58%	16%	285	B	67 %	27%	313	C	87 %	7%
202	D	75%	14 %	230	B	80%	5 %	258	D	79%	12%	286	E	78 %	9%	314	C	92 %	2%
203	D	89%	4 %	231	E	80%	7 %	259	C	86%	5%	287	D	80 %	12%	315	E	94 %	2%
204	B	97%	1 %	232	E	84%	5 %	260	D	34%	59%	288	A	70 %	2%	316	C	80 %	10%
205	B	81%	4 %	233	C	24%	69 %	261	B	79%	16%	289	E	34 %	27%	317	D	80 %	13%
206	E	61%	29 %	234	E	80%	5 %	262	A	90%	6%	290	B	10 %	82%	318	B	77 %	15%
207	D	78%	13 %	235	E	87%	3 %	263	A	85%	2%	291	A	39 %	40%	319	D	83 %	12%
208	C	84%	7 %	236	E	47%	20 %	264	B	85%	3%	292	B	96 %	3%	320	A	39 %	54%
209	B	97%	1 %	237	E	83%	5 %	265	C	91%	3%	293	D	68 %	22%	321	B	94 %	2%
210	A	55%	24 %	238	E	82%	8 %	266	E	77%	4%	294	E	70 %	16%	322	B	84 %	7%
211	C	69%	21 %	239	D	86%	4 %	267	B	93%	2%	295	B	49 %	39%	323	B	83 %	10%
212	D	88%	6 %	240	A	81%	6 %	268	B	79%	5%	296	E	69 %	11%	324	E	58 %	29%
213	E	16%	75 %	241	E	51%	14 %	269	A	85%	10%	297	D	39 %	48%	325	B	60 %	27%
214	A	17%	73 %	242	B	88%	8 %	270	A	78%	15%	298	A	85 %	8%	326	E	46 %	46%
215	B	23%	66 %	243	A	86%	3 %	271	E	71%	6%	299	B	80 %	10%	327	C	41 %	37%
216	A	57%	21 %	244	C	44%	43 %	272	B	51%	30%	300	B	41 %	47%	328	B	19 %	75%
217	B	71%	14 %	245	C	88%	3 %	273	E	57%	15%	301	B	33 %	50%	329	A	62 %	18%
218	B	14%	80 %	246	B	93%	2 %	274	B	61%	24%	302	C	84 %	5%	330	A	37 %	58%
219	B	65%	31 %	247	D	95%	2 %	275	C	83%	7%	303	C	72 %	17%	331	C	47 %	40%
220	A	65%	20 %	248	C	60%	22 %	276	B	90%	2%	304	C	83 %	4%	332	D	66 %	13%
221	C	88%	7 %	249	B	90%	3 %	277	B	45%	25%	305	C	86 %	8%	333	D	79 %	2%
222	D	42%	39 %	250	D	87%	2 %	278	C	79%	14%	306	A	87 %	5%	334	E	62 %	14%
223	D	73%	12 %	251	B	85%	4 %	279	E	86%	7%	307	B	89 %	4%	335	D	37 %	35%
224	E	51%	11 %	252	A	76%	15 %	280	D	29%	63%	308	A	80 %	11%	336	C	84 %	41%

Q.	Ans	Correct Skipped	Q.	Ans	Correct Skipped	Q.	Ans	Correct Skipped	Q.	Ans	Correct Skipped	Q.	Ans	Correct Skipped	Q.	Ans	Correct Skipped
393	E	92% 3 %															
394	D	11% 77 %															
395	B	13% 77 %															
396	D	60% 23 %															
397	A	24% 46 %															
398	A	22% 35 %															
399	C	77% 16 %															
400	D	58% 30 %															
401	E	66% 16 %															

Get Complete Smart Book

from AMAZON here: <https://amzn.to/3lARyqx>

or



Scan QR Code to buy

LEVEL 1

1 - 174 Questions

Sol 1.

$$5^{3.97} \div 9^{0.9989} = 9 \times ?$$

In this type of question, we are expected to calculate approximate value (not exact value), so we can replace the given numbers by their nearest perfect places which makes the calculation easy.

We can write the given values as:

$$0.9989 \approx 1$$

$$3.97 \approx 4$$

$$\Rightarrow 5^4 \div 9 = 9 \times ?$$

$$\Rightarrow ? = \frac{625}{81} \approx 8$$

Sol 2.

$$1595 \div 25 \times 44.5 = ?$$

$$1600 \div 25 \times 45 = ?$$

$$\Rightarrow ? \approx 64 \times 45$$

$$\Rightarrow ? \approx 2880$$

Sol 3.

Using approximation,

$$\sqrt{5089} - \sqrt{2641} + \sqrt{1186} \approx \sqrt{5041} - \sqrt{2601} + \sqrt{1156} = \\ 71 - 51 + 34 = 54$$

Sol 4.

$$(1/729)^{2/3} \div (1/729)^{1/3} + (1/729)^{-2/3}$$

$$\Rightarrow \{1/9^3\}^{1/3} + 9^2$$

$$\Rightarrow 1/9 + 9^2 = 730/9$$

Sol 5.

$$\Rightarrow (21.98)^2 - (25.02)^2 + (13.03)^2 = ?$$

$$\Rightarrow (22)^2 - (25)^2 + (13)^2 = ?$$

$$\Rightarrow 484 - 625 + 169 = ?$$

$$\therefore 28 = ?$$

Sol 6.

$$\Rightarrow 28.314 - 31.427 + 113.928 = ? + 29.114$$

$$\Rightarrow 110.815 = ? + 29.114$$

$$\therefore ? = 110.815 - 29.114 = 81.701$$

Sol 7.

Follow BODMAS rule to solve this question, as per the order is given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated

$$\Rightarrow [5^3 \div (3 + 1 \div 2 + 3 \div 2)] \div ? - 1 \div 2 = 12$$

$$\Rightarrow [5^3 \div (3 + 0.5 + 1.5)] \div ? - 1 \div 2 = 12$$

$$\Rightarrow [5^3 \div 5] \div ? - 1 \div 2 = 12$$

$$\Rightarrow [125 \div 5] \div ? - 1 \div 2 = 12$$

$$\Rightarrow 25 \div ? - 1 \div 2 = 12$$

$$\therefore ? = 2$$

Sol 8.

Trick:

No need to do calculations. Just observe two things. Firstly, something is being subtracted from 78 which means answer would be less than 78. Secondly, we have to check whether the term in the brackets is negative or positive. It would be negative if 1.95×9.998 would be greater than 24.98 which is not true.

Hence number would be less than 78 and only option 58 is less than 78. Option 1 is the right answer.

Detailed solution:

It can be approximated as $78 - [5 + 3 \text{ of } (25 - 2 \times 10)]$,

Now using BODMAS rule

Follow BODMAS rule to solve this question, as per the order given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$\Rightarrow 78 - [5 + 3 \text{ of } (25 - 20)] \text{, (Simplifying 'multiplication' } 2 \times 10 = 20)$$

$$\Rightarrow 78 - [5 + 3 \times 5] \text{, (Simplifying 'subtraction' } 25 - 20 = 5)$$

$$\Rightarrow 78 - [5 + 3 \times 5] \text{, (Simplifying 'of')}$$

$$\Rightarrow 78 - [5 + 15] \text{, (Simplifying 'multiplication' } 3 \times 5 = 15)$$

$$\Rightarrow 78 - 20 \text{, (Simplifying 'addition' } 5 + 15 = 20)$$

$$\Rightarrow 58 \text{, (Simplifying 'subtraction' } 78 - 20 = 58)$$

\therefore its approximated value is 58

Sol 9.

Approximating values in the given expression:

$$(3.01)^4 \times (2.99)^2 - 23.99 = ? \times (46.99 \times 2.91)$$

Follow BODMAS rule to solve the expression, as per the order given below,

Step - 1 - Parts of an equation enclosed in the 'BRACKETS' must be solved first.

Step - 2 - Any mathematical 'OF' or 'EXPONENTS' must be solved next.

Step - 3 - Next the part of the equation that contains 'DIVISION' and 'MULTIPLICATION' are calculated.

Step - 4 - Last but not least, the parts of the equation that contains 'ADDITION' and 'SUBTRACTION' should be calculated.

Now, the given expression:

$$\Rightarrow 81 \times 9 - 24 = ? \times (47 \times 3)$$

$$\Rightarrow 729 - 24 = ? \times 141$$

$$\Rightarrow 705 \div 141 = ?$$

$$\therefore ? = 5$$

Sol 10.

$$\{[(342)^{0.33} + (360.00)^{0.5}] \div 13.01 = ?$$

Approximating values in the expression:

$$\Rightarrow \left\{ (343)^{\frac{1}{3}} + (361)^{0.5} \right\} \div 13$$

$$\Rightarrow (7 + 19) \div 13$$

$$\Rightarrow 26 \div 13 = 2$$

Sol 11.

$$666.66 + 66.66 + 16 + 0.66 + 0.06 \div 0.001$$

$$= 666.66 + 66.66 + 16 + 0.66 + 60$$

$$= 809.98$$

$$\approx 810$$

Sol 12.

Concept:

Follow BODMAS rule to solve this question, as per the order given below.

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and following BODMAS rule in the bracket.

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next.

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated.

Step - 4: Last but not the least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Calculation:

Given expression is:

$$\Rightarrow (90\% \text{ of } 50 + 50\% \text{ of } 90) \times 10 = (?)^2$$

$$\Rightarrow \left(\frac{90}{100} \times 50 + \frac{50}{100} \times 90 \right) \times 10 = ?^2$$

$$\Rightarrow (45 + 45) \times 10 = (?)^2$$

$$\Rightarrow 900 = (?)^2$$

$$\Rightarrow (?)^2 = (30)^2$$

$$\Rightarrow ? = 30$$

Sol 13.

$$701.02 \approx 700$$

$$490.34 \approx 490$$

$$344.06 \approx 343 (7^3)$$

According to the given information,

$$(701.02\% \text{ of } 490.34) \div 344.06$$

$$= (700\% \text{ of } 490) \div 343$$

$$= \frac{(700 \times 490)}{100 \times 343} = \frac{3430}{343} = 10$$

Sol 14.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1. Parts of an equation enclosed in 'Brackets' must be solved first,

Step - 2. Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3. Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4. Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression:

$$40\% \text{ of } 4500 + 60\% \text{ of } ? = 4200$$

$$\Rightarrow 1800 + 0.6x = 4200$$

$$\Rightarrow 0.6x = 4200 - 1800$$

$$\Rightarrow 0.6x = 2400$$

$$\Rightarrow x = 4000$$

Sol 15.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1-Parts of an equation enclosed in 'Brackets' must be solved first,

Step-2-Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Now, the given expression,

$$\frac{160-44 \times 9 \div 3}{\frac{1}{2} \times 18 \div 9 + 2} = ?$$

$$\Rightarrow \frac{160-44 \times 3}{9 \div 9+2} = ?$$

$$\Rightarrow \frac{160-132}{1+2} = ?$$

$$\Rightarrow \frac{28}{3} = ?$$

$$\Rightarrow ? = 9\frac{1}{3}$$

Sol 16.

We use BODMAS to solve certain parts of the question to get a simplified form.

BODMAS stands for:

B – Brackets

O – Of (this simply stands for multiplication)

D – Division

M – Multiplication

A – Addition

S – Subtraction

The above is the standard order in which a given question is simplified.

LHS:

$$\text{We have OF in the question: } 72\% \text{ of } 2000 = \frac{72}{100} \times 2000 = 1440$$

Hence, modified LHS = 1440 – ?

Equating it to RHS,

$$1440 - ? = 300$$

$$\Rightarrow ? = 1440 - 300 = 1140$$

Sol 17.

$$1675.156 + 12.192 \times 55.871 = ?$$

$$\Rightarrow 1675.156 \approx 1675$$

$$12.192 \approx 12$$

$$55.871 \approx 56$$

Now the given expression will become:

$$\approx 1675 + 12 \times 56$$

$$\approx 1675 + 672$$

$$\approx 2347$$

Sol 18.

$$4341.9823 + 18625.1372 + 6225.1689 + 3361.9218 = ?$$

$$\Rightarrow ? = 32554.2102 \approx 32554$$

Sol 19.

$$(46.05)^2 - (24.9)^2 - (11.9)^2 = ?$$

Here, 46.05 ≈ 46

$$24.9 \approx 25$$

$$11.9 \approx 12$$

Now, the expression will become:

$$\Rightarrow ? \approx 46^2 - 25^2 - 12^2$$

$$\Rightarrow ? \approx 2116 - 625 - 144$$

$$\Rightarrow ? \approx 1347$$

Sol 20.

In this type of question, we are expected to calculate

Approximate value (not exact value), so we can replace the given numbers by their nearest perfect places which makes the calculation easy.

We can write the given values as:

$$1924.2 \approx 1924$$

$$5324.4 \approx 5324$$

$$6827.5862 \approx 6828$$

Now, the given expression:

$$33.5\% \text{ of } 1924.2 + ? \% \text{ of } 5324.4 = 6827.5862$$

$$\Rightarrow \frac{33.5}{100} \times 1924 + \frac{?}{100} \times 5324 = 6828$$

$$\Rightarrow \frac{33.5}{100} \times 1924 + \frac{?}{100} \times 5324 = 6828$$

$$\Rightarrow 644.54 + ? \times 53.24 = 6828$$

$$\Rightarrow ? = \frac{6828 - 644.54}{53.24}$$

$$\Rightarrow ? \approx 116$$

Sol 21.

Follow BODMAS rule to solve this expression, as per the order given below,

Step-1-Parts of an equation enclosed in 'Brackets' must be solved first,

Step-2-Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$420.03 - 21.07 \times 24.98 + ? = 160.23$$

$$\Rightarrow 420 - 21 \times 25 + ? = 160$$

$$\Rightarrow 420 - 525 + ? = 160$$

$$\Rightarrow ? = 160 + 525 - 420$$

$$\Rightarrow ? = 265$$

Sol 22.

Follow BODMAS rule to solve this expression, as per the order given below,

Step-1-Parts of an equation enclosed in 'Brackets' must be solved first,

Step-2-Any mathematical 'Of' or 'Exponent' must be solved next,
Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$8.07 \times 11.02 + \sqrt{120.91} + 3^{3.03} = ?$$

$$\Rightarrow 8 \times 11 + \sqrt{121} + 3^3 = ?$$

$$\Rightarrow 88 + 11 + 27 = ?$$

$$\Rightarrow 126 = ?$$

Sol 23.

In this type of question, we are expected to calculate Approximate value (not exact value), so we can replace the given numbers by their nearest perfect places which makes the calculation easy.

$$189.02 + ? - 74.95 = 23.09^2 - 7.11\% \text{ of } 1398.22$$

Taking approx value, we get

$$\Rightarrow 189 + ? - 75 = 23^2 - 7\% \text{ of } 1400$$

Follow BODMAS rule to solve this expression, as per the order given below,

Step-1-Parts of an equation enclosed in 'Brackets' must be solved first,

Step-2-Any mathematical 'Of' or 'Exponent' must be solved next,
Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$\Rightarrow 114 + ? = 529 - 98$$

$$\Rightarrow ? = 529 - 98 - 114 = 312$$

Sol 24.

$$1280\% \text{ of } 75 \div 30 + ? = 80$$

$$\Rightarrow 960 \div 30 + ? = 80$$

$$\Rightarrow 32 + ? = 80$$

$$\Rightarrow ? = 80 - 32 = 48$$

Sol 25.

$$7\% \text{ of } 750 + \sqrt[3]{729} = 27\% \text{ of } 500 + 30\% \text{ of } 350 + \sqrt{81}$$

$$\Rightarrow ?\% \text{ of } 750 + 9 = 27 \times 5 + 3 \times 35 + 9$$

$$\Rightarrow ?\% \times 750 = 135 + 105$$

$$\Rightarrow ?\% \times 750 = 240$$

$$\Rightarrow ? = 240 \times 100 \div 750 = 32$$

Sol 26.

$$625.12 + 32.07^2 - 48.97 = ?^2$$

$$\Rightarrow 625 + 32^2 - 49 = ?^2$$

$$\Rightarrow 625 + 1024 - 49 = ?^2$$

$$\Rightarrow 1600 = ?^2$$

$$\Rightarrow ? = 40$$

Sol 27.

$$37\% \text{ of } 700 - 39\% \text{ of } 400 = ? - 31\% \text{ of } 300$$

$$\Rightarrow 37 \times 7 - 39 \times 4 = ? - 31 \times 3$$

As all unit digits in options are different, hence we can reach to answer by only calculating unit digits

$$\Rightarrow 7 \times 7 - 9 \times 4 = ? - 1 \times 3$$

$$\Rightarrow ? = 9 - 6 + 3 = 6$$

Hence, answer will be 196

Sol 28.

$$256 \times 2^{-5} \times ? = 2/25 \text{ of } 50 \times 75$$

$$\Rightarrow 2^8/2^5 \times ? = 4 \times 75$$

$$\Rightarrow 8 \times ? = 4 \times 75$$

$$\Rightarrow ? = 75/2 = 37.5$$

Sol 29.

$$(36 + ? + 121)^{1/2} + 26 = 39$$

$$\Rightarrow (36 + ? + 121)^{1/2} = 39 - 26$$

$$\Rightarrow (36 + ? + 121) = 13^2$$

$$\Rightarrow ? + 157 = 169$$

$$\Rightarrow ? = 169 - 157 = 12$$

Sol 30.

$$(4 \times 3)^4 \div (9 \times 16)^3 \times (64 \times 27)^5 = (12)^?$$

$$\Rightarrow 12^4 \div 12^6 \times 12^{15} = 12^?$$

$$\Rightarrow 12^{4-6+15} = 12^?$$

Hence, $? = 4 - 6 + 15$

$$\therefore ? = 13$$

Sol 31.

$$52 \times 48 + 113 \times 87 + 35 \times 25 = ? - \sqrt{196}$$

$$\Rightarrow (50^2 - 2^2) + (100^2 - 13^2) + (30^2 - 5^2) = ? - 14$$

$$\Rightarrow 2500 - 4 + 10000 - 169 + 900 - 25 + 14 = ?$$

$$\Rightarrow ? = 13216$$

Short trick

As all options has different unit digit. Hence, we can find the answer only by calculating unit digit.

$$52 \times 48 + 113 \times 87 + 35 \times 25 = ? - \sqrt{196}$$

$$\Rightarrow 6 + 1 + 5 = ? - 4$$

$$\Rightarrow 12 + 4 = ?$$

$$\Rightarrow ? = 16 = 6 \text{ (unit digit)}$$

Hence, answer will be 13216.

Sol 32.

$$555 - 210 + \sqrt{?} = 19^2 + 27 \times 7 \div 21$$

$$\Rightarrow 345 + \sqrt{?} = 361 + 9$$

$$\Rightarrow 345 + \sqrt{?} = 370$$

$$\Rightarrow \sqrt{?} = 25$$

$$\Rightarrow ? = 625$$

Sol 33.

$$11^2 + 7.5 + 9^3 - 525 = 2 \times ? + 115 - 2.5$$

$$\Rightarrow 121 + (7.5 + 2.5) + 729 - 525 = 2 \times ? + 115$$

$$\Rightarrow 121 + 10 + 204 = 2 \times ? + 115$$

$$\Rightarrow 335 = 2 \times ? + 115$$

$$\Rightarrow 220 = 2 \times ?$$

$$\Rightarrow ? = 110$$

Sol 34.

$$\Rightarrow 57.04 \times 11.05 + 809.7 = ?$$

It can be approximated to,

$$\Rightarrow 57 \times 11 + 810$$

$$\Rightarrow 627 + 810 = 1437$$

Sol 35.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,
Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$(14.90\% \text{ of } 4000) \div 29.96 = ?$$

$$\Rightarrow (15\% \text{ of } 4000) \div 30 = ?$$

$$\Rightarrow 600 \div 30 = ?$$

$$\Rightarrow ? = 20$$

Sol 36.

Follow BODMAS to solve this question, as per the order given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,
Step-3: Next, the parts of the equation that contains 'Division' and 'Multiplication' are calculated,

Step-4: Last but not the least, the parts of the equation that contains 'Addition' and Subtraction' should be calculated.

Given expression,

$$2301 \div 20.01 \times 34.99 + 600.01 = ?$$

$$\Rightarrow ? \approx 2301 \div 20 \times 35 + 600$$

$$\Rightarrow ? \approx 115 \times 35 + 600$$

$$\Rightarrow ? \approx 4625$$

Sol 37.

$$(736 \div 15.96) \times 15 = ?$$

$$46 \times 15 = ?$$

$$? = 690$$

Sol 38.

$$\{444.04 \div 2.001 \times 21.968\} \times 3.99 = ?$$

$$\{222 \times 22\} \times 4 = ?$$

$$4884 \times 4 = ?$$

$$? = 19536$$

Sol 39.

Concept:

Follow BODMAS rule to solve this question, as per the order given below.

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and following BODMAS rule in the bracket.

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next.

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated.

Step - 4: Last but not the least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Calculation:

$$\Rightarrow 25\% \text{ of } 1600 + 17 \times 81 = ?$$

$$\Rightarrow ? = 1777$$

Answer is 1777

Sol 40.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$\Rightarrow [188.701 + 100.39]^{0.5} - 6.99$$

Approximating to the closest integers

$$\Rightarrow (189 + 100)^{0.5} - 7$$

$$\Rightarrow (289)^{0.5} - 7$$

$$\Rightarrow 17 - 7 = 10$$

Sol 41.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1 - Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step - 2 - Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3 - Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4 - Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$\Rightarrow 1999.001 + 789.88 + 444.91 - 30.49 = ?$$

Approximating to the closest integers

$$\Rightarrow 1999 + 790 + 445 - 30 = ?$$

$$\Rightarrow 2789 + 415 = ?$$

$$\therefore ? = 3204$$

Sol 42.

Approximating the numbers in the above expression:

$$\Rightarrow (350 \times 10) \div 7 + 1245 = ?$$

$$\Rightarrow 3500 \div 7 + 1245 = ?$$

$$\Rightarrow 500 + 1245 = ?$$

$$\therefore ? = 1745$$

Sol 43.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$\Rightarrow 4.5 \% \text{ of } 900 + 8.5 = 8^2 - ?$$

$$\Rightarrow \frac{4.5}{100} \times 900 + 8.5 = 8^2 - ?$$

$$\Rightarrow 40.5 + 8.5 = 8^2 - ?$$

$$\Rightarrow 49 = 64 - ?$$

$$\Rightarrow ? = 64 - 49 = 15$$

$$\Rightarrow ? = 15$$

Sol 44.

Follow BODMAS rule to solve this question as per order given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first.

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next.

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated.

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression:

$$405.03 \div 9.08 \times 14.94 = ?$$

$$\Rightarrow 405 \div 9 \times 15 = ?$$

$$\Rightarrow 45 \times 15 = ?$$

$$\Rightarrow ? = 675$$

Sol 45.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated

$$59.89\% \text{ of } 4500 + 39.96\% \text{ of } 6500 - 79.87\% \text{ of } 5500 = ?$$

$$\Rightarrow 60\% \text{ of } 4500 + 40\% \text{ of } 6500 - 80\% \text{ of } 5500 = ?$$

$$\Rightarrow 2700 + 2600 - 4400 = ?$$

$$\Rightarrow 5300 - 4400 = ?$$

$$\Rightarrow ? = 900$$

Sol 46.

$$\Rightarrow 1\frac{3}{4} + 1\frac{5}{6} - 2\frac{1}{8} = ? + 1\frac{1}{12}$$

$$\Rightarrow \frac{7}{4} + \frac{11}{6} - \frac{17}{8} - \frac{13}{12} = ?$$

$$\Rightarrow ? = \frac{7 \times 6 + 11 \times 4 - 17 \times 3 - 13 \times 2}{24}$$

$$\Rightarrow ? = \frac{42 + 44 - 51 - 26}{24}$$

$$\Rightarrow ? = 9/24$$

Sol 47.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and follow BODMAS rule in the bracket,

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Since, we need to find out the approximate value,

So, we can write these values to their nearest integers.

Given expression is

$$\begin{aligned} 96.98 + 709.99 - 142.93 &= 3.98 \times ? \\ \Rightarrow (97 + 710) - 143 &= (4 \times ?) \\ \Rightarrow 807 - 143 &= (4 \times ?) \\ \Rightarrow ? = (807 - 143)/4 &= 664/4 = 166 \end{aligned}$$

Sol 48.

Given expression,
 $16865 + 22473 + 31045 - 70102 = ?$
 $\Rightarrow ? = 70383 - 70102$
 $\Rightarrow ? = 281$

Sol 49.

?% of 450 + 20% of 335 = 251
 $\Rightarrow \frac{?}{100} \times 460 + \frac{20}{100} \times 335 = 251$
 $\Rightarrow \frac{?}{10} \times 46 + 67 = 251$
 $\Rightarrow ? \times 4.6 = 251 - 67 = 184$
 $\Rightarrow ? = 184/4.6 = 40$

Sol 50.

Follow BODMAS rule to solve this question, as per the order given below,

- Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,
 Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,
 Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,
 Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated

$$\Rightarrow 1 + 1 \div (1 \div 1) = 1 + 1 \div 1 = 1 + 1 = 2$$

Now another bracket

$$\begin{aligned} &\Rightarrow [1 + 1 \div (1 + 1 \div (1 \div 1))] \\ &= [1 + 1 \div 2] = 3 \div 2 \text{ Given expression,} \\ &\Rightarrow 1 \div [1 + 1 \div (1 + 1 \div (1 \div 1))] \\ &= 1 \div [3 \div 2] \\ &= 2/3 \\ \therefore \text{Value of the given expression} &= 2/3 \end{aligned}$$

Sol 51.

$$\begin{aligned} &\frac{3}{5} \times \frac{1125}{1228} \times 7 \\ &= 3 \times \frac{225}{1228} \times 7 \\ &= \frac{3 \times 225 \times 7}{1228} \\ &= \frac{225 \times 21}{1228} \\ &= \frac{4725}{1228} = 3.85 = 4 \end{aligned}$$

[Approximately]

Sol 52.

In this type of question, we are expected to calculate Approximate value (not exact value), so we can replace the given numbers by their nearest perfect places which makes the calculation easy.

Now, the given expression:

$$14.995 \times 8.001 \times 20.991$$

$$\approx 15 \times 8 \times 21 = 2520$$

Hence, the required answer is 2520,

Sol 53.

$$\begin{aligned} 21.743 - 32.669 + 15.198 &\\ &= 21.743 + 15.198 - 32.669 \\ &= 36.941 - 32.669 \\ &= 4.272 \end{aligned}$$

Sol 54.

Applying BODMAS rule, the priority is

- Bracket
- Of
- Division

- Multiplication
- Addition
- Subtraction

Given expression is-

$$\begin{aligned} &\Rightarrow 261 \div ? \times 15 + 270 = 405 \\ &\Rightarrow 261 \div ? \times 15 = 135 \\ &\Rightarrow 261 \div ? = 9 \\ &\Rightarrow ? = 261/9 = 29 \end{aligned}$$

Sol 55.

We have

$$\begin{aligned} &48 + 48 \times 1.5 - 59 = ? \\ &\text{As per BODMAS, we divide first, then multiply, then add and then finally subtract.} \\ &\Rightarrow 48 + 72 - 59 = ? \\ &\Rightarrow 120 - 59 = ? \\ &\Rightarrow ? = 61 \end{aligned}$$

Sol 56.

$$\begin{aligned} ? &= 12.5 \times 6.7 \times 4.2 \\ &\Rightarrow ? = 351.75 \end{aligned}$$

Sol 57.

For these kinds of questions, we have to apply BODMAS rule. If many mathematical operators are present in the equation then we will solve them in the order of BODMAS. First B then O then D likewise M, A and S.

Here, B stands for brackets

O stands for orders means power of any number

D stands for divide

M stands for multiplication

A stands for addition

S stands for subtraction

Let the value of number be n:

$$\begin{aligned} &\text{Then, } (16)^9 \div (16)^4 \times (16)^3 = (16)^n \\ &\Rightarrow (16)^5 \times (16)^3 = (16)^n \\ &\Rightarrow (16)^8 = 16^n \end{aligned}$$

Since base of these two numbers are same so we can equate the powers of these two numbers.

$$\Rightarrow n = 8$$

Sol 58.

$$\begin{aligned} &\sqrt{7921 + (?)^2} = 4\% \text{ of } 1000 + 98 \\ &\Rightarrow 89 + (?)^2 = 4/100 \times 1000 + 98 \\ &\Rightarrow (?)^2 = 40 + 98 - 89 \\ &\Rightarrow ? = \sqrt{49} = 7 \end{aligned}$$

Sol 59.

$$2/7 \text{ of } 5/8 \text{ of } 7/9 \text{ of } 6048 = 2/7 \times 5/8 \times 7/9 \times 6048 = 840$$

Sol 60.

Follow BODMAS Rule –

$$\begin{aligned} &\Rightarrow ? = (25/5) \times 15 (5) \div 25 + 75 \\ &= 5 \times (75/25) + 75 \\ &= 5 \times 3 + 75 \\ &= 15 + 75 \\ &= 90 \end{aligned}$$

Sol 61.

Follow BODMAS rule to solve this question, as per the order given below,

- Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,
 Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,
 Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,
 Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression:

$$\begin{aligned} &\Rightarrow (9.979)^3 - (23.99)^2 + 2^5 \\ &\Rightarrow 10^3 - 24^2 + 2^5 = 1000 - 576 + 32 \end{aligned}$$

$$\Rightarrow 456 \approx 450$$

Sol 62.

$$(4576 + 3286 + 5639) \div (712 + 415 + 212) = ?$$

$$\Rightarrow 13501 \div (712 + 415 + 212) = ?$$

$$\Rightarrow 13501 \div 1339 \approx 10$$

Sol 63.

As we know that we are not expected to calculate the exact value so we can replace the given values by their nearest values to make calculation easy.

$$\text{Let, } 34.91 \approx 35, 45.12 \approx 45$$

$$\text{And } 702 \approx 700$$

Now, the given expression becomes:

$$? \approx 35\% \text{ of } 3760 - 45\% \text{ of } 700$$

$$\Rightarrow ? \approx 3760 \times \frac{35}{100} - 700 \times \frac{45}{100}$$

$$\Rightarrow ? \approx 1316 - 315$$

$$\Rightarrow ? \approx 1001 \approx 1010$$

Sol 64.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1 - Parts of an equation enclosed in 'Brackets' must be solved first,

Step - 2 - Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3 - Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4 - Last but not the least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$1679 \div 14.95 \times 5.02 = ?$$

$$\Rightarrow 1680 \div 15 \times 5$$

$$\Rightarrow 112 \times 5 = 560$$

Sol 65.

$$(7921 + 79) + 100 = 8000 + 100$$

$$\therefore \sqrt{8100} = 90$$

Sol 66.

$$\text{Given, } ? - 1936248 = 1635773$$

$$\Rightarrow ? = 1936248 + 1635773$$

$$\Rightarrow ? = 3572021$$

Sol 67.

$$\text{Given, } 986 \times 207 - 986 \times 107$$

Hence taking 986 common

$$\text{We have } 986 \times (207 - 107)$$

$$= 986 \times 100$$

$$= 98600$$

Sol 68.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket-

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not the least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated

$$2639.98 \div 48.08 \times 11.11 = ?$$

$$\Rightarrow 2640 \div 48 \times 11 = ?$$

$$\Rightarrow 55 \times 11 = ?$$

$$\Rightarrow ? = 605$$

Sol 69.

The given expression:

$$15.5\% \text{ of } 580 + 24.8\% \text{ of } 650$$

$$= \left(\frac{155}{1000} \times 580 \right) + \left(\frac{248}{1000} \times 650 \right)$$

$$= 89.9 + 161.2$$

$$= 251.1 \approx 250$$

Sol 70.

Follow BODMAS rule to solve this question, as per the order is given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not the least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated

$$(62 \div 2 - 3) + 27 \times 2 - 33 = ?^2$$

$$\Rightarrow ?^2 = (31 - 3) + 27 \times 2 - 33$$

$$\Rightarrow ?^2 = 28 + 27 \times 2 - 33$$

$$\Rightarrow ?^2 = 28 + 54 - 33$$

$$\Rightarrow ?^2 = 82 - 33$$

$$\Rightarrow ?^2 = 49$$

$$\Rightarrow ? = 7$$

Sol 71.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket-

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not the least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated

$$? \% \text{ of } 49.999 \times 14.96 \% \text{ of } 80.03 = 114.073$$

$$\Rightarrow ? \% \text{ of } 50 \times 15 \% \text{ of } 80 = 114$$

$$\Rightarrow ? \% \text{ of } 50 \times 12 = 114$$

$$\Rightarrow (?/100) \times 50 \times 12 = 114$$

$$\Rightarrow ? \times 6 = 114$$

$$\Rightarrow ? = 19$$

Sol 72.

Given expression:

$$12.8 \times 4.5 \times 2.2 = ?$$

$$\Rightarrow ? = 57.6 \times 2.2$$

$$\Rightarrow ? = 126.72$$

Hence, the required number in place of the question mark is 126.72.

Sol 73.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket, the BODMAS rule must be followed,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not the least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

The given expression is,

$$(25 \times (10 + 5) - 15) \div 6^2$$

$$= (25 \times 15 - 15) \div 6^2$$

$$= (375 - 15) \div 6^2$$

$$= 360 \div 6^2$$

$$= 360 \div 36$$

$$= 10$$

Sol 74.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1-Parts of an equation enclosed in 'Brackets' must be solved first,

Step-2-Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

The given expression is: $\frac{2}{5} \text{ of } \frac{3}{5} \text{ of } \frac{30}{7} \text{ of } \frac{49}{12} \text{ of } 36 - \frac{18}{5} \text{ of } \frac{1}{3}$

The given expression can be rewritten as

$$\begin{aligned}& \left(\frac{2}{5} \times \left(\frac{3}{5} \times \left(\frac{30}{7} \times \left(\frac{49}{12} \times 36 \right) \right) \right) \right) - \left(\frac{18}{5} \times \frac{1}{3} \right) \\&= \left(\frac{2}{5} \times \left(\frac{3}{5} \times \left(\frac{30}{7} \times (49 \times 3) \right) \right) \right) - \left(\frac{6}{5} \right) \\&= \left(\frac{2}{5} \times \left(\frac{3}{5} \times \left(\frac{30}{7} \times (49 \times 3) \right) \right) \right) - \left(\frac{6}{5} \right) \\&= \left(\frac{2}{5} \times \left(\frac{3}{5} \times (30 \times 21) \right) \right) - \left(\frac{6}{5} \right) \\&= \left(\frac{2}{5} \times (3 \times 6 \times 21) \right) - \left(\frac{6}{5} \right) \\&= \left(\frac{2}{5} \times 378 \right) - \left(\frac{6}{5} \right) \\&= \left(\frac{2}{5} \times 378 \right) - \left(\frac{6}{5} \right) \\&= \left(\frac{756}{5} \right) - \left(\frac{6}{5} \right) \\&= \left(\frac{750}{5} \right) = 150\end{aligned}$$

Sol 75.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket, the BODMAS rule must be followed,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next, Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

The given expression is,

$$\begin{aligned}& (200 - 10^2) \div 5 - 2000\% \text{ of } 15 \div 300\% \text{ of } 10 \\&= (200 - 100) \div 5 - 2000\% \text{ of } 15 \div 300\% \text{ of } 10 \\&= 100 \div 5 - (2000/100) \times 15 \div (300/100) \times 10 \\&= 20 - 300 \div 30 \\&= 20 - 10 \\&= 10 = ?\end{aligned}$$

Sol 76.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1-Parts of an equation enclosed in 'Brackets' must be solved first,

Step-2-Any mathematical 'Of' or 'Exponent' must be solved next, Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression:

$$\begin{aligned}& 108 \div 36 \text{ of } \frac{1}{4} + \frac{2}{5} \times 3\frac{1}{4} \\&\Rightarrow 108 \div (36 \times \frac{1}{4}) + \frac{2}{5} \times \frac{13}{4} \\&\Rightarrow 108 \div 9 + \frac{13}{10} \\&\Rightarrow 12 + \frac{13}{10} \\&\Rightarrow \frac{120+13}{10} \\&\Rightarrow \frac{133}{10} = 13\frac{3}{10}\end{aligned}$$

Sol 77.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1-Parts of an equation enclosed in 'Brackets' must be solved first,

Step-2-Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Now, the given expression,

$$512 \times 0.5 = 1024 \div ? \times 4$$

$$\Rightarrow 256/4 = 1024/?$$

$$\Rightarrow ? = 1024/64$$

$$\Rightarrow ? = 16$$

Sol 78.

In this type of question, we are expected to calculate Approximate value (not exact value), so we can replace the given numbers by their nearest perfect places which makes the calculation easy.

We can write the given values as:

$$4005.33 \approx 4000$$

$$19.89 \approx 20$$

$$1.9 \approx 2$$

∴ Now, given expression:

$$4005.33 \div 19.89 \times 1.9$$

$$\approx (4000/20) \times 2$$

$$\approx 200 \times 2$$

$$\approx 400$$

Sol 79.

Given expression,

$$34534 - 84829 + 88888 - 38593$$

$$= 34534 + 88888 - (84829 + 38593)$$

$$= 123422 - 123422$$

$$= 0$$

Sol 80.

Given that,

$$[(13)^2]^3? = 2197$$

$$\Rightarrow [(13)^2]^3? = (13)^3$$

We know that, $(a^m)^n = a^{mn}$

$$\Rightarrow (13)^{2 \times 3 \times ?} = (13)^3$$

$$\Rightarrow (13)^{6 \times ?} = (13)^3$$

Comparing powers on both the sides,

$$6 \times ? = 3$$

$$\Rightarrow ? = 0.5$$

Sol 81.

Concept:

Follow BODMAS rule to solve this question, as per the order given below.

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and following BODMAS rule in the bracket.

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next.

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated.

Step - 4: Last but not the least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Calculation:

Given expression:

$$\Rightarrow 60\% \text{ of } 25\% \text{ of } \frac{5}{6} \text{ th of } ? = 630$$

$$\Rightarrow 0.6 \times 0.25 \times (5/6) \times ? = 630$$

$$\Rightarrow 0.125 \times ? = 630$$

$$\Rightarrow ? = 630/0.125$$

$$(\because 0.125 = 1/8)$$

$$\Rightarrow ? = 5,040$$

Hence, the required answer is 5,040

Sol 82.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$\Rightarrow \frac{9}{13} \text{ of } 2197 + \frac{3}{7} \text{ of } 1155 = ?$$

$$\Rightarrow \frac{9}{13} \times 2197 + \frac{3}{7} \times 1155 = ?$$

$$\Rightarrow 9 \times 169 + 3 \times 165 = ?$$

$$\Rightarrow 1521 + 495 = ?$$

$$\Rightarrow ? = 2016$$

Sol 83.

Given expression is

$$\Rightarrow (?)^2 + 60^2 = 5625$$

$$\Rightarrow (?)^2 + 3600 = 5625$$

$$\Rightarrow (?)^2 = 5625 - 3600$$

$$\Rightarrow (?)^2 = 2025$$

On taking square root

$$\Rightarrow ? = 45$$

Sol 84.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$63 \times 9 \times 14 \div ? = 98$$

$$\Rightarrow (567 \times 14) \div ? = 98$$

$$\Rightarrow 98 = \frac{567 \times 14}{?}$$

$$\Rightarrow ? = \frac{567 \times 14}{98}$$

$$\Rightarrow ? = \frac{7938}{98}$$

$$\Rightarrow ? = 81$$

Sol 85.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1-Parts of an equation enclosed in 'Brackets' must be solved first,

Step-2-Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Now, the given expression:

$$11.7 \times 4.1 - 5.97$$

$$= 47.97 - 5.97$$

$$= 42$$

Sol 86.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket, the BODMAS rule must be followed,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Now, given expression :

$$\Rightarrow 342 \div 6 \times 28 = 1099 + ?$$

$$\Rightarrow 57 \times 28 = 1099 + ?$$

$$\Rightarrow 1596 = 1099 + ?$$

$$\Rightarrow ? = 1596 - 1099$$

$$\Rightarrow ? = 497$$

Sol 87.

Follow BODMAS rule to solve this question, as per the order is given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contains 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contains 'Addition' and 'Subtraction' should be calculated.

Now, the given expression,

$$4 \times ? = 4062 \div 5$$

$$\Rightarrow 4 \times ? = 4062 \div 5$$

$$\Rightarrow 4 \times ? = 812.4$$

$$\Rightarrow ? = 812.4 / 4$$

$$\Rightarrow ? = 203.1$$

Sol 88.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

The given expression:

$$\begin{aligned} & \frac{14}{8} \text{ of } \frac{4}{56} \text{ of } \frac{16}{18} \text{ of } 1134 \\ &= \frac{14}{8} \times \frac{4}{56} \times \frac{16}{18} \times 1134 \\ &= \frac{14 \times 4 \times 16 \times 1134}{8 \times 56 \times 18} \\ &= \frac{14 \times 16 \times 1134}{2 \times 56 \times 18} \\ &= \frac{14 \times 8 \times 1134}{56 \times 18} \\ &= \frac{14 \times 1134}{7 \times 18} \\ &= \frac{2 \times 1134}{18} \\ &= 63 \times 2 \\ &= 126 \end{aligned}$$

Sol 89.

Given expression is,

$$\sqrt[3]{50653} - ? = 19$$

$$\sqrt[3]{37^3} - ? = 19$$

$$\Rightarrow 37 - ? = 19$$

$$\Rightarrow ? = 37 - 19 = 18$$

Hence the answer is 18

Sol 90.

Follow the BODMAS rule to solve the question,

$$345 \div 30 + 450 \div 36 = ? - 12\% \text{ of } 30$$

Any mathematical 'Of' or 'Exponent' must be solved next

$$\Rightarrow 345 \div 30 + 450 \div 36 = ? - [(12/100) \times 30]$$

The parts of the equation that contain 'Division' and 'Multiplication' are calculated

$$\Rightarrow (345/30) + (450/36) = ? - 3.6$$

The parts of the equation that contain 'Addition' and 'Subtraction' should be calculated

$$\Rightarrow 11.5 + 12.5 = ? - 3.6$$

$$\therefore ? = 27.6$$

Sol 91.

$$\Rightarrow 80 + (8 \times 10) \div (180 \div 36) = ?$$

$$\Rightarrow 80 + (80 \times 36)/180 = ?$$

$$\Rightarrow ? = 80 + 16 = 96$$

$$\therefore ? = 96$$

Sol 92.

$$(27.1)^2 + (49.6)^2 - (39.9)^2 = ? + 124.969$$

It can be approximated as

$$(27)^2 + (50)^2 - (40)^2 = ? + 125$$

$$729 + 2500 - 1600 = ? + 125$$

$$1629 = ? + 125$$

$$\therefore ? \approx 1500$$

Sol 93.

4 of 2/3 of 5/9 of 27/50 of 23

$$= 4 \times 2/3 \times 5/9 \times 27/50 \times 23$$

$$= 8/3 \times 5/9 \times 27/50 \times 23$$

$$= 40/27 \times 27/50 \times 23$$

$$= 4/5 \times 23$$

$$= 92/5$$

Sol 94.

Given expression is,

$$\Rightarrow 88.88 + 164.70 - 50.11 = 50.89 \times ?$$

We can write the given values as:

$$\Rightarrow 88.88 \approx 89 \text{ and } 164.70 \approx 165$$

$$\Rightarrow 50.11 \approx 50 \text{ and } 50.89 \approx 51$$

Then,

$$\Rightarrow 89 + 165 - 50 = 51 \times ?$$

$$\Rightarrow 254 - 50 = 51 \times ?$$

$$\Rightarrow 204 = 51 \times ?$$

$$\Rightarrow ? = 204/51$$

$$\therefore ? \approx 4$$

Sol 95.

$$(\text{?} \div 9.97) \times 12.08 = 20.12\% \text{ of } 1319.98$$

By approximation;

$$(\text{?} \div 10) \times 12 = 20\% \text{ of } 1320$$

$$\text{?} \div 10 \times 12 = 264$$

$$\Rightarrow ? = 264 \times 10/12 = 220$$

Sol 96.

$$34.03\% \text{ of } 550.08 \div ? = 297.08 + \sqrt{728.97} - \sqrt{89998}$$

By approximation;

$$\Rightarrow 34\% \text{ of } 550 \div ? = 297 + \sqrt{729} - \sqrt{90000}$$

$$187 \div ? = 297 + 27 - 300 = 24$$

$$\Rightarrow ? = 8 \text{ (approx.)}$$

Sol 97.

$$339.98 \div ? = \sqrt{143.98} + \sqrt{64.02}$$

By approximation;

$$\Rightarrow 340 \div ? = \sqrt{144} + \sqrt{64} = 20$$

$$\Rightarrow ? = 340/20 = 17$$

Sol 98.

$$2^2 = 32.01 \div 128.01 \times 1023.97 \div 7.97$$

By approximation;

$$\Rightarrow 2^2 = 32 \div 128 \times 1024 \div 8 = 32 \div 128 \times 128$$

$$2^2 = 32 = 2^5$$

$$\Rightarrow ? = 5$$

Sol 99.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3- Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4- Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression,

$$2(11.925 \times 6.05) + (5 \times 85.87) = ?$$

$$\Rightarrow 2(12 \times 6) + (5 \times 86) = ?$$

$$\Rightarrow 2 \times 72 + 430 = ?$$

$$\Rightarrow 144 + 430 = ?$$

$$\Rightarrow ? = 574$$

Sol 100.

Follow BODMAS rule to solve this question, as per the order given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contains 'Addition' and 'Subtraction' should be calculated.

$$25.57 + 39.59 + 43.92 = 150\% \text{ of } ? + 34.08$$

$$\Rightarrow 109.08 = 150\% \text{ of } ? + 34.08$$

$$\Rightarrow 150\% \text{ of } ? = 109.08 - 34.08$$

$$\Rightarrow 150\% \text{ of } ? = 75$$

$$\Rightarrow ? = (75/150) \times 100$$

$$\therefore ? = 50$$

Sol 101.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3- Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4- Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$81\% \text{ of } 2300 - 34\% \text{ of } 596 = ?$$

$$\Rightarrow ? = (81/100 \times 2300) - (34/100 \times 596)$$

$$\Rightarrow ? = (81 \times 2300) - (34 \times 596)$$

$$\Rightarrow ? = 1863 - 202.64$$

$$\therefore ? = 1660.36$$

Sol 102.

Follow BODMAS rule to solve this question, as per the order given below,

Step -1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step -2- Any mathematical 'Of' or 'Exponent' must be solved next,

Step -3- Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step -4- Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$\frac{1287}{1645} \times \frac{235}{572} \div 3\frac{15}{16} = ?$$

$$\Rightarrow ? = 1287/1645 \times 235/572 \times 16/63$$

$$\Rightarrow ? = (143/1645) \times (235/143) \times (4/7)$$

$$\Rightarrow ? = (1/329) \times (47/1) \times (4/7)$$

$$\therefore ? = 4/49$$

**Mistake Point**

We do not have to simplify the fraction to simplest form.

Sol 103.

Law of Surds and Indices:

$$1. (a)^m \times (a)^n = a^{(m+n)}$$

$$2. (a)^m \div (a)^n = a^{(m-n)}$$

$$3. (a^m)^n = (a)^{mn}$$

$$4. (a)^{(-m)} = 1/a^m$$

$$5. (a)^0 = 1$$

$$6. (a)^{1/m} = \sqrt[m]{a}$$

Given expression is,

$$64^2 - 36^2 = ? \times 25$$

$$\Rightarrow 4096 - 1296 = ? \times 25$$

$$\Rightarrow 2800 = 25 \times ?$$

$$\therefore ? = 112$$

Sol 104.

$$2.93 \times \sqrt{357} - \sqrt{1850} \times 0.492 = ? \quad \text{---- (I)}$$

Take approximated values

$$\Rightarrow 2.93 \approx 3$$

$$\Rightarrow \sqrt{357} = \sqrt{361} = 19$$

$$\Rightarrow \sqrt{1850} = \sqrt{1849} = 43$$

$$\Rightarrow 0.492 \approx 0.5$$

Putting approximated values in (I)

$$\Rightarrow 3 \times 19 - 43 \times 0.5 = 57 - 21.5 = 35.5$$

$$\therefore ? = 35.5$$

Sol 105.

$$19750.015 \div 979.82 \times 201.04 = ?$$

Approximating the values to the nearest integer:

$$19750 \div 980 \times 201 = ?$$

$$19750 \times (1/980) \times 201 = ?$$

$$20.15 \times 201 = ?$$

$$\therefore ? = 4050.76 \approx 4050$$

Sol 106.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated

$$\sqrt{483.991 + (7.0215)^2} = ? \times 6.0212 - 1.0215^3$$

$$\Rightarrow \sqrt{484 + 7^2} = ? \times 6 - 1^3$$

$$\Rightarrow 22 + 49 = ? \times 6 - 1$$

$$\Rightarrow 71 + 1 = 6 \times ?$$

$$\Rightarrow 72 = 6 \times ?$$

$$\Rightarrow ? = 72/6$$

$$\therefore ? = 12$$

Sol 107.

$$5^{3.5} \times 5^{4.8} \times 5^{2.4} \div 5^x = 5^{5.1}$$

Using the laws of indices,

$$\Rightarrow 5^{(3.5 + 4.8 + 2.4)} \div 5^x = 5^{5.1}$$

$$\Rightarrow 5^{10.7} \div 5^x = 5^{5.1}$$

$$\Rightarrow 5^{(10.7 - x)} = 5^{5.1}$$

On comparing both sides

$$\Rightarrow 10.7 - x = 5.1$$

$$\Rightarrow x = 10.7 - 5.1$$

$$\therefore x = 5.6$$

Sol 108.

Given expression is,

$$\Rightarrow 14\% \text{ of } 800 + 37\% \text{ of } 300 = 45\% \text{ of } 600 - ?$$

$$\Rightarrow (14/100) \times 800 + (37/100) \times 300 = (45/100) \times 600 - ?$$

$$\Rightarrow 14 \times 8 + 37 \times 3 = 45 \times 6 - ?$$

$$\Rightarrow 112 + 111 = 270 - ?$$

$$\Rightarrow 223 = 270 - ?$$

$$\Rightarrow ? = 270 - 223$$

$$\therefore ? = 47$$

Sol 109.

Given expression is,

$$31.87 + 87.80 - 55.11 = 12.84 \times ? - 25.88$$

We can write the given values as:

$$31.87 \approx 32 \text{ and } 87.80 \approx 88$$

$$55.11 \approx 55 \text{ and } 12.84 \approx 13 \text{ and } 25.88 \approx 26$$

Then,

$$\Rightarrow 32 + 88 - 55 = 13 \times ? - 26$$

$$\Rightarrow 120 - 55 = 13 \times ? - 26$$

$$\Rightarrow 65 = 13 \times ? - 26$$

$$\Rightarrow 65 + 26 = 13 \times ?$$

$$\Rightarrow 13 \times ? = 91$$

$$\Rightarrow ? = 91/13$$

$$\therefore ? \approx 7$$

Sol 110.

Given expression is,

$$69.90 \div 2.15 + 35.20 = 59.79 \div ? + 39.91$$

We can write the given values as:

$$69.90 \approx 70 \text{ and } 2.15 \approx 2$$

$$35.20 \approx 35 \text{ and } 59.79 \approx 60 \text{ and } 39.91 \approx 40$$

Then,

$$\Rightarrow 70 \div 2 + 35 = 60 \div ? + 40$$

$$\Rightarrow 35 + 35 = 60 \div ? + 40$$

$$\Rightarrow 70 = 60 \div ? + 40$$

$$\Rightarrow 70 - 40 = 60 \div ?$$

$$\Rightarrow 30 = 60 \div ?$$

$$\Rightarrow ? = 60/30$$

$$\therefore ? \approx 2$$

Sol 111.

Laws of Indices:

$$1. a^m \times a^n = a^{m+n}$$

$$2. a^m \div a^n = a^{m-n}$$

$$3. (a^m)^n = a^{mn}$$

$$4. (a)^{-m} = 1/a^m$$

$$5. (a)^{m/n} = \sqrt[n]{a^m}$$

$$6. (a)^0 = 1$$

$$3^{(2/3)} \times 3^{(1/3)} \times 3 = 9^{(?)}$$

$$\Rightarrow 3^{(2/3 + 1/3 + 1)} = 9^{(?)}$$

$$\Rightarrow 3^2 = 9^{(?)}$$

$$\Rightarrow 9 = 9^{(?)}$$

$$\therefore ? = 1$$

Sol 112.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated

$$18.96 + (33.33/11.11) \times (22.22/3.33) - 9.01 = ?$$

$$\Rightarrow 19 + (33/11) \times (22/3) - 9 = ?$$

$$\Rightarrow 19 + 11 \times 2 - 9 = ?$$

$$\Rightarrow 19 + 22 - 9 = ?$$

$$\Rightarrow ? = 32$$

Sol 113.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first.

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next.

Step - 3: Next, the parts of the equation that contain 'Divison' and 'Multiplication' are calculated.

Step - 4: Last but not the least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression:

$$\Rightarrow 48 \div \left[\left\{ (402 - 398) + 5\frac{3}{5} \right\} \div \frac{6}{5} \right] = ?$$

$$\Rightarrow 48 \div \left[\left\{ (4) + \frac{28}{5} \right\} \div \frac{6}{5} \right] = ?$$

$$\Rightarrow 48 \div \left[\left\{ \frac{20+28}{5} \right\} \div \frac{6}{5} \right] = ?$$

$$\Rightarrow 48 \div \left[\left\{ \frac{48}{5} \right\} \div \frac{6}{5} \right] = ?$$

$$\Rightarrow 48 \div \left[\frac{48}{5} \times \frac{5}{6} \right] = ?$$

$$\Rightarrow 48 \div [8] = ?$$

$$\Rightarrow 6 = ?$$

Sol 114.

$$64^{12}/4^{18} = 4^{36}/4^{18}$$

$$4^{18} = 4^{3 \times 6} = 64^6$$

$$\therefore ? = 6$$

Sol 115.

Given expression is,

$$\Rightarrow 19\% \text{ of } 900 + 34\% \text{ of } 400 = ?^2 + 18$$

$$\Rightarrow \frac{19}{100} \times 900 + \frac{34}{100} \times 400 = ?^2 + 18$$

$$\Rightarrow 19 \times 9 + 34 \times 4 = ?^2 + 18$$

$$\Rightarrow 171 + 136 = ?^2 + 18$$

$$\Rightarrow 307 - 18 = ?^2$$

$$\Rightarrow ?^2 = 289$$

$$\Rightarrow ?^2 = 17^2$$

$$\therefore ? = 17$$

Sol 116.

Given expression is,

$$\Rightarrow 16\% \text{ of } 1250 + 64\% \text{ of } 625 = 1400 - ?\% \text{ of } 5000$$

$$\Rightarrow \frac{16}{100} \times 1250 + \frac{64}{100} \times 625 = 1400 - \frac{?}{100} \times 5000$$

$$\Rightarrow 200 + 400 = 1400 - \frac{?}{100} \times 5000$$

$$\Rightarrow 600 = 1400 - 50 \times ?$$

$$\Rightarrow 50 \times ? = 1400 - 600$$

$$\Rightarrow 50 \times ? = 800$$

$$\Rightarrow ? = 800/50 = 16$$

$$\therefore ? = 16$$

Sol 117.

The pattern of the given series:

$$\Rightarrow 84 \times 2 + 9 = 168 + 9 = 177$$

$$\Rightarrow 177 \times 2 - 8 = 354 - 8 = 346$$

$$\Rightarrow 346 \times 2 + 7 = 692 + 7 = 699$$

$$\Rightarrow 699 \times 2 - 6 = 1398 - 6 = 1392 = ?$$

Sol 118.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,
Step-3- Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4- Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$\Rightarrow \left(\frac{3}{4} \times \frac{5}{6} \right) \times \left(\frac{16}{15} \times \frac{45}{2} \right) = 144 + 9\frac{5}{5} - ?$$

$$\Rightarrow \frac{5}{8} \times 24 = 144 + \frac{50}{5} - ?$$

$$\Rightarrow 5 \times 3 = 144 + 10 - ?$$

$$\Rightarrow 15 = 154 - ?$$

$$\Rightarrow ? = 154 - 15 = 139$$

$$\therefore ? = 139$$

Sol 119.

$$449.92\% \times 250.102 - \frac{4002.33 \times 1.98}{19.89} = ?$$

Take approximate values

$$\Rightarrow 449.92 \approx 450$$

$$\Rightarrow 250.102 \approx 250$$

$$\Rightarrow 4002.33 \approx 4000$$

$$\Rightarrow 1.98 \approx 2$$

$$\Rightarrow 19.89 \approx 20$$

Putting approximated values in the equation

$$\Rightarrow \frac{450}{100} \times 250 - \frac{4000 \times 2}{20}$$

$$\Rightarrow 1125 - 400 = 725$$

$$\therefore ? = 725$$

Sol 120.

$$\Rightarrow (44.96)^2 - (25.02)^2 + (76.02)^2 - (25.98)^2 = ?$$

Take approximate values

$$\Rightarrow 44.96 \approx 45$$

$$\Rightarrow 25.02 \approx 25$$

$$\Rightarrow 76.02 \approx 76$$

$$\Rightarrow 25.98 \approx 26$$

Putting approximated values in the equation

$$\Rightarrow (45)^2 - (25)^2 + (76)^2 - (26)^2$$

Using $a^2 - b^2 = (a+b)(a-b)$, we get

$$\Rightarrow (45+25)(45-25) + (76+26)(76-26)$$

$$\Rightarrow (70 \times 20) + (102 \times 50)$$

$$\Rightarrow 1400 + 5100 = 6500$$

$$\therefore ? = 6500$$

Sol 121.

$$60\% \text{ of } 750 - 30\% \text{ of } 103 + 20\% \text{ of } 200 = ?$$

$$\Rightarrow 450 - 30.9 + 40 = ?$$

$$\Rightarrow 459.1 = ?$$

Sol 122.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$3.07 \times 14.96 + (15.02)^2 - (11.03)^2 = ?$$

$$\Rightarrow 3 \times 15 + 225 - 121 = ?$$

$$\Rightarrow 45 + 225 - 121 = ?$$

$$\Rightarrow 270 - 121 = ?$$

$$\therefore ? = 149$$

Sol 123.

Using BODMAS,

$$\Rightarrow 36 - 2(20 + 3 \times 3 - 2 \times 2) + 10$$

$$\Rightarrow 36 - 2(20 + 9 - 4) + 10$$

$$\Rightarrow 36 - 2(29 - 4) + 10$$

$$\Rightarrow 36 - 2 \times 25 + 10$$

$$\Rightarrow 36 - 50 + 10$$

$$\Rightarrow 46 - 50$$

$$\Rightarrow -4$$

Sol 124.

$$\sqrt{676} \times \frac{67}{100} \div \frac{1}{100} = ? + 577$$

$$\Rightarrow 26 \times \frac{67}{100} \times 100 = ? + 577$$

$$\Rightarrow 1742 = ? + 577$$

$$\Rightarrow ? = 1742 - 577$$

$$\Rightarrow ? = 1165$$

Sol 125.

$$\sqrt{144} \times \sqrt{81} - (6)^2 = ? + (8)^2$$

$$\Rightarrow 12 \times 9 - 36 = ? + 64$$

$$\Rightarrow 108 - 100 = ?$$

$$\Rightarrow ? = 8$$

Sol 126.

$$12^2 - ? = \sqrt{784}$$

$$\Rightarrow 144 - ? = 28$$

$$\Rightarrow ? = 116$$

Hence option 4 is correct.

Sol 127.

$$2^3 \times 3^2 \div (90 \div ?) = \sqrt{64}$$

$$\Rightarrow 8 \times 9 \times (x/90) = 8$$

$$\Rightarrow x = 10$$

Hence option 1 is correct.

Sol 128.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,
 Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,
 Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,
 Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated

$$\sqrt[3]{7.9} \times (4.03)^2 - 12.04 = ?$$

$$\Rightarrow ? = (2^3)^{1/3} \times (16) - 12$$

$$\Rightarrow ? = 2 \times 16 - 12$$

$$\Rightarrow ? = 32 - 12 = 20$$

$$\text{Sol 129. } 173 + 333 = 506$$

Sol 130.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3- Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4- Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is

$$8^2 + (7^2 - 20) \times 5 = ?$$

$$\Rightarrow ? = 64 + (49 - 20) \times 5$$

$$\Rightarrow ? = 64 + 145$$

$$\Rightarrow ? = 209$$

Sol 131.

Given expression,

$$\Rightarrow ? = \sqrt{8} + 2\sqrt{32} - 3\sqrt{128} + 4\sqrt{50}$$

$$\Rightarrow ? = (\sqrt{2} \times \sqrt{4}) + (2 \times \sqrt{16} \times \sqrt{2}) - (3 \times \sqrt{64} \times \sqrt{2}) + (4 \times \sqrt{25} \times \sqrt{2})$$

$$\Rightarrow ? = 2\sqrt{2} + 8\sqrt{2} - 24\sqrt{2} + 20\sqrt{2}$$

$$\Rightarrow ? = 6\sqrt{2}$$

$$\Rightarrow ? = 6 \times 1.414$$

$$\therefore ? = 8.484$$

Sol 132.

Given expression,

$$\Rightarrow n + \frac{2}{3}n + \frac{1}{2}n + \frac{1}{7}n = 97$$

$$\Rightarrow n + \frac{2}{3}n + \frac{9}{14}n = 97$$

$$\Rightarrow n + \frac{55}{42}n = 97$$

$$\Rightarrow \frac{97}{42}n = 97$$

$$\therefore n = 42$$

Sol 133.

$$\Rightarrow ? = (0.5 \times 5 + 0.25 \times 0.5 + 0.5 \times 4 + 0.5 \times 0.75)$$

$$\Rightarrow ? = 2.5 + 0.125 + 2 + 0.375$$

$$\therefore ? = 5$$

Sol 134.

$$120 \div x = 14 \times 6 - 4^3$$

$$120/x = 84 - 64$$

$$120/x = 20$$

$$x = 120/20$$

$$x = 6$$

Sol 135.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and follow BODMAS rule in the bracket,

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Since, we need to find out the approximate value, So, we can write these values to their nearest integers.

Given expression is

$$(1875.96 \div 27.98) - (671.92 \div 55.96) = ?$$

$$\Rightarrow (1876 \div 28) - (672 \div 56) = ?$$

$$\Rightarrow 67 - 12 = ?$$

$$\Rightarrow ? = 55$$

Sol 136.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and follow BODMAS rule in the bracket,

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Since, we need to find out the approximate value, So, we can write these values to their nearest integers.

Given expression is

$$\{44.95 - (16.97 \times 2.93 - 2.99 \times 1.92)\} = ?$$

$$\Rightarrow \{45 - (17 \times 3 - 3 \times 2)\} = ?$$

$$\Rightarrow \{45 - (51 - 6)\} = ?$$

$$\Rightarrow \{45 - 45\} = ?$$

$$\Rightarrow ? = 0$$

Sol 137.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and follow BODMAS rule in the bracket,

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Since, we need to find out the approximate value, So, we can write these values to their nearest integers.

Given expression is

$$[(1279.98)^2 \div 32.23 \times 23.94] \div 47.98 = ?^2$$

$$\Rightarrow [(1280)^2 \div 32 \times 24] \div 48 = ?^2$$

$$\Rightarrow [(1280)^2 \times 24] / (32 \times 48) = ?^2$$

$$\Rightarrow (1280)^2 / 64 = ?^2$$

$$\Rightarrow ? = 1280/8 = 160$$

Sol 138.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and follow BODMAS rule in the bracket,

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Since, we need to find out the approximate value, So, we can write these values to their nearest integers.

Given expression is

$$851.99 - 12.93 \times 7.98 - 101.88 \times 2.93 - 0.91 = ?^2$$

$$\Rightarrow 852 - 13 \times 8 - 102 \times 3 - 1 = ?^2$$

$$\Rightarrow 852 - 104 - 306 - 1 = ?^2$$

$$\Rightarrow 441 = ?^2$$

$$\Rightarrow 21 = ?$$

Sol 139.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and follow BODMAS rule in the bracket,

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Since, we need to find out the approximate value,

So, we can write these values to their nearest integers.

Given expression is

$$383.9 \div 1.92^5 \times 2.93 + 7.88 = ?$$

$$\Rightarrow 384 \div 25 \times 3 + 8 = ?$$

$$\Rightarrow (384/32) \times 3 + 8 = ?$$

$$\Rightarrow 12 \times 3 + 8 = ?$$

$$\Rightarrow 36 + 8 = ?$$

$$\Rightarrow 44$$

Sol 140.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and follow BODMAS rule in the bracket,

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Since, we need to find out the approximate value,

So, we can write these values to their nearest integers.

Given expression is

$$4.95^2 + 19.92 \times 3.94 - \sqrt{255.9} = ?$$

$$= 5^2 + 20 \times 4 - 16 = ?$$

$$= 25 + 80 - 16$$

$$= 89$$

Sol 141.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$(\sqrt{63.99}) \times 149.99\% - 175.99 \div 22.22 = ?$$

$$(\sqrt{64}) \times 150\% - 176 \div 22 = ?$$

$$\Rightarrow 8 \times 1.5 - 8 = ?$$

$$\Rightarrow 12 - 8 = ?$$

$$\Rightarrow 4 = ?$$

Sol 142.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$(76.87 \times 10.99 \div 6.97 + 1.99) \div \sqrt[3]{26.99} = ?$$

$$(77 \times 11 \div 7 + 2) \div \sqrt[3]{27} = ?$$

$$\Rightarrow ? = (121 + 2) \div 3$$

$$\Rightarrow ? = 123/3$$

$$\Rightarrow ? = 41$$

Sol 143.

$$3.99 \times 11.895 + \sqrt{225} - ? = 13$$

$$\Rightarrow 4 \times 12 + 15 - ? = 13$$

$$\Rightarrow 48 + 15 - 13 = ?$$

$$\Rightarrow 50$$

Sol 144.

$$4.89 \times 20.19 \div 9.99 = ? - 4$$

$$\Rightarrow 5 \times 20 \times 1/10 = ? - 4$$

$$\Rightarrow 10 + 4 = ?$$

$$\Rightarrow 14 = ?$$

Sol 145.

$$(16\% \text{ of } 500) \div (? \% \text{ of } 200) = 4$$

$$\Rightarrow \left[\frac{16}{100} \times 500 \right] \div \left[\frac{?}{100} \times 200 \right] = 4$$

$$\Rightarrow 80 \div (2 \times ?) = 4$$

$$\Rightarrow \frac{80}{2 \times ?} = ?$$

$$\Rightarrow ? = 10$$

Sol 146.

$$\frac{40 \times 2 \div 4^2 \times 3}{90 \div 5 \times 2}$$

$$\Rightarrow \frac{80 \div 16 \times 3}{90 \div 5 \times 2}$$

$$\Rightarrow \frac{80 \times \frac{1}{16} \times 3}{90 \times \frac{1}{5} \times 2}$$

$$\Rightarrow 15/36$$

$$\Rightarrow 5/12$$

Sol 147.

$$\frac{1}{17} \left[2 \frac{3}{4} + 3 \frac{5}{8} \right]$$

$$\Rightarrow \frac{1}{17} \left[2 + \frac{3}{4} + 3 + \frac{5}{8} \right]$$

$$\Rightarrow \frac{1}{17} \left[\frac{16+6+24+5}{8} \right]$$

$$\Rightarrow \frac{1}{17} \left[\frac{51}{8} \right]$$

$$\Rightarrow 3/8$$

Sol 148.

$$\sqrt{(81 + x + 95)} = 16$$

Squaring on both side

$$81 + x + 95 = 256$$

$$x = 256 - 176$$

$$x = 80$$

Sol 149.

$$256 \div 2^3 \times x = 16\% \text{ of } 3000$$

$$256 \div 8 \times x = 3000 \times 16/100$$

$$32 \times x = 480$$

$$x = 480/32 = 15$$

Sol 150.

To Follow BODMAS Rule

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket, the **BODMAS** rule must be followed,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$\begin{aligned}1/7.99 + 1/11.96 - 1/3.94 + 1/? &= 0 \\1/8 + 1/12 - 1/4 + 1/? &= 0 \\1/? &= 1/4 - 1/8 - 1/12 \\1/? &= (6 - 3 - 2) / 24 \\? &= 24\end{aligned}$$

Sol 151.

The given expression,

$$\sqrt{143} \times \sqrt{323} \div 4.001 = ? \times (3.01)^2$$

We can write the given values as,

$$\sqrt{143} \approx 12, \sqrt{323} \approx 18, 4.001 \approx 4 \text{ and } 3.01 \approx 3$$

Then,

$$\Rightarrow 12 \times 18 \div 4 = ? \times 3^2$$

$$\Rightarrow 12 \times 9/2 = ? \times 9$$

$$\Rightarrow ? \approx 6$$

Sol 152.

$$67\% \text{ of } 801 - 231.17 = ? - 23\% \text{ of } 789$$

$$? = 67\% \text{ of } 801 - 231.17 + 23\% \text{ of } 789$$

$$? = 536.67 - 231.17 + 181.47$$

$$? \approx 487 \approx 490$$

Sol 153.

Follow these BODMAS rules to solve the question

Step-1: The part of the equation containing 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are solved

Step-4: At last, the part of the equation that contains 'Addition' and 'Subtraction' should be solved.

Given expression is,

$$60\% \text{ of } 80 \div 16 \times 30\% \text{ of } 70 = ?$$

$$\Rightarrow 48 \div 16 \times 21 = ?$$

$$\Rightarrow 3 \times 21 = ?$$

$$\therefore ? = 63$$

Sol 154.

Given expression:

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1 - Parts of an equation enclosed in 'Brackets' must be solved first,

Step - 2 - Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3 - Next, the parts of the equation that contains 'Division' and 'Multiplication' are calculated,

Step - 4 - Last but not least, the parts of the equation that contains 'Addition' and 'Subtraction' should be calculated.

$$21.6 - 18.8 - 3 + 3.8 \times 3 = ?$$

$$\Rightarrow 2.8 - 3 + 11.4 = ?$$

$$\Rightarrow ? = 14.2 - 3 = 11.2$$

Sol 155.

Given expression:

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1 - Parts of an equation enclosed in 'Brackets' must be solved first,

Step - 2 - Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3 - Next, the parts of the equation that contains 'Division' and 'Multiplication' are calculated,

Step - 4 - Last but not least, the parts of the equation that contains 'Addition' and 'Subtraction' should be calculated.

$$8\frac{2}{3} \text{ of } 8\frac{1}{13} = ?$$

$$\Rightarrow 26/3 \times 105/13 = ?$$

$$\Rightarrow ? = 2 \times 35 = 70$$

Sol 156.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next, Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$1347 + 254 + 457 - 3382 + 8745 - 5723 = ?$$

$$\Rightarrow ? = 2058 + 5363 - 5723$$

$$\Rightarrow ? = 7421 - 5723$$

$$\therefore ? = 1698$$

Sol 157.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$1124 + [24 + \{23 - (27 + 6 \times 9) + 91\} + 66.67\% \text{ of } 75] = ?^2 + 270$$

$$\Rightarrow 1124 + [24 + \{23 - (27 + 54) + 91\} + 2/3 \times 75] = ?^2 + 270$$

$$\Rightarrow 1124 + [24 + \{23 - 81 + 91\} + 2 \times 25] = ?^2 + 270$$

$$\Rightarrow 1124 + [24 + 33 + 50] = ?^2 + 270$$

$$\Rightarrow 1124 + 107 = ?^2 + 270$$

$$\Rightarrow ?^2 = 1231 - 270 = 961$$

$$\therefore ? = 31$$

Sol 158.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$(87.5\% \text{ of } 256) \div 14 + \{(14 \times 8 + 18 - 111) + 2 \times 28\} = ?$$

$$\Rightarrow (87.5/100 \times 256) \div 14 + \{(112 + 18 - 111) + 56\} = ?$$

$$\Rightarrow (7/8 \times 256) \div 14 + \{19 + 56\} = ?$$

$$\Rightarrow (7 \times 32) \div 14 + 75 = ?$$

$$\Rightarrow ? = 16 + 75$$

$$\therefore ? = 91$$

Sol 159.

$$8 \div [2 \times 2 - \{14 + (2 \div 4 \times 4) - 13\}] = \frac{3}{4} + ?$$

$$\Rightarrow 8 \div [4 - \{14 + 2 - 13\}] = 3/4 + ?$$

$$\Rightarrow 8 \div [4 - 3] = 3/4 + ?$$

$$\Rightarrow 8 = 3/4 + ?$$

$$\Rightarrow ? = 29/4$$

Sol 160.

Given equation is

$$(17.28 \div 0.144) \% \text{ of } [3.5 \times (20 \div 0.5)] = ?^2 - (1.25 \times 0.8)$$

$$\Rightarrow 120\% \text{ of } (3.5 \times 40) = ?^2 - 1$$

$$\Rightarrow 1.2 \times 140 + 1 = ?^2$$

$$\Rightarrow 169 = ?^2$$

$$\Rightarrow ? = 13$$

Sol 161.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next, Step-3- Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4- Last but not the least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given Expression,

$$(57.71 \div 3.89) \times 2.22 + 51.17 = 157.69 - ?$$

We can also write values as:

$$57.71 \approx 58, 3.89 \approx 4, 2.22 \approx 2, 51.17 \approx 51, 157.69 \approx 158$$

Given expression becomes,

$$\Rightarrow (58 \div 4) \times 2 + 51 = 158 - ?$$

$$\Rightarrow 14.5 \times 2 + 51 = 158 - ?$$

$$\Rightarrow 29 + 51 = 158 - ?$$

$$\Rightarrow 80 = 158 - ?$$

$$\Rightarrow ? = 158 - 80$$

$$\Rightarrow ? \approx 78$$

Sol 162.

$$\Rightarrow (757 + 876 - 457) \div 4 = 356 - 31 \times ?$$

Using BODMAS rule,

$$\Rightarrow (1633 - 457) \div 4 = 356 - 31 \times ?$$

$$\Rightarrow 1176 \div 4 = 356 - 31 \times ?$$

$$\Rightarrow 294 = 356 - 31 \times ?$$

$$\Rightarrow 31 \times ? = 62$$

$$\Rightarrow ? = 62/31$$

$$\Rightarrow ? = 2$$

Sol 163.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$(200.10 \div 49.89) \times 14.80 = 69.15 - ?$$

We can write the given values as:

$$200.10 \approx 200 \text{ and } 49.89 \approx 50$$

$$14.80 \approx 15 \text{ and } 69.15 \approx 70$$

$$\Rightarrow (200 \div 50) \times 15 = 70 - ?$$

$$\Rightarrow 4 \times 15 = 70 - ?$$

$$\Rightarrow ? \approx 10$$

Sol 164.

$$(1.987/4.914) + (4.895/6.958) - (0.999/9.989) = ?$$

Taking approximate values,

$$\Rightarrow (2/5) + (5/7) - (1/10) = ?$$

$$\Rightarrow 39/35 - 1/10 = ?$$

$$\therefore ? = 71/70$$

Sol 165.

According to the BODMAS rule, the priority in which the operations should be done is:

Operations	Symbols
B- Bracket	()
O- Of	Of
D- Division	÷, /
M- Multiplication	×
A- Addition	+
S- Subtraction	-

$$\Rightarrow 89.898\% \text{ of } 699.89 + 50.002\% \text{ of } 1000.101 - 169.90 = (?)$$

Approximating the value to the nearest integer:

$$\Rightarrow 90\% \text{ of } 700 + 50\% \text{ of } 1000 - 170 = (?)$$

$$\Rightarrow 90/100 \times 700 + 50/100 \times 1000 - 170 = (?)$$

$$\Rightarrow 630 + 500 - 170 = (?)$$

$$(?) = 960$$

Sol 166.

According to the BODMAS rule, the priority in which the operations should be done is:

Operations	Symbols
B- Bracket	()
O- Of	Of
D- Division	÷, /
M- Multiplication	×
A- Addition	+
S- Subtraction	-

$$\Rightarrow (?)\% \text{ of } 200 + 12\% \text{ of } 450 = 83$$

$$\Rightarrow 2 \times (?) + 54 = 83$$

$$\Rightarrow 2 \times (?) = 83 - 54$$

$$\Rightarrow 2 \times (?) = 29$$

$$(?) = 14.5 = 15$$

Sol 167.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated

$$\Rightarrow (45.102)^2 + (20.101)^2 = (?)^2 + (6.007)^3$$

$$\Rightarrow (45)^2 + (20)^2 = (?)^2 + (6)^3$$

$$\Rightarrow 2025 + 400 = (?)^2 + 216$$

$$\Rightarrow 2425 = (?)^2 + 216$$

$$(?)^2 = 2209$$

$$(?) = 47$$

Sol 168.

According to the BODMAS rule, the priority in which the operations should be done is:

Operations	Symbols
B- Bracket	()
O- Of	Of
D- Division	÷, /
M- Multiplication	×
A- Addition	+
S- Subtraction	-

$$\Rightarrow \sqrt{2498} \times \sqrt{626} \div \sqrt{99} = (?)$$

Approximating the values to the nearest integer:

$$\Rightarrow \sqrt{2500} \times \sqrt{625} \div \sqrt{100} = (?)$$

$$\Rightarrow 50 \times 25 \div 10 = (?)$$

$$(?) = 125$$

Sol 169.

According to the BODMAS rule, the priority in which the operations should be done is:

Operations	Symbols
B- Bracket	()
O- Of	Of
D- Division	÷, /
M- Multiplication	×
A- Addition	+
S- Subtraction	-

$$\Rightarrow 21.003 \times 39.998 - 209.91 = 126 \times (?)$$

Approximating the values to the nearest integer:

$$\Rightarrow 21 \times 40 - 210 = 126 \times (?)$$

$$\Rightarrow 840 - 210 = 126 \times (?)$$

$$(?) = 630/126$$

$$(?) = 5 \text{ (approx.)}$$

Sol 170.

According to the BODMAS rule, the priority in which the operations should be done is:

Operations	Symbols
B- Bracket	()
O- Of	Of
D- Division	÷, /
M- Multiplication	×
A- Addition	+
S- Subtraction	-

$$\Rightarrow \sqrt{899} \times (12.02)^2 + (?) = 5000.01$$

Approximating the value to the nearest integer:

$$\Rightarrow \sqrt{900} \times (12)^2 + (?) = 5000$$

$$\Rightarrow 30 \times 144 + (?) = 5000$$

$$\Rightarrow 4320 + (?) = 5000$$

$$(?) = 5000 - 4320$$

$$(?) = 680$$

Sol 171.

According to the BODMAS rule, the priority in which the operations should be done is:

Operations	Symbols
B-Bracket	()
O-Of	Of
D-Division	÷, /
M-Multiplication	×
A-Addition	+
S-Subtraction	-

$$\Rightarrow 1234 + 2345 = (?) + 3456 - 4567$$

$$(?) = 1234 + 2345 - 3456 + 4567$$

$$(?) = 3579 - 3456 + 4567$$

$$(?) = 123 + 4567$$

$$(?) = 4690$$

Sol 172.

$$(5.995)^3 \div (3.1281)^3 \times (1.9988)^2 = ?$$

Taking approximate values,

$$\Rightarrow (6)^3 \div (3)^3 \times (2)^2 = ?$$

$$\Rightarrow 216 \div 27 \times 4 = ?$$

$$\Rightarrow 8 \times 4 = ?$$

$$\therefore ? = 32$$

Sol 173.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$\Rightarrow 185 + 376 - 120 = 979 - ?$$

$$\Rightarrow 561 - 120 = 979 - ?$$

$$\Rightarrow 441 = 979 - ?$$

$$\Rightarrow ? = 979 - 441$$

$$\Rightarrow ? = 538$$

Sol 174.

To solve questions of this type, follow the laws of "Surds and indices" given below-

Laws of Indices:

$$1. a^m \times a^n = a^{m+n}$$

$$2. a^m \div a^n = a^{m-n}$$

$$3. (a^m)^n = a^{mn}$$

$$4. (a)^{-m} = 1/a^m$$

$$5. (a)^{m/n} = \sqrt[n]{a^m}$$

$$6. (a)^0 = 1$$

By using this laws:

$$\Rightarrow 25^2 \times 5^6 = 125 \times 5^4 \times 625^2$$

$$\Rightarrow 25^2 \times 5^6 = 5^3 \times 5^4 \times (5^4)^2$$

$$\Rightarrow 25^2 \times 5^6 = 5^3 \times 5^4 \times 5^8$$

$$\Rightarrow 5^{(2 \times 2 + 6)} = 5^{(3+4+8)}$$

$$\Rightarrow 2 \times 2 + 6 = 3 + 4 + 8$$

$$\Rightarrow 2 \times 2 = 15 - 6$$

$$\Rightarrow 2 \times 2 = 9$$

$$\therefore ? = 9/2$$

LEVEL 2

175 - 334 Questions

Sol 175.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1-Parts of an equation enclosed in 'Brackets' must be solved first,

Step-2-Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Now the given expression:

$$6\frac{5}{6} \times 5\frac{1}{3} + 10\frac{3}{5} \times 4\frac{1}{2} = ?$$

$$\Rightarrow ? = \frac{41}{6} \times \frac{16}{3} + \frac{53}{5} \times \frac{9}{2}$$

$$\Rightarrow ? = \frac{41 \times 16 \times 5 + 53 \times 9 \times 9}{90}$$

$$\Rightarrow ? = \frac{3280 + 4293}{90} = \frac{7573}{90} = 84\frac{13}{90}$$

Sol 176.

$$\sqrt{288.32} \approx 17$$

$$\sqrt{527.99} \approx 23$$

$$38.903 \approx 39$$

$$24.8 \approx 25$$

$$751 \approx 750$$

According to the given information,

$$(\sqrt{288.32} \times \sqrt{527.99}) \div 38.903 + 24.8\% \text{ of } 751$$

$$= \sqrt{289} \times \sqrt{529} \div 39 + 25\% \text{ of } 750$$

$$= (17 \times 23) / 39 + (750 \times 25) / 100$$

$$= 391 / 39 + 187.5$$

$$= 10 + 187.5$$

$$= 197.5 \approx 198$$

Sol 177.

Using approximation,

$$\Rightarrow 1785.78 + 548.82 - 210.89 = 1786 + 549 - 211 = 2124$$

Sol 178.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1 - Parts of an equation enclosed in the 'BRACKETS' must be solved first

Step - 2 - Any mathematical 'OF' or 'EXPONENTS' must be solved next

Step - 3 - Next the part of the equation that contains 'DIVISION' and 'MULTIPLICATION' are calculated

Step - 4 - Last but not least, the parts of the equation that contains 'ADDITION' and 'SUBTRACTION' should be calculated

Now, the given expression:

$$\Rightarrow 22^2 + \sqrt{?} = 516$$

$$\Rightarrow 484 + \sqrt{?} = 516$$

$$\Rightarrow \sqrt{?} = 516 - 484$$

$$\Rightarrow \sqrt{?} = 32$$

$$\Rightarrow ? = (32)^2 = 1024$$

Sol 179.

Follow BODMAS rule to solve this question, as per the order is given below,

Step - 1 - Parts of an equation enclosed in 'Brackets' must be solved first,

Step - 2 - Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3 - Next, the parts of the equation that contains 'Division' and 'Multiplication' are calculated,

Step - 4 - Last but not least, the parts of the equation that contains 'Addition' and 'Subtraction' should be calculated

The given expression can approximately be written as

$$\sqrt{2500} \times \sqrt{625} \div \sqrt{100} = 50 \times 25 \div 10 = 125.$$

Sol 180.

Applying the BODMAS Rule, the priority of operations is Bracket of

- Division
- Multiple
- Addition
- Subtraction

Rearranging the given problem,

$$\Rightarrow (15 \times 184) + 27 - 59 = ? + (156/12)$$

$$\Rightarrow (15 \times 184) + 27 - 59 = ? + 13$$

$$\Rightarrow 2760 + 27 - 59 = ? + 13$$

$$\Rightarrow 2760 + 27 - 59 - 13 = ?$$

$$\Rightarrow 2760 + 27 - (59 + 13) = ?$$

$$\Rightarrow 2760 + 27 - 72 = ?$$

$$\Rightarrow (2760 + 27) - 72 = ?$$

$$\Rightarrow 2787 - 72 = ?$$

$$\therefore ? = 2715$$

Sol 181.

$$\sqrt{2551} + \sqrt[3]{(2000 - (16.5)^2)} + \sqrt{110.2} \div 3 = ?$$

$$\Rightarrow 50.5 + \sqrt[3]{(2000 - 272.25)} + 10.5 \div 3$$

$$\Rightarrow 50.5 + \sqrt[3]{1728} + 3.5$$

$$\Rightarrow 54 + 12 = 66$$

Sol 182.

$$\Rightarrow \frac{150 \times 455}{100} - \frac{30 \times 330}{100} = \left(\frac{25}{100}\right) \times \left(\frac{30}{100}\right) \times x$$

$$\Rightarrow 682.5 - 99 = 0.075x$$

$$\Rightarrow x = 7780$$

Sol 183.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket, the BODMAS rule must be followed,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

The given expression is,

$$3/5 \text{ of } 285 \div 9 + 9^2$$

$$= (3/5 \times 285) \div 9 + 9^2$$

$$\begin{aligned} &= 171 \div 9 + 9^2 \\ &= 19 + 81 \\ &= 100 \end{aligned}$$

Sol 184.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1-Parts of an equation enclosed in 'Brackets' must be solved first,

Step-2-Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Now, the given expression,

$$\begin{aligned} &(67 \times 38) \div 40 \times 12 = ? \\ &\Rightarrow \frac{67 \times 38}{40} \times 12 \\ &\Rightarrow \frac{67 \times 38}{40} \times 12 \\ &\Rightarrow 763.8 \end{aligned}$$

Sol 185.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1-Parts of an equation enclosed in 'Brackets' must be solved first,

Step-2-Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Now, the given expression,

$$\begin{aligned} &= 6 \text{ of } \left\{ \frac{1}{3} + 4 \frac{5}{6} - \left(4 \frac{2}{3} - 5 \frac{1}{3} \right) \right\} \\ &= 6 \times \left\{ \frac{1}{3} + \frac{6 \times 4 + 5}{6} - \left(\frac{3 \times 4 + 2}{3} - \frac{3 \times 5 + 1}{3} \right) \right\} \\ &= 6 \times \left\{ \frac{1}{3} + \frac{29}{6} - \left(\frac{14}{3} - \frac{16}{3} \right) \right\} \\ &= 6 \times \left\{ \frac{1}{3} + \frac{29}{6} + \frac{2}{3} \right\} \\ &= 35 \end{aligned}$$

Sol 186.

In this type of question, we are expected to calculate

Approximate value (not exact value), so we can replace the numbers by their nearest perfect places which makes the calculation easy.

$$46324 \approx 46000$$

$$484 \approx 500$$

$$46324 \div 484 = ? \approx 46000 \div 500$$

$$\Rightarrow ? \approx 92 \approx 96$$

Sol 187.

We are expected to calculate the approximate value and not the exact value.

\therefore the given numbers can be approximated as follows:

$$268.875 \approx 270$$

$$8.835 \approx 9$$

$$24.105 \approx 24$$

\therefore The given expression becomes,

$$270 \div 9 \times 24 = 30 \times 24 = 720 = ?$$

Sol 188.

In this question, we're expected to calculate only the approximate value, not the exact value.

\therefore we can use approximate values of the given numbers.

$$67.1 \approx 67$$

$$451.89 \approx 450$$

$$403 \approx 402$$

So, the given expression becomes:

$$67 \times 450 \div 402$$

$$= \frac{67 \times 450}{402}$$

$$= 450/6 = 75$$

Sol 189.

$$\left(36 + 78 \div 52 - 8 \times \frac{3}{16} \right) \times 5 \div 10$$

Follow BODMAS rule to solve this question, as per the order given below,

Step-1-Parts of an equation enclosed in 'Brackets' must be solved first,

Step-2-Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$= \left(36 + \frac{78}{52} - \frac{8 \times 3}{16} \right) \frac{5}{10}$$

$$= \left(36 + \frac{3}{2} - \frac{3}{2} \right) \frac{5}{10}$$

$$= 36 \times \frac{5}{10} = 18$$

Sol 190.

$$56 + 12 \times 0.45 - 3 \\ = 56 + (12 \times 0.45) - 3 \quad \rightarrow \text{by using BODMAS rule} \\ = 56 + 5.4 - 3 \\ = 58.4$$

Sol 191.

$$(15.5\% \text{ of } 850) + (24.8\% \text{ of } 650) \\ \approx (16\% \text{ of } 850) + (25\% \text{ of } 650) \\ = \left(850 \times \frac{16}{100} \right) + \left(650 \times \frac{25}{100} \right) \rightarrow \text{by using BODMAS rule} \\ = 136 + 162.5 \\ = 298.5 \\ \approx 295$$

Sol 192.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Now, the given expression,

$$15083 + 25\% \text{ of } ? + 289 = 16385.5 \\ \Rightarrow 25\% \text{ of } ? = 1013.5 \\ \Rightarrow ? = 4054$$

Sol 193.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first.

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next.

Step-3- Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated.

Step-4- Finally, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Now, the given expression,

$$78 \times 4 \div 13 + 8 - 24 = ?$$

$$\Rightarrow ? = 24 + 8 - 24$$

$$\Rightarrow ? = 8$$

Sol 194.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first.

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next.

Step-3- Next, the parts of the equation that contain 'Division'

and 'Multiplication' are calculated.

Step-4- Finally, the parts of the equation that contain 'Addition'

and 'Subtraction' should be calculated.

Now, the given expression,

$$13 \times 119 \div (34 - 22 + 5) + 3 = ?$$

$$\Rightarrow ? = 13 \times 119 \div 17 + 3$$

$$\Rightarrow ? = 13 \times 7 + 3$$

$$\Rightarrow ? = 94$$

Sol 195.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket, the BODMAS rule must be followed,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$3 - [19 + \{14 - (16 - 3 - 21)\}] = ?$$

$$\Rightarrow 3 - [19 + \{14 - (13 - 21)\}] = ?$$

$$\Rightarrow 3 - [19 + \{14 - (-8)\}] = ?$$

$$\Rightarrow 3 - [19 + \{14 + 8\}] = ?$$

$$\Rightarrow 3 - [19 + 22] = ?$$

$$\Rightarrow 3 - [41] = ?$$

$$\Rightarrow ? = -38$$

Sol 196.

$$24.082 \times 9.964 \times 23.980 = ?$$

Here, $24.082 \approx 24$

$9.964 \approx 10$

$23.980 \approx 24$

Now, the given expression will become:

$$\Rightarrow ? \approx 24 \times 10 \times 24$$

$$\Rightarrow ? \approx 5760$$

Sol 197.

$$23.001 \times 19.999 \times 8.998 = ?$$

Here, $23.001 \approx 23$

$19.999 \approx 20$

$8.998 \approx 9$

$$\Rightarrow ? \approx 23 \times 20 \times 9$$

$$\therefore ? \approx 4140$$

Sol 198.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1-Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket, the BODMAS rule must be followed,

Step-2-Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

The given expression is,

$$81 \div 9 \div 3 \div 3$$

$$= (81/9) \div 3 \div 3$$

$$= 9 \div 3 \div 3$$

$$= (9/3) \div 3$$

$$= 3 \div 3$$

$$= 1$$

Sol 199.

Follow BODMAS rule to solve this question, as per the order given below,

Step 1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$\Rightarrow \{(3654 + 1346) \times 2\} \div 100 = ?$$

$$\Rightarrow \{(5000) \times 2\} \div 100 = ?$$

$$\Rightarrow ? = 10000 \div 100$$

$$\Rightarrow ? = 100$$

Sol 200.

Convert the values to their nearest integers,

$$\Rightarrow (26)^2 + \frac{100}{3} \times 540 - (4)^3 \times (3245 \div 5) = x$$

where, x = Desire solution

From the Division, Multiplication, Addition and Subtraction rule,

$$\Rightarrow 26 \times 26 + 33.3333 \times 540 - 4 \times 4 \times 4 \times 649 = x$$

$$\Rightarrow 676 + 18000 - 41536 = x$$

$$\Rightarrow 18676 - 41536 = x$$

$$\therefore x = -22860$$

Sol 201.

Let the answer is $= x$

$$\therefore (56)^2 + (43)^2 - x = 4700$$

$$\Rightarrow 4985 - x = 4700$$

$$\Rightarrow x = 285$$

Sol 202.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and follow BODMAS rule in the bracket,

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Since, we need to find out the approximate value,

So, we can write these values to their nearest integers.

Given expression is

$$818.99 \div 62.93 + 18.9 \times 21.98 = 34.95 \times 19.92 - ?^2 - (9.98)^2$$

$$\Rightarrow 819 \div 63 + 19 \times 22 = 35 \times 20 - ?^2 - (10)^2$$

$$\Rightarrow 13 + 19 \times 22 = 35 \times 20 - ?^2 - 100$$

$$\Rightarrow 13 + 418 = 35 \times 20 - ?^2 - 100$$

$$\Rightarrow 13 + 418 = 700 - ?^2 - 100$$

$$\Rightarrow 431 = 700 - ?^2 - 100$$

$$\Rightarrow ?^2 = 700 - 431 - 100$$

$$\Rightarrow ? = \sqrt{169} = 13$$

Sol 203.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and follow BODMAS rule in the bracket,

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Since, we need to find out the approximate value,

So, we can write these values to their nearest integers.

Given expression is

$$24.85^2 - 24.97 = ? \times (436.97 \div 18.89 + 777.07 \div 36.7 + 5.89)$$

$$\Rightarrow 25^2 - 25 = ? \times (437 \div 19 + 777 \div 37 + 6)$$

$$\Rightarrow 25^2 - 25 = ? \times (437 \div 19 + 777 \div 37 + 6)$$

$$\Rightarrow 625 - 25 = ? \times (23 + 21 + 6)$$

$$\Rightarrow 600 = ? \times 50$$

$$\Rightarrow ? = 12$$

Sol 204.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and follow BODMAS rule in the bracket,

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Since, we need to find out the approximate value,
So, we can write these values to their nearest integers.

Given expression is

$$(24.89 \times 8.21) - (11.99 \times 5.96) - 64.85 = ? \times 8.97$$

$$\Rightarrow (25 \times 8) - (12 \times 6) - 65 = ? \times 9$$

$$\Rightarrow ? \times 9 = (25 \times 8) - (12 \times 6) - 65$$

$$\Rightarrow ? \times 9 = 200 - 72 - 65$$

$$\Rightarrow ? \times 9 = 63$$

$$\Rightarrow ? = 63/9 = 7$$

Sol 205.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and follow BODMAS rule in the bracket,

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Since, we need to find out the approximate value,
So, we can write these values to their nearest integers.

Given expression is

$$3.94 \times 4.99^2 - 3.13^2 \times 6.97 + 5.96^2 = ? + 23.84$$

$$\Rightarrow (4 \times 5^2) - (3^2 \times 7) + 6^2 = ? + 24$$

$$\Rightarrow ? = (4 \times 5^2) - (3^2 \times 7) + 6^2 - 24$$

$$\Rightarrow (4 \times 25) - (9 \times 7) + 36 - 24$$

$$\Rightarrow 100 - 63 + 36 - 24$$

$$\Rightarrow (100 + 36) - (63 + 24)$$

$$\Rightarrow 49$$

Sol 206.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and follow BODMAS rule in the bracket,

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Since, we need to find out the approximate value,
So, we can write these values to their nearest integers.

Given expression is

$$45574.95 - [5.35 + 6.98 \text{ of } (72.93 \times 96.97 - 23.14 \times 26.87)] = ?$$

$$45575 - [5 + 7 \text{ of } (73 \times 97 - 23 \times 27)]$$

$$= 45575 - [5 + 7 \text{ of } \{73 \times (100 - 3)\} - \{23 \times (30-3)\}]$$

$$= 45575 - [5 + 7 \text{ of } \{(7300 - 219) - (690 - 69)\}]$$

$$= 45575 - [5 + 7 \text{ of } (7081 - 621)]$$

$$= 45575 - [5 + 7 \text{ of } 6460]$$

$$= 45575 - [5 + 7 \times 6460]$$

$$= 45575 - [5 + 45220]$$

$$= 45575 - 45225$$

$$= 350$$

Sol 207.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and follow BODMAS rule in the bracket,

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,
 Step - 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.
 Since, we need to find out the approximate value,
 So, we can write these values to their nearest integers.

Given expression is
 $(73424.95 - 33266.87 - 22417.98 - 17649.90) \times \sqrt{11024.9} = ?$
 $\Rightarrow (73425 - 33267 - 22418 - 17650) \times \sqrt{11025} = ?$
 $\Rightarrow (90) \times \sqrt{11025} = ?$
 $\Rightarrow 90 \times \sqrt{(21 \times 5)^2} = ?$
 $\Rightarrow 90 \times 105 = ?$
 $\Rightarrow 9450 = ?$

Sol 208.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and follow BODMAS rule in the bracket,
 Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.
 Since, we need to find out the approximate value,
 So, we can write these values to their nearest integers.

Given expression is
 $40.04\% \text{ of } 264.85 + (8.9)^3 \times 3.84 - 4847.88 \div 23.84 \times 8.04 = ?$
 $\Rightarrow 40\% \text{ of } 265 + 9^3 \times 4 - 4848 \div 24 \times 8 = ?$
 $\Rightarrow 106 + 729 \times 4 - 4848 \div 24 \times 8 = ?$
 $\Rightarrow 106 + 729 \times 4 - 202 \times 8 = ?$
 $\Rightarrow 106 + 2916 - 1616 = ?$
 $\Rightarrow 3022 - 1616 = ?$
 $\therefore ? = 1406$

Sol 209.

$$2 \times 8 + 4 + 42 \div 6 + 3 - 5$$

Using Bodmas rule we get,
 $\Rightarrow (2 \times 8) + 4 + (42 \div 6) + 3 - 5$
 $\Rightarrow 16 + 4 + 7 + 3 - 5$
 $\Rightarrow 30 - 5$
 $\Rightarrow 25$
 $\therefore \text{answer is } 25$

Sol 210.

Since we are asked to find the approximate value, we can assume

$$\begin{aligned} &\Rightarrow \sqrt{5} \approx 2 \\ &\Rightarrow \sqrt{199} \approx 14 \\ &\Rightarrow \sqrt[3]{515} \approx 8 (\because 8^3 = 512) \\ &\Rightarrow \frac{\sqrt{5} \times \sqrt{199} \times \sqrt[3]{515}}{(2^8 \times 7^2)^{\frac{1}{2}}} = \frac{2 \times 14 \times 8}{(2^8 \times 7^2)^{\frac{1}{2}}} \end{aligned}$$

As per law of indices;

$$\begin{aligned} (m \times n)^a &= m^a \times n^a \\ \Rightarrow \frac{2 \times 14 \times 8}{[(2^8)^{\frac{1}{2}} \times (7^2)^{\frac{1}{2}}]} &= \frac{2 \times 14 \times 8}{[2^4 \times 7^1]} \\ \Rightarrow \frac{2 \times 2 \times 7 \times 2^3}{[2^4 \times 7^1]} &= \frac{2^5 \times 7}{[2^4 \times 7^1]} \\ \therefore ? &= 2 \end{aligned}$$

$$\therefore ? = 2$$

Sol 211.

Using BODMAS rule
 $386.265 + 1.02713 \times 92.18 - 54.711 = ?$
 $= 386 + 92 - 55$
 $= 423$

Sol 212.

Since, we need to find out the approximate value,
 So, we can write these values to their nearest integers.

Given expression is
 $(459.04 \div 21.01) \times 8.99 = ?$
 $\Rightarrow ? \approx (459 \div 21) \times 9$
 $\Rightarrow ? \approx (21.85) \times 9$
 $\Rightarrow ? \approx 22 \times 9$
 $\Rightarrow ? = 198$

Sol 213.

Let the value which need to be calculated be x
 $\sqrt{259081} + \sqrt{13456} = 25 \times ?$
 $509 + 116 = 25 \times ?$
 $625/25 = x$
 $x = 25$

Sol 214.

Applying BODMAS rule to solve the problem,
 Step - 1 - Parts of the equation enclosed in 'Brackets' must be solved first.
 Step - 2 - Any mathematical 'Of' or 'Exponent' must be solved next.
 Step - 3 - Next the part of the equation which contains 'Division' and 'Multiplication' must be solved.
 Step - 4 - Last but not the least, the parts of the equation that contains 'Addition' and 'Subtraction' must be solved.

Now the given expression,

$$\begin{aligned} &\Rightarrow \frac{15}{2} - \left[? \div \left\{ \frac{5}{4} - \frac{1}{2\left(\frac{3}{2}-\frac{1}{3}-\frac{1}{6}\right)} \right\} \right] = \frac{9}{2} \\ &\Rightarrow \frac{15}{2} - \left[? \div \left\{ \frac{5}{4} - \frac{1}{\frac{2(9-2-1)}{6}} \right\} \right] = \frac{9}{2} \\ &\Rightarrow \frac{15}{2} - \left[? \div \left\{ \frac{5}{4} - \frac{1}{2} \right\} \right] = \frac{9}{2} \\ &\Rightarrow \frac{15}{2} - \left[? \div \left\{ \frac{5-2}{4} \right\} \right] = \frac{9}{2} \\ &\Rightarrow \frac{15}{2} - \left[? \div \frac{3}{4} \right] = \frac{9}{2} \\ &\Rightarrow \frac{15}{2} - \frac{9}{2} = ? \times \frac{4}{3} \\ &\Rightarrow \frac{6}{2} = ? \times \frac{4}{3} \\ &\Rightarrow 3 \times \frac{3}{4} = ? \\ ? &= 9/4 = 2.25 \end{aligned}$$

Sol 215.

Applying BODMAS rule to solve the problem,
 Step-1: Parts of the equation enclosed in 'Brackets' must be solved first.
 Step-2: Any mathematical 'Of' or 'Exponent' must be solved next.
 Step-3: Next the part of the equation which contain 'Division' and 'Multiplication' must be solved.
 Step-4: Last but not the least, the parts of the equation that contains 'Addition' and 'Subtraction' must be solved.
 Now the given expression,

$$\Rightarrow \frac{\frac{13}{4} - \frac{4}{5} \times \frac{5}{6}}{\frac{13}{3} \div \frac{1}{5} - \left(\frac{3}{10} + \frac{106}{5} \right)} = \frac{31}{?}$$

$$\Rightarrow \frac{\frac{13}{4} - \frac{4}{5} \times \frac{5}{6}}{\frac{13}{3} \times 5 - \left(\frac{215}{10} \right)} = \frac{31}{?}$$

$$\Rightarrow \frac{\frac{13}{4} - \frac{2}{3}}{\frac{65}{3} - 21.5} = \frac{31}{?}$$

$$\Rightarrow \frac{\frac{31}{12}}{\frac{0.5}{3}} = \frac{31}{?}$$

$$\Rightarrow \frac{31}{12} \times \frac{3}{0.5} = \frac{31}{?}$$

$$\Rightarrow \frac{31 \times 12 \times 0.5}{31 \times 3} = ?$$

$$\Rightarrow ? = 2$$

Sol 216.

Approximating the numbers in the above expression:

$$\Rightarrow (52^2 - 34^2) \div 18 \times \sqrt{?} = 1720$$

$$\Rightarrow (52 + 34) \times (52 - 34) \div 18 \times \sqrt{?} = 1720$$

$$\Rightarrow (86 \times 18) \div 18 \times \sqrt{?} = 1720$$

$$\Rightarrow 86 \times \sqrt{?} = 1720$$

$$\Rightarrow \sqrt{?} = 1720/86 = 20$$

$$\therefore ? = 20^2 = 400$$

Sol 217.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4: Last but not the least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$\Rightarrow (91.87)^2 - (30.58)^2 = ? \times 12.20$$

$$\Rightarrow (a^2 - b^2) = (a + b)(a - b) \quad \dots\dots\dots(1)$$

$$\Rightarrow (92)^2 - (31)^2 = ? \times 12.20$$

$$\Rightarrow (92 - 31)(92 + 31) = ? \times 12.20 \quad \dots\dots\dots\text{from (1)}$$

$$\Rightarrow 123 \times 61 = ? \times 12.20$$

$$\Rightarrow \frac{123 \times 61}{12.20} = ?$$

$$\Rightarrow ? = 615$$

Sol 218.

$$\Rightarrow \left(\frac{1}{5}\right)^{4x} = 0.0016 = \frac{1}{625} = \left(\frac{1}{5}\right)^4$$

$$\Rightarrow 4x = 4$$

$$\Rightarrow x = 1$$

$$\Rightarrow 0.55^x = 0.55^1 = 0.55$$

Sol 219.

To solve questions of this type, follow the laws of "Surds and indices" given below:

Laws of Indices:

$$1. a^m \times a^n = a^{m+n}$$

$$2. a^m \div a^n = a^{m-n}$$

$$3. (a^m)^n = a^{mn}$$

$$4. (a^{-m}) = 1/a^m$$

$$5. (a)^{m/n} = \sqrt[n]{a^m}$$

$$6. (a)^0 = 1$$

By using these laws:

$$\Rightarrow (8^6 \times 8^4) \div (8^5 \times 8) = 8^9 \times 8^{14} \div 8^?$$

$$\Rightarrow (6 + 4) - (5 + 1) = (9 + 14 - ?)$$

$$\begin{aligned} &\Rightarrow 10 - 6 = 23 - ? \\ &\Rightarrow 4 = 23 - ? \\ &\Rightarrow ? = 19 \end{aligned}$$

Sol 220.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1-Parts of an equation enclosed in 'Brackets' must be solved first,

Step-2-Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Now, the given expression,

$$75\% \text{ of } 2640 \div 36 + 4 \times \sqrt{1024}$$

$$\Rightarrow \frac{\frac{75}{100} \times 2640}{36} + 4 \times \sqrt{2^{10}}$$

$$\Rightarrow 55 + 4 \times 2^5$$

$$\Rightarrow 55 + 4 \times 32$$

$$\Rightarrow 55 + 128$$

$$\Rightarrow 183$$

Sol 221.

In this type of question, we are expected to calculate Approximate value (not exact value), so we can replace the given numbers by their nearest perfect places which makes the calculation easy.

We can write the given values as:

$$841.952 \approx 842, 1.999 \approx 2 \text{ and } 7.014 \approx 7, \text{ and } 1.99 \approx 2$$

Now, the given expression,

$$\Rightarrow 841.952 \times 1.999 \div 7.014 = ? \times 1.99$$

$$\Rightarrow ? \times 2 \approx 842 \times 2 \div 7$$

$$\Rightarrow ? \times 2 \approx 240.57$$

$$\Rightarrow ? \times 2 \approx 240,$$

$$\Rightarrow ? \approx 120$$

Hence, the required answer is 120,

Sol 222.

Given,

$$49\% \text{ of } 2647 + 27\% \text{ of } 7589 = ?$$

$$\Rightarrow 49\% \text{ of } 2647 = (49/100) \times 2647 = 1297.03$$

$$\Rightarrow 27\% \text{ of } 7589 = (27/100) \times 7589 = 2049.03$$

$$\Rightarrow 49\% \text{ of } 2647 + 27\% \text{ of } 7589 = 1297.03 + 2049.03 = 3346.06$$

\therefore Value of given expression = 3346.06

Sol 223.

Given expression:

$$\frac{64.5}{100} \times 800 + \frac{36.4}{100} \times 1500 = ?^2 + 38$$

$$\Rightarrow 516 + 546 = ?^2 + 38$$

$$\Rightarrow ?^2 = 1062 - 38 = 1024$$

$$\Rightarrow ? = 32$$

Hence, the required number in place of question mark in the given question is 32,

Sol 224.

$$36\% \text{ of } 245 - 40\% \text{ of } 210 = 10 - ?$$

$$\Rightarrow \frac{36}{100} \times 245 - \frac{40}{100} \times 210 = 10 - ?$$

$$\Rightarrow 10 - ? = 88.2 - 84$$

$$\Rightarrow 10 - ? = 4.2$$

$$\Rightarrow 10 - 4.2 = ?$$

$$\Rightarrow ? = 5.8$$

Sol 225.

Given expression:

$$36\% \text{ of } 245 - 40\% \text{ of } 210 = 10 - ?$$

$$\Rightarrow \frac{36}{100} \times 245 - \frac{40}{100} \times 210 = 10 - ?$$

$$\Rightarrow 88.2 - 84 = 10 - ?$$

$$\Rightarrow ? = 5.8$$

Hence, the required number in place of question mark in the given question is 5.8,

Sol 226.

$$\begin{aligned} ? \text{ of } 1400 - 18\% \text{ of } 750 &= 159 \\ \Rightarrow ? \times 1400 - 0.18 \times 750 &= 159 \\ \Rightarrow ? \times 1400 &= 294 \\ \Rightarrow ? &= 294/1400 \\ \Rightarrow ? &= 0.21 = 21\% \end{aligned}$$

Sol 227.

Given expression:

$$\begin{aligned} 14.2\% \text{ of } 5500 + 15.6\% \text{ of } ? &= 1795 \\ \Rightarrow \frac{14.2}{100} \times 5500 + \frac{15.6}{100} \times ? &= 1795 \\ \Rightarrow 781 + \frac{15.6}{100} \times ? &= 1795 \\ \Rightarrow \frac{15.6}{100} \times ? &= 1014 \end{aligned}$$

$$\Rightarrow ? = 6500$$

Hence, the required number in place of question mark in the given question is 6500,

Sol 228.

In this type of question, we are expected to calculate Approximate value (not exact value), so we can replace the given numbers by their nearest perfect places which makes the calculation easy.

Now, the given expression:

$$\begin{aligned} 17.995 \times 16.005 + 15.999 \times 15.001 &\\ = 18 \times 16 + 16 \times 15 &= 16 \times (18 + 15) \\ = 16 \times 33 &= 528 \end{aligned}$$

Hence, the required answer is 528,

Sol 229.

14% of 250 × ? % of 150 = 840

$$\begin{aligned} \Rightarrow \frac{14}{100} \times 250 \times \frac{?}{100} \times 150 &= 840 \\ \Rightarrow 35 \times 1.5 \times ? &= 840 \\ \Rightarrow ? \times 52.5 &= 840 \\ \Rightarrow ? &= 840/52.5 \\ \Rightarrow ? &= 16 \end{aligned}$$

Sol 230.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket, the BODMAS rule must be followed,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,
Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$\begin{aligned} \Rightarrow 3920 \div 16 \times 9 &=? + 684 \\ \Rightarrow 245 \times 9 &=? + 684 \\ \Rightarrow 2205 &=? + 684 \\ \Rightarrow ? &= 2205 - 684 \\ \Rightarrow ? &= 1521 \end{aligned}$$

Sol 231.

Given expression:

$$\begin{aligned} 623.15 - 218.82 - 321.43 &=? \\ \Rightarrow ? &= 623.15 - (218.82 + 321.43) \\ \Rightarrow ? &= 404.33 - 321.43 \\ \Rightarrow ? &= 82.9 \end{aligned}$$

Sol 232.

60% of 25% of 5/6 th of ? = 630

$$\Rightarrow (60/100) \text{ of } (25/100) \text{ of } 5/6 \text{ th of } ? = 630$$

$$\Rightarrow \frac{3}{5} \times \frac{1}{4} \times \frac{5}{6} \times ? = 630$$

$$\Rightarrow (1/8) \times ? = 630$$

$$\Rightarrow ? = 630 \times 8$$

$$\Rightarrow ? = 5040$$

Sol 233.

Given expression:

$$(1/11) \text{ of } \{(17424)^{1/2} \div (66)^2 \times (3)^3\} = ?^2$$

$$\Rightarrow ?^2 = (1/11) \text{ of } \{132 \div (66)^2 \times 27\}$$

$$\Rightarrow ?^2 = \frac{1}{11} \times \frac{132}{66 \times 66} \times 27$$

$$\Rightarrow ?^2 = \frac{2}{11} \times \frac{27}{66} = \frac{1}{11} \times \frac{27}{33} = \frac{1}{11} \times \frac{9}{11}$$

$$\Rightarrow ?^2 = \left(\frac{3}{11}\right)^2 \Rightarrow ? = \frac{3}{11}$$

$$\Rightarrow ? = 3/11$$

Sol 234.

Let the missing number be x.

$$140\% \text{ of } 320 - x\% \text{ of } 400 = 25\% \text{ of } 720$$

$$140/100 \times 320 - x/100 \times 400 = 25/100 \times 720$$

$$448 - 4x = 180$$

$$4x = 448 - 180 = 268$$

$$x = 67$$

Sol 235.

Values in the given problem can be written approximately as

$$(42 \times 8) + (?^2) = 20^2$$

$$\Rightarrow (?^2) = 20^2 - (42 \times 8)$$

$$= 400 - 336 = 64$$

$$\Rightarrow ? = \sqrt{64} = 8$$

Sol 236.

Let the unknown be x

$$x = 5248 \div 2 \div 3.5$$

Simplifying,

Since division is left associative,

$$\Rightarrow x = 2624 \div 3.5 = 5248 \div 7 \approx 750$$

Sol 237.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket, the BODMAS rule must be followed,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,
Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$(? \div 32) \times 16 = 284$$

$$\Rightarrow (?/32) \times 16 = 284$$

$$\Rightarrow (?/2) = 284$$

$$\Rightarrow ? = 284 \times 2 = 568$$

Sol 238.

Follow 'BODMAS' rule to solve the given question.

Given expression:

$$\Rightarrow ? = (5134 \div 17) \div 2 \times \sqrt{9} - 180$$

$$\Rightarrow ? = 302 \div 2 \times 3 - 180$$

$$\Rightarrow ? = 151 \times 3 - 180$$

$$\Rightarrow ? = 273$$

Sol 239.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket, the BODMAS rule must be followed,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,
Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated

We have the expression:

$$\begin{aligned} 0.5 \times 3.9 \div 1.3 &= ? + 0.5 \\ \Rightarrow 0.5 \times (3.9 \div 1.3) &= ? + 0.5 \\ \Rightarrow 0.5 \times 3 &= ? + 0.5 \\ \Rightarrow 1.5 &= ? + 0.5 \\ \Rightarrow ? &= 1.5 - 0.5 \\ \Rightarrow ? &= 1.0 \end{aligned}$$

Sol 240.

$$\begin{aligned} 283 \times 56 + 252 &= 20 \times ? \\ \Rightarrow 15848 + 252 &= 20 \times ? \\ \Rightarrow x &= 800 \end{aligned}$$

Sol 241.

Applying BODMAS rule, the priority is

- Bracket
- Of
- Division
- Multiplication
- Addition
- Subtraction

Given expression is :

$$\begin{aligned} 153 \times 193 + 15552 &=? \\ = 29529 + 15552 & \\ = 45081 & \end{aligned}$$

Sol 242.

Follow BODMAS rule to solve this question, as per the order given below,
Step-1-Parts of an equation enclosed in 'Brackets' must be solved first,
Step-2-Any mathematical 'Of' or 'Exponent' must be solved next,
Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,
Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

The given expression is:

$$\begin{aligned} 16 - \frac{4}{6} \times \frac{6}{5} &\text{ of } 20 \div 4 \\ \Rightarrow 16 - \frac{4}{6} \times \left(\frac{6}{5} \times 20 \right) &\div 4 \\ \Rightarrow 16 - \frac{4}{6} \times \left(24 \times \frac{1}{4} \right) & \\ \Rightarrow 16 - \frac{4}{6} \times 6 & \\ \Rightarrow 16 - 4 &= 12 \end{aligned}$$

Sol 243.

Given in the question,
24% of 6730

$$= 24\% \times 6730$$

Converting percentage into fraction,

$$= \frac{24}{100} \times 6730$$

$$= 24 \times 67.3$$

$$= 1615.2$$

Sol 244.

One of the ways to do this question is to make the denominator of every fraction equal by taking L.C.M of 5, 7, 9, 11 and then comparing the numerator. A fraction with higher value of numerator will be greater.

L.C.M of 5, 7, 9, 11

$$= 5 \times 7 \times 9 \times 11$$

$$= 3465$$

Thus the above fractions can be written as:

$$\begin{aligned} \Rightarrow \frac{3 \times 7 \times 9 \times 11}{3465} &= \frac{2079}{3465} \\ \Rightarrow \frac{5 \times 5 \times 9 \times 11}{3465} &= \frac{2475}{3465} \end{aligned}$$

$$\begin{aligned} \Rightarrow \frac{7 \times 5 \times 7 \times 11}{3465} &= \frac{2695}{3465} \\ \Rightarrow \frac{9 \times 5 \times 7 \times 9}{3465} &= \frac{2835}{3465} \end{aligned}$$

Hence it can be seen by comparing the numerator values that,

$$\frac{2835}{3465} > \frac{2695}{3465} > \frac{2475}{3465} > \frac{2079}{3465}$$

Thus descending order is:

$$\Rightarrow \frac{9}{11}, \frac{7}{9}, \frac{5}{7}, \frac{3}{5}$$

Note: This question can also be solved by simply converting the fractions in decimal forms and then comparing.

Sol 245.

Follow BODMAS Rule to solve this question, as per the order given below,

Step-1-Parts of an equation enclosed in 'Brackets' must be solved first,

Step-2-Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

The given expression:

$$\begin{aligned} 51 + 2 \times 0.35 - 5.70 &=? \\ \Rightarrow ? &= 51 + 0.70 - 5.70 \\ \Rightarrow ? &= 51.70 - 5.70 \\ \Rightarrow ? &= 46 \end{aligned}$$

Sol 246.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1-Parts of an equation enclosed in 'Brackets' must be solved first,

Step-2-Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given,

$$\begin{aligned} 3.5 \times (60 \div 2.5) &=? \\ \Rightarrow ? &= 3.5 \times (60 \div 2.5) \\ \Rightarrow ? &= 3.5 \times 60 / 2.5 \\ \Rightarrow ? &= 3.5 \times 24 = 84 \end{aligned}$$

Hence, the required answer is 84.

Sol 247.

Given expression:

$$\sqrt{25 - 12 + 155 + 1} = ?$$

$$\Rightarrow ? = \sqrt{(169)}$$

$$\Rightarrow ? = 13$$

Sol 248.

Rewrite the equation as,

$$\begin{aligned} \sqrt{210 \frac{1}{4}} &= \sqrt{\frac{841}{4}} = ? \\ ? &= \frac{29}{2} = 14 \frac{1}{2} \end{aligned}$$

Sol 249.

The given expression:

$$\begin{aligned} 352.085 + 42.791 + 15.505 & \\ = 394.876 + 15.505 & \\ = 410.381 & \end{aligned}$$

Sol 250.

Given Expression is,

$$\sqrt{2809} = ?$$

$$\Rightarrow \sqrt{(53^2)} = ?$$

$$\Rightarrow 53 = ?$$

Sol 251.

Follow BODMAS rule to solve this question, as per the order given below,
 Step-1-Parts of an equation enclosed in 'Brackets' must be solved first,
 Step-2-Any mathematical 'Of' or 'Exponent' must be solved next,
 Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,
 Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.
 Given expression:

$$(43)^2 + 841 = (?)^2 + 1465$$

$$\Rightarrow (?)^2 = 1849 + 841 - 1465$$

$$\Rightarrow (?)^2 = 1225$$

$$\Rightarrow (?) = 35$$

Hence, the required number in place of the question mark is 35.

Sol 252.

Given Equation is,

$$\sqrt[3]{132651} = ?$$

$$132651 = 3^3 \times 17^3$$

$$\Rightarrow ? = \sqrt[3]{3^3 \times 17^3}$$

$$\Rightarrow ? = 3 \times 17 = 51$$

Sol 253.

Follow BODMAS rule to solve this question, as per the order given below,
 Step-1-Parts of an equation enclosed in 'Brackets' must be solved first,
 Step-2-Any mathematical 'Of' or 'Exponent' must be solved next,
 Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,
 Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.
 Now, given expression:

$$\Rightarrow 19992 \div 147 \times 7 = ?$$

$$\Rightarrow 136 \times 7 = ?$$

$$\Rightarrow ? = 952$$

Sol 254.

Given expression:

$$\frac{2}{5} \text{ of } \frac{7}{9} \text{ of } (?) = 294$$

$$\Rightarrow \frac{2}{5} \times \frac{7}{9} \times ? = 294$$

$$\Rightarrow (14/45) \times (?) = 294$$

$$\Rightarrow ? = 294 \times 45/14$$

$$\Rightarrow ? = 945$$

Sol 255.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket, the BODMAS rule must be followed,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,
 Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,
 Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Now, given expression:

$$\Rightarrow 199 + 5^3 \div 4 \times 4^2 = ?$$

$$\Rightarrow 199 + 125 \div 4 \times 4^2 = ?$$

$$\Rightarrow 199 + 125 \times 4 = ?$$

$$\Rightarrow ? = 199 + 500$$

$$\Rightarrow ? = 699$$

Sol 256.

For comparing the fraction, we need to equalize the denominator. L.C.M. of 8, 9,13 is 936.

$$\frac{5}{8} = \frac{5 \times 117}{936} = \frac{585}{936}$$

$$\frac{6}{8} = \frac{6 \times 117}{936} = \frac{702}{936}$$

$$\frac{7}{9} = \frac{7 \times 104}{936} = \frac{728}{936}$$

$$\frac{11}{13} = \frac{11 \times 72}{936} = \frac{792}{936}$$

Now, comparing the numerator, we find that $585 < 702 < 728 < 792$

$$\therefore 5/8 < 6/8 < 7/9 < 11/13$$

Sol 257.

Given Equation is-

$$\Rightarrow 30492 \div \sqrt[3]{?} = 77 \times 12$$

$$\Rightarrow 30492 \div \sqrt[3]{?} = 924$$

$$\Rightarrow \sqrt[3]{?} = 30492 / 924 = 33$$

$$\Rightarrow ? = (33)^2 = 1089$$

Hence the answer is 1089.

Sol 258.

Let the required term be X. The given expression may be simplified as:

$$\Rightarrow \frac{6 \div X \times 4.5}{(6 \times 5) \div 3} = 0.9$$

$$\Rightarrow 6 \div X \times 4.5 = 0.9 \times \{(6 \times 5) \div 3\}$$

$$\Rightarrow 6 \div X \times 4.5 = 0.9 \times 10$$

$$\Rightarrow 6/X = 9/4.5$$

$$\Rightarrow X = 3$$

Sol 259.

Given Equation is,

$$444 \times 44 \times 4 = ?$$

$$\Rightarrow ? = 444 \times 176$$

$$\Rightarrow ? = 78144$$

Sol 260.

Given Expression is,

$$\left(\frac{999}{1000} \times 9 \right)$$

$$= \frac{999 \times 1000 + 999}{1000} \times 9$$

$$= \frac{999999}{1000} \times 9$$

$$= \frac{8999991}{1000}$$

$$= 8999 \frac{991}{1000}$$

Sol 261.

The given expression:

$$\Rightarrow 1056 \times ? = (264)^2$$

$$\Rightarrow 1056 \times ? = 69696$$

$$\Rightarrow ? = 69696 / 1056 = 66$$

Hence the answer is 66

Sol 262.

The given expression:

$$\sqrt{676} + \sqrt{529}$$

$$= \sqrt{(26)^2} + \sqrt{(23)^2}$$

$$= 26 + 23$$

$$= 49$$

$$\text{Now, } 49 = 7^2$$

$$\therefore ? = 7$$

Sol 263.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and follow BODMAS rule in the bracket,

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Since, we need to find out the approximate value,

So, we can write these values to their nearest integers.

Given expression is

$$5.99 \times 3.94 + 7.98 \div 1.92 \times 2.99 - 11.99 \div 2.93 \times 4.95 = ?$$

$$\Rightarrow 6 \times 4 + 8 \div 2 \times 3 - 12 \div 3 \times 5 = ?$$

$$\Rightarrow 6 \times 4 + 8 \div 2 \times 3 - 12 \div 3 \times 5$$

$$\Rightarrow 6 \times 4 + 4 \times 3 - 4 \times 5$$

$$\Rightarrow 24 + 12 - 20 = 16$$

$$\therefore ? = 16$$

Sol 264.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and follow BODMAS rule in the bracket,

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Since, we need to find out the approximate value,

So, we can write these values to their nearest integers.

Given expression is

$$278.9 + 810.99 - 37.88 \times 5.09 = 17.07 \times ? - 69.21$$

$$\Rightarrow 279 + 811 - 38 \times 5 = 17 \times ? - 69$$

$$\Rightarrow 279 + 811 - 190 = 17 \times ? - 69$$

$$\Rightarrow 1090 - 190 = 17 \times ? - 69$$

$$\Rightarrow 900 = 17 \times ? - 69$$

$$\Rightarrow 900 + 69 = 17 \times ?$$

$$\Rightarrow 17 \times ? = 969$$

$$\Rightarrow ? = 969/17$$

$$\Rightarrow ? = 57$$

Sol 265.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and follow BODMAS rule in the bracket,

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Since, we need to find out the approximate value,

So, we can write these values to their nearest integers.

Given expression is

$$980.91 \div 8.99 \times 3.94 + 143.94 = 20.91 \times 27.98 - ?$$

$$\Rightarrow 981 \div 9 \times 4 + 144 = 21 \times 28 - ?$$

$$\Rightarrow 109 \times 4 + 144 = 21 \times 28 - ?$$

$$\Rightarrow 436 + 144 = 21 \times 28 - ?$$

$$\Rightarrow 436 + 144 = 588 - ?$$

$$\Rightarrow 580 = 588 - ?$$

$$\Rightarrow ? = 588 - 580$$

$$\therefore ? = 8$$

Sol 266.

Given expression is,

$$331.80 \div 3.80 + 47.80 = 41.17\% \text{ of } 400 - ?$$

We can write the given values as:

$$331.80 \approx 332 \text{ and } 3.80 \approx 4$$

$$47.80 \approx 48 \text{ and } 41.17 \approx 41$$

Then,

$$\Rightarrow 332 \div 4 + 48 = 41\% \text{ of } 400 - ?$$

$$\Rightarrow 332 \div 4 + 48 = (41/100) \times 400 - ?$$

$$\Rightarrow 83 + 48 = (41 \times 4) - ?$$

$$\Rightarrow 83 + 48 = 164 - ?$$

$$\Rightarrow 131 = 164 - ?$$

$$\Rightarrow ? = 164 - 131$$

$$\Rightarrow ? \approx 33$$

Sol 267.

Given expression is,

$$87.87 \div 22.22 \times 8.88 + 14.09 = 10.11 + ?$$

We can write the given values as:

$$87.87 \approx 88 \text{ and } 22.22 \approx 22$$

$$8.88 \approx 9 \text{ and } 14.09 \approx 14 \text{ and } 10.11 \approx 10$$

$$\Rightarrow 88 \div 22 \times 9 + 14 = 10 + ?$$

$$\Rightarrow 4 \times 9 + 14 = 10 + ?$$

$$\Rightarrow 36 + 14 = 10 + ?$$

$$\Rightarrow 50 = 10 + ?$$

$$\Rightarrow ? = 50 - 10$$

$$\Rightarrow ? \approx 40$$

Sol 268.

Given expression is,

$$(180.20 - 59.74) \div 40.04 = 79.81 - 61.72 - ?$$

We can write the given values as:

$$180.20 \approx 180 \text{ and } 59.74 \approx 60$$

$$40.04 \approx 40 \text{ and } 79.81 \approx 80 \text{ and } 61.72 \approx 62$$

Then,

$$\Rightarrow (180 - 60) \div 40 = 80 - 62 - ?$$

$$\Rightarrow 120 \div 40 = 80 - 62 - ?$$

$$\Rightarrow 3 = 80 - 62 - ?$$

$$\Rightarrow 3 = 18 - ?$$

$$\Rightarrow ? = 18 - 3$$

$$\Rightarrow ? \approx 15$$

Sol 269.

$$\left(\frac{13}{27} \times \frac{9}{26} \right) \div \frac{3}{52} \times \frac{2}{9}$$

Applying BODMAS Rule;

$$\Rightarrow \frac{1}{6} \div \frac{3}{52} \times \frac{2}{9}$$

$$\Rightarrow \frac{1}{6} \times \frac{52}{3} \times \frac{2}{9}$$

$$\Rightarrow \frac{52}{18} \times \frac{2}{9}$$

$$\Rightarrow \frac{52}{81}$$

Sol 270.

$$(25 \times 3.05 + 50.4 \div 24) \times 74.33\% + 24.78\% (311 \div 31) = ?$$

It can be approximated as

$$(25 \times 3 + 50 \div 25) \times 75\% + 25\% \times (310 \div 31) = ?$$

$$(75 + 2) \times 3/4 + 1/4 \times 10 = ?$$

$$(77) \times 3/4 + 2.5 = ?$$

$$57.75 + 2.5 = ?$$

$$\therefore ? \approx 60$$

Sol 271.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$\Rightarrow (V1030 + 27.80) \div 20.04 = 3.96 \times 1.50 - ?$$

We can write the given values as:

$$\Rightarrow V1030 = V(1024 + 6) = V(32^2 + 6) \approx 32$$

$$\Rightarrow 27.80 \approx 28 \text{ and } 20.04 \approx 20 \text{ and } 3.96 \approx 4$$

Then,

$$\Rightarrow (32 + 28) \div 20 = 4 \times 1.5 - ?$$

$$\Rightarrow 60 \div 20 = 6 - ?$$

$$\Rightarrow 3 = 6 - ?$$

$$\Rightarrow 3 = 6 - ?$$

$$\Rightarrow ? = 6 - 3 \\ \therefore ? \approx 3$$

Sol 272.

$$\begin{aligned} ?\% \text{ of } 179.98 &= \sqrt{(24.03)^2 + (17.99)^2 + (60.02\% \text{ of } 659.96)} \\ \text{By approximation;} \\ ?\% \text{ of } 180 &= \sqrt{(24)^2 + (18)^2 + (60\% \text{ of } 660)} \\ ?\% \text{ of } 180 &= \sqrt{576 + 324 + 396} = \sqrt{1296} = 36 \\ \Rightarrow ?\% &= 36/180 = 1/5 \\ \Rightarrow ? &= 20 \end{aligned}$$

Sol 273.

$$\begin{aligned} \sqrt{9409} \times 63 + 748 &= ?^3 \\ \Rightarrow \sqrt{(97)^2} \times 63 + 748 &= ?^3 \\ \Rightarrow (97 \times 63) + 748 &= ?^3 \\ \Rightarrow 6111 + 748 &= ?^3 \\ \Rightarrow ?^3 &= 6859 \\ \Rightarrow ?^3 &= 19^3 \\ \therefore ? &= 19 \end{aligned}$$

Sol 274.

Follow BODMAS rule to solve this question, as per the given order below.
Step 1: Parts of the equation enclosed in 'Brackets' must be solved first.
Step 2: Any mathematical 'Of' or 'Exponent' must be solved next.
Step 3: Next, the parts of the equation containing 'Division' or 'Multiplication' are calculated.
Step 4: Last but not the least, the parts of the equation containing 'Addition' or 'Subtraction' are calculated.
Given,
 $11.25 - 2.75 \times (7.66 + 2.34) + 3.35 \times 3 = ?$
 $\Rightarrow 11.25 - 2.75 \times 10 + 3.35 \times 3 = ?$
 $\Rightarrow 11.25 - 27.5 + 10.05 = ?$
 $\Rightarrow -6.2 = ?$

Sol 275.

Given expression is,
 $(17.14 \times 15.80) \div 3.71 = ? \times 9.19 - 48.79$
We can write the given values as:
 $17.14 \approx 17$ and $15.80 \approx 16$
 $3.71 \approx 4$ and $9.19 \approx 9$ and $48.79 \approx 49$
Then,
 $\Rightarrow (17 \times 16) \div 4 = ? \times 9 - 49$
 $\Rightarrow 272 \div 4 = ? \times 9 - 49$
 $\Rightarrow 68 = ? \times 9 - 49$
 $\Rightarrow 68 + 49 = ? \times 9$
 $\Rightarrow ? \times 9 = 117$
 $\Rightarrow ? = 117/9$
 $\Rightarrow ? \approx 13$

Sol 276.

Given expression is,
 $(43.19 \times 10.19) \div 5.20 = 37.40 \times 1.94 + ?$
We can write the given values as:
 $43.19 \approx 43$ and $10.19 \approx 10$
 $5.20 \approx 5$ and $37.40 \approx 37$ and $1.94 \approx 2$
Then,
 $\Rightarrow (43 \times 10) \div 5 = 37 \times 2 + ?$
 $\Rightarrow 430 \div 5 = 37 \times 2 + ?$
 $\Rightarrow 86 = 37 \times 2 + ?$
 $\Rightarrow 86 = 74 + ?$
 $\Rightarrow ? = 86 - 74$
 $\Rightarrow ? \approx 12$

Sol 277.

Follow BODMAS rule to solve this question, as per the order given below,
Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,
Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3- Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4- Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.
Given expression is,
 $121 \div (7/5 \times 3/8 \times 4/5) = ?$
 $\Rightarrow ? = 121 \div (21/50)$
 $\Rightarrow ? = 121 \times 50/21$
 $\Rightarrow ? = 6050/21$
 $\therefore ? = 288.09 \approx 288$

Sol 278.

Suppose x will come in place of question mark;

$$\begin{aligned} [(42)^2 \div 63 \times 12] \div 14 &= 240 \times x \\ \Rightarrow [1764 \div 63 \times 12] \div 14 &= 240x \\ \text{Applying BODMAS Rule;} \\ \Rightarrow [28 \times 12] \div 14 &= 240x \\ \Rightarrow [336] \div 14 &= 240x \\ \Rightarrow 240x &= 24 \\ \Rightarrow x &= 0.1 = 1/10 \end{aligned}$$

Sol 279.

$$\begin{aligned} (\sqrt{64.09 \times 23.95} - 31) \div 6.89 &= ? \\ \text{Approximating the values to the nearest integer:} \\ \Rightarrow (8 \times 24 - 31) \div 7 &= ? \\ \Rightarrow (192 - 31) \div 7 &= ? \\ \Rightarrow ? = 161/7 & \\ \Rightarrow ? &= 23 \end{aligned}$$

Sol 280.

$$\begin{aligned} \Rightarrow \sqrt{5378} \times \sqrt{3363} \div \sqrt{360} &= ? \\ \text{Approximating the values to the nearest integer:} \\ \Rightarrow \sqrt{5329} \times \sqrt{3364} \div \sqrt{361} &= ? \\ \Rightarrow ? = (73 \times 58)/19 & \\ \Rightarrow ? = 222.84 \approx 223 & \end{aligned}$$

Sol 281.

Follow BODMAS rule to solve this question, as per the order given below,
Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,
Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,
Step-3- Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,
Step-4- Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.
Given expression is,
 $\Rightarrow (901 \div 53) \times 4 + (825 \div 33) = 33 \times ? - 72$
 $\Rightarrow 17 \times 4 + 25 = 33 \times ? - 72$
 $\Rightarrow 68 + 25 = 33 \times ? - 72$
 $\Rightarrow 93 = 33 \times ? - 72$
 $\Rightarrow 93 + 72 = 33 \times ?$
 $\Rightarrow 165 = 33 \times ?$
 $\Rightarrow ? = 165/33$
 $\Rightarrow ? = 5$

Sol 282.

Given expression is,
 $(180.18 \div 3.16) + 44.14 = 15.96 \times ? + 7.98$
We can write the given values as:
 $180.18 \approx 180$ and $3.16 \approx 3$
 $44.14 \approx 44$ and $15.96 \approx 16$ and $7.98 \approx 8$
Then,
 $\Rightarrow (180 \div 3) + 44 = 16 \times ? + 8$
 $\Rightarrow 60 + 44 = 16 \times ? + 8$
 $\Rightarrow 104 = 16 \times ? + 8$
 $\Rightarrow 104 - 8 = 16 \times ?$
 $\Rightarrow 96 = 16 \times ?$
 $\Rightarrow ? = 96 / 16$
 $\Rightarrow ? \approx 6$

Sol 283.

Given expression is,
 $(24.78 \times 8.35) = (31.12 \times 6.96) + (5.10 \times 1.91) - ?$

We can write the given values as:

$$24.78 \approx 25 \text{ and } 8.35 \approx 8 \text{ and } 31.12 \approx 31$$

$$6.96 \approx 7 \text{ and } 5.10 \approx 5 \text{ and } 1.91 \approx 2$$

Then,

$$\Rightarrow (25 \times 8) = (31 \times 7) + (5 \times 2) - ?$$

$$\Rightarrow 200 = (31 \times 7) + (5 \times 2) - ?$$

$$\Rightarrow 200 = 217 + 10 - ?$$

$$\Rightarrow 200 = 227 - ?$$

$$\Rightarrow ? = 227 - 200$$

$$\Rightarrow ? \approx 27$$

Sol 284.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$4.897 \times 4.010 + 6.021 \div 1.899 - 2.967 \times 3.033 = ?$$

Taking their approx. values

$$\Rightarrow 5 \times 4 + 6 \div 2 - 3 \times 3 = ?$$

$$\Rightarrow ? = 20 + 3 - 9$$

$$\Rightarrow ? = 14$$

$$\therefore ? = 14$$

Sol 285.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$15 + \left\{ \left(2\frac{4}{7} \times 5\frac{4}{2} \right) \div \left(6\frac{2}{9} \times 2\frac{4}{7} \right) \right\} = ?$$

$$\Rightarrow 15 + \left\{ \left(\frac{18}{7} \times \frac{14}{2} \right) \div \left(\frac{56}{9} \times \frac{18}{7} \right) \right\} = ?$$

$$\Rightarrow 15 + \left(\frac{18}{16} \right) = ?$$

$$\Rightarrow 15 + \frac{9}{8} = ?$$

$$\Rightarrow ? = \frac{120 + 9}{8} = \frac{129}{8}$$

$$\Rightarrow ? = 129/8$$

Sol 286.

Approximating the above values :

$$\Rightarrow 10^3 - 24^2 + 2^5$$

$$\Rightarrow 1000 - 576 + 32$$

$$\therefore ? = 456$$

Sol 287.

We know that any value between 0.1 and 0.4 becomes 0 after approximation. And any value between 0.5 and 0.9 becomes 1 after approximation.

Using the same approach we will solve given expression:

$$\Rightarrow 73.823 + 63.26 - 46.72 \times 0.5 = ?$$

$$\Rightarrow 74 + 63 - 47 \times 0.5 = ?$$

$$\Rightarrow 137 - 23.5 = ?$$

$$\Rightarrow ? = 113.5 = 114 \text{ (approx.)}$$

Sol 288.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated

$$(83.89 \times 50.04) \div 1.5 + 199.99 = ?$$

$$\Rightarrow (84 \times 50) \div 1.5 + 200 = ?$$

$$\Rightarrow 4200 \div 1.5 + 200 = ?$$

$$\Rightarrow 2800 + 200 = ?$$

$$\Rightarrow ? = 3000$$

Sol 289.

$$\Rightarrow 35\% \text{ of } 3563 + 61\% \text{ of } 8349 = ?$$

$$\Rightarrow 1247.05 + 5092.89 = ?$$

$$\Rightarrow ? = 6339.94$$

$$\Rightarrow ? \approx 6340$$

Sol 290.

$$\Rightarrow 4\frac{6}{37} \times 6\frac{21}{52} \times 14\frac{6}{7} + 1\frac{3}{4} = ?$$

$$\Rightarrow 154/37 \times 333/52 \times 104/7 + 7/4 = ?$$

$$\Rightarrow 396 + 1.75 = ?$$

$$\Rightarrow ? = 397.75$$

Sol 291.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated

$$(17.002)^3 + (22.99)^3 - (19.99)^3 = ?$$

$$\Rightarrow (17)^3 + (23)^3 - (20)^3 = ?$$

$$\Rightarrow 4913 + 12167 - 8000 = ?$$

$$\Rightarrow 17080 - 8000 = ?$$

$$\Rightarrow ? = 9080$$

Sol 292.

Follow BODMAS rule to solve this question, as per the order given below:

B	Brackets in order (), {}, []	ब्रैकेट (), {}, [] क्रम में
O	of	का
D	Division (÷)	विभाजन (÷)
M	Multiplication (×)	गुणा (×)
A	Addition (+)	जोड़ (+)
S	Subtraction (-)	घटाव (-)

$$4^3 + [(11^2 + 24) + (8^2 \div 4)] = ?$$

$$\Rightarrow 64 + [(121 + 24) + (64 \div 4)]$$

$$\Rightarrow 64 + (145 + 16)$$

$$\Rightarrow 64 + 161 = 225$$

$$\therefore ? = 225$$

Sol 293.

Given expression:

$$(25)^{7.5} \times (5)^{2.5} \div (125)^3 = 5^?$$

$$\Rightarrow (5)^{15} \times (5)^{2.5} \div (5)^9 = 5^?$$

$$\Rightarrow (5)^{15+2.5} \div (5)^9 = 5^?$$

$$\Rightarrow (5)^{15+2.5-9} = 5^?$$

$$\Rightarrow ? = 8.5$$

Sol 294.

Follow BODMAS rule to solve this question, as per the order given below.

Step - 1 - steps of an equation enclosed in 'Brackets' must be solved first.

Step - 2 - any mathematical 'Of' or 'Exponent' must be solved next.

Step - 3 - Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated.

Step - 4 - Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Now, the given expression:

$$\Rightarrow \{(12)^2 \times (3)^2\} \div (6)^3 + ? = 5 \times 3.4$$

$$\Rightarrow \{144 \times 9\} \div 216 + ? = 5 \times 3.4$$

$$\Rightarrow 1296 \div 216 + ? = 17$$

$$\Rightarrow 6 + ? = 17$$

$$\Rightarrow ? = 11$$

Sol 295.

Follow BODMAS rule to solve this question, as per the order given below.

Step - 1 - steps of an equation enclosed in 'Brackets' must be solved first.

Step - 2 - any mathematical 'of' or 'exponent' must be solved next.

Step - 3 - Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated.

Step - 4 - Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Now, the given expression:

$$\Rightarrow \frac{270}{30} \times \frac{432}{36} + \frac{1}{3} \text{ of } \{1700 \div (506 \div 23 \times 3 - 7^2) - ?\} = 75$$

$$\Rightarrow \frac{270}{30} \times \frac{432}{36} + \frac{1}{3} \text{ of } \{1700 \div (22 \times 3 - 49) - ?\} = 75$$

$$\Rightarrow \frac{270}{30} \times \frac{432}{36} + \frac{1}{3} \text{ of } \{1700 \div (66 - 49) - ?\} = 75$$

$$\Rightarrow \frac{270}{30} \times \frac{432}{36} + \frac{1}{3} \text{ of } \{1700 \div 17 - ?\} = 75$$

$$\Rightarrow \frac{270}{30} \times \frac{432}{36} + \frac{1}{3} \text{ of } \{100 - ?\} = 75$$

$$\Rightarrow \frac{270}{30} \times \frac{432}{36} + \frac{100}{3} - \frac{?}{3} = 75$$

$$\Rightarrow 9 \times 12 + \frac{100}{3} - \frac{?}{3} = 75$$

$$\Rightarrow 108 + \frac{100}{3} - \frac{?}{3} = 75$$

$$\Rightarrow ?/3 = 108 + 100/3 - 75$$

$$\Rightarrow ? = 3 \times (108 + 100/3 - 75)$$

$$\Rightarrow ? = 324 + 100 - 225$$

$$\Rightarrow ? = 424 - 225$$

$$\Rightarrow ? = 199$$

Sol 296.

Approximating values in the given expression:

$$? \approx 1440/36 + 2/9 \times 4050 - 125$$

Follow BODMAS rule to solve the expression, as per the order given below,

Step - 1 - Parts of an equation enclosed in the 'BRACKETS' must be solved first

Step - 2 - Any mathematical 'OF' or 'EXPONENTS' must be solved next

Step - 3 - Next the part of the equation that contains 'DIVISION' and 'MULTIPLICATION' are calculated

Step - 4 - Last but not least, the parts of the equation that contains 'ADDITION' and 'SUBTRACTION' should be calculated

$$? \approx 1440/36 + 2/9 \times 4050 - 125$$

$$? = 40 + 900 - 125$$

$$\therefore ? = 815$$

Sol 297.

$$38.11 \times 55.42 - ?^3 + 84.79 \times 14.01 = 37.32 \times 22.35 - 277.87$$

Taking their approx. value;

$$38 \times 55 - ?^3 + 85 \times 14 = 37 \times 22 - 278$$

$$\Rightarrow 2090 - ?^3 + 1190 = 814 - 278$$

$$\Rightarrow 3280 - ?^3 = 536$$

$$\Rightarrow ?^3 = 3280 - 536$$

$$\Rightarrow ?^3 = 2744$$

$$\therefore ? = \sqrt[3]{2744} = 14$$

Sol 298.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$\Rightarrow 47.88 + 84.07 - 99.95 = 7.86 \times ?$$

$$\Rightarrow 48 + 84 - 100 = 7.86 \times ?$$

$$\Rightarrow 132 - 100 = 7.86 \times ?$$

$$\Rightarrow 32 = 7.86 \times ?$$

$$\Rightarrow 32 = 8 \times ?$$

$$\Rightarrow ? = 32/8 = 4$$

$$\Rightarrow ? = 4$$

Sol 299.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$\Rightarrow 54.86 + 19.98 + (?)^2 = 28.01\% \text{ of } 700$$

$$\Rightarrow 55 + 20 + (?)^2 = \frac{28}{100} \times 700$$

$$\Rightarrow 75 + (?)^2 = 28 \times 7$$

$$\Rightarrow 75 + (?)^2 = 196$$

$$\Rightarrow (?)^2 = 121$$

$$\Rightarrow (?)^2 = 11^2$$

$$\Rightarrow ? = 11$$

Sol 300.

$$1132.757 - 2315.996 - 1753.829 + 2 \times 2846.639$$

$$= 1133 - 2316 - 1754 + 5694$$

$$= (1133 + 5694) - (2316 + 1754)$$

$$= 6827 - 4070$$

$$= 2757$$

Sol 301.

$$\frac{9}{5} \times 2\frac{3}{4} \div \frac{5}{8} + \frac{9}{2} \times \frac{5}{7} - \frac{18}{25}$$

$$= \frac{9}{5} \times \frac{11}{4} \div \frac{5}{8} + \frac{9}{2} \times \frac{5}{7} - \frac{18}{25}$$

$$= \frac{9}{5} \times \frac{11}{4} \times \frac{8}{5} + \frac{9}{2} \times \frac{5}{7} - \frac{18}{25}$$

$$= \frac{198}{25} + \frac{45}{14} - \frac{18}{25}$$

$$= \frac{180}{25} + \frac{45}{14}$$

$$= \frac{36}{5} + \frac{45}{14}$$

$$= \frac{36 \times 14 + 45 \times 5}{70}$$

$$= (504 + 225)/70$$

$$= 729/70$$

Sol 302.

$$119.8\% \text{ of } 2419 + 40.03\% \text{ of } 142$$

Approximating values:

$$120\% \text{ of } 2419 + 40\% \text{ of } 142$$

$$= 1.2 \times 2419 + 0.4 \times 142$$

$$= 2902.8 + 56.8$$

$$= 2959.6 \approx 2960$$

Sol 303.

Approximating values and then using BODMAS:

$$29.88\% \text{ of } 5103 - (17.48)^2 + (32.52)^2 = ?$$

$$= 0.2988 \times 5103 - (17.48)^2 + (32.52)^2$$

$$= 0.3 \times 5103 - \{(17.48)^2 - (32.52)^2\}$$

$$= 1530.9 - (17.48 - 32.52)(17.48 + 32.52)$$

$$= 1531 - (-15.04)(50)$$

$$= 1531 + 752$$

$$= 2283$$

Sol 304.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$\Rightarrow 87.14 + 11.1 + 1.94 = 191.15 - ?$$

$$\Rightarrow 100.18 = 191.15 - ?$$

$$\Rightarrow ? = 191.15 - 100.18$$

$$\Rightarrow ? = 90.97$$

Sol 305.

$$\frac{(23.01)^2 - (12.92)^2}{(33.92)^2 - (15.98)^2} = ?$$

Take approximate values

$$\Rightarrow 23.01 \approx 23$$

$$\Rightarrow 12.92 \approx 13$$

$$\Rightarrow 33.92 \approx 34$$

$$\Rightarrow 15.98 \approx 16$$

Putting approximated values in the equation

$$\frac{(23)^2 - (13)^2}{(34)^2 - (16)^2} = ?$$

Using $a^2 - b^2 = (a+b)(a-b)$, we get

$$\Rightarrow \frac{(23+13) \times (23-13)}{(34-16) \times (34+16)} = ?$$

$$\Rightarrow \frac{36 \times 10}{18 \times 50} = 0.4$$

$$\therefore ? = 0.4$$

Sol 306.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$[17.96 \times (215.87)^{1/3} \div 2.98] = x\% \text{ of } 199.99 + (3.97)^2$$

$$\Rightarrow [18 \times (216)^{1/3} \div 3] = x\% \text{ of } 200 + (4)^2$$

$$\Rightarrow [18 \times 6 \div 3] = x\% \text{ of } 200 + 16$$

$$\Rightarrow [18 \times 2] - 16 = x\% \text{ of } 200$$

$$\Rightarrow 36 - 16 = x\% \text{ of } 200$$

$$\Rightarrow 20 = (x/100) \times 200$$

$$\Rightarrow x = 10$$

Sol 307.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$(32.99 + 18.02) \div 2.99 + ?^3 = 3^2 + 4^2$$

$$\Rightarrow (33 + 18)/3 + ?^3 = 9 + 16$$

$$\Rightarrow 17 + ?^3 = 25$$

$$\Rightarrow ?^3 = 8$$

$$\Rightarrow ? = 2$$

Sol 308.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$(\sqrt{2115.95 \div 23}) + (14^2 - 16.01 \times 10.04) - 22 = ?$$

$$\Rightarrow (\sqrt{2116 \div 23}) + (14^2 - 16 \times 10) - 22 = ?$$

$$\Rightarrow (46 \div 23) + (196 - 160) - 22 = ?$$

$$\Rightarrow 2 + 36 - 22 = ?$$

$$\Rightarrow 16 = ?$$

Sol 309.

$$\frac{\{(5)^2\}^{6.5} \times (5)^{3.5}}{\{5^3\}^{4.5}} = 5^?$$

$$\Rightarrow \frac{5^{13} \times 5^{3.5}}{5^{13.5}} = 5^?$$

$$\Rightarrow 5^{(16.5-13.5)} = 5^?$$

$$\Rightarrow 5^3 = 5^?$$

$$\Rightarrow ? = 3$$

Sol 310.

Follow BODMAS rule to solve this question, as per the order given below:

B	Brackets in order (), {}, []	ब्रैकेट (), {}, [] क्रम में
O	of	का
D	Division (÷)	विभाजन (÷)
M	Multiplication (×)	गुणा (×)
A	Addition (+)	जोड़ (+)
S	Subtraction (-)	घटाव (-)

$$34^2 - 25^2 + 18^2 - 9^2 = ? - 15^2$$

$$\Rightarrow ? = 1156 - 625 + 324 - 81 + 225$$

$$\Rightarrow ? = 999$$

Sol 311.

Follow BODMAS rule to solve this question, as per the order given below:

- Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,
 - Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,
 - Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,
 - Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.
- The expression given is as follows,
- $$225 \div 25 \times 21 - 30 = ? + \sqrt{2209} - \sqrt{7744}$$
- $$\Rightarrow 189 - 30 = ? + 47 - 88$$
- $$\Rightarrow ? = 200$$

Sol 312.

Follow BODMAS rule to solve this question, as per the order given below,

- Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,
- Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,
- Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,
- Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is

$$\Rightarrow (\sqrt{2} + \sqrt{7} - 2\sqrt{10})$$

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

$$= \sqrt{2} + \sqrt{5 - 2\sqrt{10}}$$

$$= \sqrt{2} + \sqrt{5} - \sqrt{2}$$

$$= \sqrt{5}$$

Sol 313.

Follow BODMAS rule to solve this question, as per the order is given below:

- Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,
- Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,
- Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$11\frac{1}{9}\% \text{ of } (29.99)^2 + (7.979)^2 \div (511.98)^{1/3} = -(x)^2 + (11.979)^2$$

$$\Rightarrow 11\frac{1}{9}\% \text{ of } (30)^2 + (8)^2 \div (512)^{1/3} = -(x)^2 + (12)^2$$

$$\Rightarrow \frac{100}{9 \times 100} \times 900 + 64 \div 8 = -(x)^2 + 144$$

$$\Rightarrow 100 + 8 - 144 = -(x)^2$$

$$\Rightarrow -36 = -(x)^2$$

$$\Rightarrow x = 6$$

Sol 314.

Follow BODMAS rule to solve this question, as per the order is given below:

- Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,
- Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,
- Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,
- Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$(9.09)^2 \times (26.89)^{1/3} \div 8.99 + (16.97)^2 = x$$

$$\Rightarrow (9)^2 \times (27)^{1/3} \div 9 + (17)^2 = x$$

$$\Rightarrow 81 \times 3 \div 9 + 289 = x$$

$$\Rightarrow 81 \times (1/3) + 289 = x$$

$$\Rightarrow 27 + 289 = x$$

$$\Rightarrow x = 316$$

Sol 315.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and follow BODMAS rule in the bracket,

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Since, we need to find out the approximate value,

So, we can write these values to their nearest integers.

Given expression is

$$(7.98 + 3.94 - 1.92) \times (16.97 - 11.92) \times 9.91 - 88.99 = ?$$

$$\Rightarrow (8 + 4 - 2) \times (17 - 12) \times 10 - 89$$

$$\Rightarrow (12 - 2) \times (17 - 12) \times 10 - 89$$

$$\Rightarrow 10 \times (17 - 12) \times 10 - 89$$

$$\Rightarrow 10 \times 5 \times 10 - 89$$

$$\Rightarrow 50 \times 10 - 89$$

$$\Rightarrow 500 - 89$$

$$\Rightarrow 411.$$

Sol 316.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and follow BODMAS rule in the bracket,

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Since, we need to find out the approximate value,

So, we can write these values to their nearest integers.

Given expression is

$$2111.99 + 691.92 \times 1.98 - 1111.11 \times 5.05 + 7323.94 \times 7.98 = ?$$

$$\Rightarrow 2112 + 692 \times 2 - 1111 \times 5 + 7324 \times 8 = ?$$

$$\Rightarrow 2112 + 1384 - 5555 + 58592 = ?$$

$$\Rightarrow ? = 62088 - 5555 = 56533$$

$$\therefore ? = 56533$$

Sol 317.

Follow BODMAS rule to solve this question, as per the order is given below:

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$\frac{\sqrt{484} - 525 \div 35}{\sqrt[3]{64} \times 7 - 21} = ?$$

$$\Rightarrow ? = (22 - 15)/(4 \times 7 - 21)$$

$$\Rightarrow ? = 7/7$$

$$\Rightarrow ? = 1$$

Sol 318.

Follow BODMAS rule to solve this question, as per the order is given below:

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step - 4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$\frac{[22 + (7 + 3) \div 5] \times 2^8}{4^3} = ?$$

$$\Rightarrow ? = 24 \times 2^8 / 2^6$$

$$\Rightarrow ? = 24 \times 4$$

$$\Rightarrow ? = 96$$

Sol 319.

Follow BODMAS rule to solve this question, as per the order is given below:

- Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,
- Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,
- Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,
- Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$48 - 55 \div 5 \times 11 + (\sqrt{289}) = ?$$

$$\begin{aligned} \Rightarrow ? &= 48 - 11 \times 11 + 17 \\ \Rightarrow ? &= 48 - 121 + 17 \\ \Rightarrow ? &= 65 - 121 \\ \Rightarrow ? &= -56 \end{aligned}$$

Sol 320.

Follow BODMAS rule to solve this question, as per the order is given below:

- Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,
- Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,
- Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,
- Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$\begin{aligned} 55\% \text{ of } 6620 + \sqrt[3]{681472} \times (1/11) - 32^2 &= ? \\ \Rightarrow (55/100) \times 6620 + \sqrt[3]{681472} \times (1/11) - 32^2 &= ? \\ \Rightarrow (11/20) \times 6620 + \sqrt[3]{681472} \times (1/11) - 1024 &= ? \\ \Rightarrow (11 \times 331) + 88 \times (1/11) - 1024 &= ? \\ \Rightarrow 3641 + 8 - 1024 &= ? \\ \Rightarrow 3649 - 1024 &= ? \\ \therefore ? &= 2625 \end{aligned}$$

Sol 321.

Follow BODMAS rule to solve this question, as per the order is given below:

- Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,
- Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,
- Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,
- Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$\begin{aligned} (16.99) \times (6.01)^2 - (4.99) \times (7.99) &=? \\ \Rightarrow 17 \times (6)^2 - 5 \times 8 &=? \\ \Rightarrow 17 \times 36 - 40 &=? \\ \Rightarrow 612 - 40 &=? \\ \text{Hence, } ? &= 572 \end{aligned}$$

Sol 322.

Given expression is -

$$(456.18 - 345.69) \div 11.10 \times 24.91 = 443.80 - 328.08 + ?$$

We can write given values as,

$$\begin{aligned} 456.18 &\approx 456, 345.69 \approx 346, 11.10 \approx 11 \\ 24.91 &\approx 25, 443.80 \approx 444, 328.08 \approx 328 \end{aligned}$$

Given expression becomes -

$$\begin{aligned} \Rightarrow (456 - 346) \div 11 \times 25 &= 444 - 328 + ? \\ \Rightarrow (110) \div 11 \times 25 &= 444 - 328 + ? \\ \Rightarrow 10 \times 25 &= 444 - 328 + ? \\ \Rightarrow 250 &= 444 - 328 + ? \\ \Rightarrow 250 &= 116 + ? \\ \Rightarrow ? &= 250 - 116 \\ \Rightarrow ? &\approx 134 \end{aligned}$$

Sol 323.

Follow BODMAS rule to solve this question, as per the order given below,

- Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,
- Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,
- Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4- Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$(12.17)^2 + (4.93)^2 \times 4.98 - \sqrt[3]{127} - 6018.18 \div 5.91 = ?^3$$

Taking approximate values as,

$$12.17 \approx 12, 4.93 \approx 5, 4.98 \approx 5, \sqrt[3]{127} \approx \sqrt[3]{125}, 6018.18 \approx 6018, 5.91 \approx 6$$

$$\Rightarrow (12)^2 + (5)^2 \times 5 - \sqrt[3]{125} - 6018 \div 6 = ?^3$$

$$\Rightarrow ?^3 = -739$$

$$\Rightarrow ? = -9.04 \approx -9$$

Sol 324.

Follow BODMAS rule to solve this question, as per the order given below,

- Step-1- Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket-

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next

- Step-3- Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4- Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$(80)^{1/4} + (4.01)^3 - 71.98 \times 2.02 + (10.98)^2 = ?$$

Taking the approximate values as,

$$80 \approx 81, 4.01 \approx 4, 71.98 \approx 72, 2.02 \approx 2, 10.98 \approx 11$$

$$\Rightarrow (81)^{1/4} + (4)^3 - 72 \times 2 + (11)^2 = ?$$

$$\Rightarrow 3 + 64 - 144 + 121 = ?$$

$$\therefore ? = 44$$

Sol 325.

Follow BODMAS rule to solve this question, as per the order given below,

- Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,

- Step-3- Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4- Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$(1472.2 \div 23.13)^{1/3} + (71.8 \times 2.05)^{1/2} = (?)^{1/2}$$

Taking the approximate values,

$$1472.2 \approx 1472, 23.13 \approx 23, 71.8 \approx 72, 2.05 \approx 2$$

$$\Rightarrow (1472 \div 23)^{1/3} + (72 \times 2)^{1/2} = (?)^{1/2}$$

$$\Rightarrow (64)^{1/3} + (144)^{1/2} = (?)^{1/2}$$

$$\Rightarrow 4 + 12 = (?)^2$$

$$\therefore ? = 4$$

Sol 326.

Follow BODMAS rule to solve this question, as per the order given below,

- Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,

- Step-3- Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4- Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$(12/5)^2 \times (37.5 \times 56) \div (984/41) = ?$$

Applying BODMAS Rule;

$$\Rightarrow (144/25) \times 2100 \div 24 = ?$$

$$\Rightarrow (144/25) \times 87.5 = ?$$

$$\therefore ? = 504$$

Sol 327.

Follow BODMAS rule to solve this question, as per the order given below,

- Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3- Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4- Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$100 \times 297 \div 33 - 5.2 \times 85 + 432 \div 5.4 \times 2.7 = (?)^2 - 482$$

Applying BODMAS Rule;

$$\Rightarrow 100 \times 9 - 442 + 80 \times 2.7 + 482 = ?^2$$

$$\Rightarrow ?^2 = 900 - 442 + 216 + 482$$

$$\Rightarrow ?^2 = 1156$$

$$\therefore ? = 34$$

Sol 328.

Follow BODMAS rules to solve the equation

Step -1: The part of the equation containing 'Brackets' must be solved first, and in the bracket,

Step -2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step -3: Next, the parts of the equation that contains 'Division' and 'Multiplication' are solved

Step -4: At last, the part of the equation that contains 'Addition' and 'Subtraction' should be solved.

$$\Rightarrow (2V2 - 7)^2 + \sqrt{1568} - 21 = (6)^2$$

$$\Rightarrow 8 + 49 - 28V2 + \sqrt{1568} - 21 = (6)^2$$

$$\Rightarrow 57 - \sqrt{2 \times 28 \times 28} + \sqrt{1568} - 21 = (6)^2$$

$$\Rightarrow 57 - 21 + \sqrt{1568} - \sqrt{1568} = (6)^2$$

$$\Rightarrow 36 = (6)^2$$

$$\therefore ? = 2$$

Sol 329.

Follow BODMAS rules to solve the equation

Step -1: The part of the equation containing 'Brackets' must be solved first, and in the bracket,

Step -2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step -3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are solved

Step -4: At last, the part of the equation that contains 'Addition' and 'Subtraction' should be solved.

$$\Rightarrow 24.5\% \text{ of } 360 + ? = 21\% \text{ of } 450 + 17\% \text{ of } 340$$

$$\Rightarrow 88.2 + ? = 94.5 + 57.80$$

$$\Rightarrow ? = 94.5 - 88.2 + 57.80$$

$$\Rightarrow ? = 152.3 - 88.2 = 64.1$$

$$\therefore ? = 64.1$$

Sol 330.

$$1/17 \times \sqrt[3]{4913.28} + 25\% \text{ of } 401\% \text{ of } 300.008 + 1/13.0008 \times$$

$$\sqrt[3]{2197.0008} = ?$$

It can be approximated as

$$1/17 \times \sqrt[3]{4913} + 25\% \text{ of } 400\% \text{ of } 300 + 1/13 \times \sqrt[3]{2197} = ?$$

$$\Rightarrow 1/17 \times 17 + 1/4 \times 4 \times 300 + 1/13 \times 13 = ?$$

$$\Rightarrow 1 + 300 + 1 = ?$$

$$\Rightarrow 302 = ?$$

Sol 331.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$\sqrt[3]{726.034 + 888.012 - \sqrt[3]{(?)}} = 39.97$$

Approximating the value to the nearest integer:

$$\Rightarrow \sqrt[3]{726 + 888 - \sqrt[3]{(?)}} = 40$$

$$\Rightarrow 1614 - 1600 = \sqrt[3]{(?)}$$

$$\Rightarrow (?) = 14^3$$

$$\Rightarrow (?) = 2744$$

Sol 332.

Rules of Approximation:

1. If a number has digits to the right of the decimal less than 5, then just drop the digits to the right of the decimal. The number so obtained will be the approximated value.

2. If a number has digits to the right of the decimal more than 5, then just drop the digits to the right of the decimal and raise the remaining number by '1'.The number so obtained will be the approximated value.

Concept:

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3- Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4- Last but not the least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given Expression,

$$(5899.10 - 288.70) \div 29.96 = 12.81 \times 11.80 + ?$$

We can also write values as:

$$5899.10 \approx 5899, 288.70 \approx 289, 29.96 \approx 30, 12.81 \approx 13, 11.80 \approx 12$$

Calculation:

Given expression becomes,

$$\Rightarrow (5899 - 289) \div 30 = 13 \times 12 + ?$$

$$\Rightarrow 5610 \div 30 = 13 \times 12 + ?$$

$$\Rightarrow 187 = 13 \times 12 + ?$$

$$\Rightarrow 187 = 156 + ?$$

$$\Rightarrow ? \approx 31$$

Sol 333.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$5 \times 8 + 60 \div 4 - 9 \times 5 + 2$$

$$\Rightarrow 5 \times 8 + 15 - 9 \times 5 + 2$$

$$\Rightarrow 40 + 15 - 45 + 2$$

$$\Rightarrow 57 - 45$$

$$\Rightarrow 12$$

Sol 334.

Let the required value of the expression be p.

$$p = 415.25 - 627.10 + 958.55$$

$$\Rightarrow p = 1373.8 - 627.10$$

$$\Rightarrow p = 746.7$$

LEVEL 3

335 - 401 Questions

Sol 335.

Follow BODMAS rule to solve this question, as per the order given below,

Step - 1 - Parts of an equation enclosed in the 'BRACKETS' must be solved first

Step - 2 - Any mathematical 'OF' or 'EXPONENTS' must be solved next

Step - 3 - Next the part of the equation that contains 'DIVISION; and 'MULTIPLICATION' are calculated

Step - 4 - Last but not least, the parts of the equation that contains 'ADDITION' and 'SUBTRACTION' should be calculated

Now, the given expression:

$$\Rightarrow (25)^3 \times (4)^3 - (800)^2 = ?^2$$

$$\Rightarrow 15625 \times 64 - (800)^2 = ?^2$$

$$\Rightarrow 1000000 - (800)^2 = ?^2$$

$$\Rightarrow 1000000 - 640000 = ?^2$$

$$\Rightarrow 360000 = ?^2$$

$$\Rightarrow 600 = ?$$

Sol 336.

$$23\% \text{ of } 8040 = (23/100) \times 8040 = 1849.2$$

$$\Rightarrow 42\% \text{ of } 545 = (42/100) \times 545 = 228.9$$

$$\Rightarrow ?\% \text{ of } 3000 = (?/100) \times 3000 = 30(?)$$

$$\Rightarrow 1849.2 + 228.9 = 30(?)$$

$$\Rightarrow 30(?) = 2078.1$$

$$\therefore ? = 69.27$$

Sol 337.

$$\Rightarrow 15.8 \times 3 + 8.1 - 21.5 = ? + 14.6$$

$$\Rightarrow 47.4 + 8.1 - 21.5 = ? + 14.6$$

$$\Rightarrow ? + 14.6 = 34$$

$$\therefore ? = 19.4$$

Sol 338.

Follow BODMAS rule to solve this question, as per the order given below,
Step-1-Parts of an equation enclosed in 'Brackets' must be solved first,
Step-2-Any mathematical 'Of' or 'Exponent' must be solved next,
Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,
Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.
Now, the given expression,

$$3 - \left\{ 2 \text{ of } \left(3\frac{4}{5} - 1\frac{2}{3} \right) \div \frac{33}{15} + (? \% \text{ of } 45) \right\} = 0$$

$$\Rightarrow 3 - \left\{ 2 \text{ of } \left(\frac{5 \times 3 + 4}{5} - \frac{3 \times 1 + 2}{3} \right) \div \frac{33}{15} + \left(\frac{?}{100} \times 45 \right) \right\} = 0$$

$$\Rightarrow 3 - \left\{ 2 \times \left(\frac{19}{5} - \frac{5}{3} \right) \times \frac{15}{33} + \frac{9 \times ?}{20} \right\} = 0$$

$$\Rightarrow 3 - \left\{ 2 \times \left(\frac{57 - 25}{15} \right) \times \frac{15}{33} + \frac{9 \times ?}{20} \right\} = 0$$

$$\Rightarrow 3 - \left\{ 2 \times \frac{32}{15} \times \frac{15}{33} + \frac{9 \times ?}{20} \right\} = 0$$

$$\Rightarrow 3 - \left\{ \frac{64}{33} + \frac{9 \times ?}{20} \right\} = 0$$

$$\Rightarrow \frac{9 \times ?}{20} = 3 - \frac{64}{33}$$

$$\Rightarrow \frac{9 \times ?}{20} = \frac{99 - 64}{33}$$

$$\Rightarrow ? = \frac{35}{33} \times \frac{20}{9}$$

$$\Rightarrow ? = \frac{700}{297} = 2\frac{106}{297}$$

Sol 339.

Let the numerator of the original fraction = x
Denominator of the fraction = y

⇒ the fraction = x/y

Twice the numerator decreased by 50%

$$\Rightarrow 2x - (50 \times 2x/100)$$

$$= 2x - x$$

$$= x$$

Three times the denominator increased by 200%

$$\Rightarrow 3y + (200 \times 3y/100)$$

$$= 3y + 6y$$

$$= 9y$$

$$\therefore \text{the fraction} = (\text{Numerator}/\text{Denominator}) = \frac{x}{9y}$$

Now,

$$\frac{x}{9y} = \frac{141}{170}$$

$$\Rightarrow x/y = 1269/170$$

Thus, the original fraction is 1269/170.

Sol 340.

Follow BODMAS rule to solve this question, as per the order given below,

- Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,
 - Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,
 - Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,
 - Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.
- Given expression is,
- $$\Rightarrow (783.81 \div 3.91) - (1.5 \times 3.99) = 170.15 + ?$$
- We can write the given values as:
- $$783.81 \approx 784, 3.91 \approx 4, 3.99 \approx 4 \text{ and } 170.15 \approx 170$$
- Then,
- $$\Rightarrow (784 \div 4) - (1.5 \times 4) = 170 + ?$$
- $$\Rightarrow (196) - (6) = 170 + ?$$
- $$\Rightarrow 190 = 170 + ?$$
- $$\therefore ? = 190 - 170 = 20$$

Sol 341.

Follow BODMAS rule to solve this question, as per the order given below,

- Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,
 - Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,
 - Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,
 - Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.
- Given expression is,
- $$\Rightarrow 141.79 + (79.02 \times 2.04) = (?)^2 \times 2.90$$
- We can write the given values as:
- $$141.79 \approx 142, 79.02 \approx 79, 2.04 \approx 2, 2.90 \approx 3$$
- Then,
- $$\Rightarrow 142 + (79 \times 2) = (?)^2 \times 3$$
- $$\Rightarrow 142 + (158) = (?)^2 \times 3$$
- $$\Rightarrow 300 = (?)^2 \times 3$$
- $$\Rightarrow 300 \div 3 = (?)^2$$
- $$\Rightarrow 100 = (?)^2$$
- $$\Rightarrow 10^2 = (?)^2$$
- $$\therefore ? = 10$$

Sol 342.

Follow BODMAS rule to solve this question, as per the order given below,

- Step-1-Parts of an equation enclosed in 'Brackets' must be solved first,
 - Step-2-Any mathematical 'Of' or 'Exponent' must be solved next,
 - Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,
 - Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.
- Given expression:

$$\Rightarrow (?)^2 = \sqrt{13^2 + 28 \div 4 - 3^3 + 107}$$

$$\Rightarrow (?)^2 = \sqrt{169 + 28 \div 4 - 27 + 107}$$

$$\Rightarrow (?)^2 = \sqrt{169 + 7 - 27 + 107} = \sqrt{256} = 16$$

$$\Rightarrow ? = 4$$

Hence, the required answer is 4.

Sol 343.

Given expression,

$$\Rightarrow ? = 68.032 - 13.108 - 17.096$$

$$\Rightarrow ? = 54.924 - 17.096$$

$$\Rightarrow ? = 37.828$$

Sol 344.

$$(38)^2 + (63)^2 + (?)^2 = 6089$$

Re-writing the given equation, $6089 - (38)^2 - (63)^2 = (?)^2$

$$676 = (?)^2$$

Rooting both sides, $? = 26$

Sol 345.

Follow BODMAS rule to solve this question, as per the order given below:

Now, the given expression:

$$1682 \div 58 \times ? = 377$$

$$\Rightarrow 29 \times ? = 377$$

$$\Rightarrow ? = 377 \div 29$$

$$\Rightarrow ? = 13$$

Sol 346.

(0.45% of 150) \times (3.25% of 240) = ?

$$\Rightarrow ? = \frac{0.45}{100} \times 150 \times \frac{3.25}{100} \times 240$$

$$\Rightarrow ? = 0.675 \times 7.8$$

$$\Rightarrow ? = 5.265$$

Sol 347.

Simplifying the give values, we get,

$$\Rightarrow ? = \left(\frac{8787}{77} \right) \times \frac{92}{13} \approx 810$$

Hence, option 4 is correct.

Sol 348.

The given expression is

$$(66 + 14)^2 = \sqrt{?}$$

$$\text{Or, } x = ((66 + 14)^2)^2$$

$$\text{Or, } x = (66 + 14)^4 \quad (\because (a^m)^n = a^{mn})$$

$$\Rightarrow x = (80)^4$$

$$\Rightarrow x = 4,09,60,000$$

Sol 349.

Given expression can be written as,

$$\sqrt{0.09} = \sqrt{(9/100)} = ?$$

$$\therefore ? = 3/10 = 0.3$$

Sol 350.

Given Equation is,

$$468.4 \div 20 = ?$$

$$\Rightarrow ? = \frac{468.4}{20}$$

$$\Rightarrow ? = \frac{4684}{200} \text{ (Removing the decimal)}$$

$$\Rightarrow ? = 23.42$$

Sol 351.

Given expression:

$$\frac{\sqrt{1356} \times \sqrt{?}}{\sqrt{6084}} = 11$$

$$\Rightarrow 66 \times \sqrt{?} = 11 \times 78$$

$$\Rightarrow \sqrt{?} = 13$$

$$\Rightarrow ? = 169$$

Hence, the required number in place of the question mark is 169.

Sol 352.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket, the BODMAS rule must be followed,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next, Step-3-Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4-Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated

We have the expression:

$$\Rightarrow (80 \times 0.40)^3 \div (40 \times 1.6) \times (128)^3 = (2)^? + 7$$

$$\Rightarrow 32^3 \div 64 \times (128)^3 = (2)^? + 7$$

(We know that $64 = 32 \times 2$)

$$\Rightarrow (32^3 \div 32 \times 2) \times (128)^3 = (2)^? + 7$$

$$\Rightarrow 512 \times (128)^3 = (2)^? + 7$$

(We know that $512 = 2^9$ and $128 = 2^7$)

$$\Rightarrow 2^9 \times 2^{7 \times 3} = (2)^? + 7$$

$$\Rightarrow 2^{30} = (2)^? + 7$$

$$\Rightarrow 2^7 + 2^3 = (2)^? + 7$$

$$\Rightarrow ? = 23$$

Sol 353.

Given problem can be evaluated as:

$$\Rightarrow 37\% \text{ of } 450 = \frac{37}{100} \times 450$$

$$= 166.5$$

Now

$$\Rightarrow 166.5 - X\% \text{ of } 375 = 76.5$$

$$\Rightarrow 166.5 - 76.5 = X\% \text{ of } 375$$

$$\Rightarrow X\% \text{ of } 375 = 90$$

$$\Rightarrow \frac{X}{100} \times 375 = 90$$

$$\Rightarrow X = \frac{90 \times 100}{375}$$

$$\Rightarrow X = 24$$

Sol 354.

The given expression:

$$\Rightarrow 83\% \text{ of } 1700 + 42\% \text{ of } 2150 = (?)^3 + 117$$

$$\Rightarrow 83\% \times 1700 + 42\% \times 2150 = (?)^3 + 117$$

$$\Rightarrow \frac{83}{100} \times 1700 + \frac{42}{100} \times 2150 = ?^3 + 117$$

$$\Rightarrow 1411 + 903 = ?^3 + 117$$

$$\Rightarrow ?^3 + 117 = 2314$$

$$\Rightarrow ?^3 = 2314 - 117 = 2197$$

$$\Rightarrow ? = (2197)^{1/3} = 13$$

Sol 355.

Given expression is,

$$\Rightarrow (8742 \div 188) - 5.5 = \sqrt{(?)}$$

$$\Rightarrow 46.5 - 5.5 = \sqrt{(?)}$$

$$\Rightarrow \sqrt{(?)} = 41$$

$$\Rightarrow ? = 41^2$$

$$\Rightarrow ? = 1681$$

Hence the answer is 1681

Sol 356.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Finally, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

24% of 150 \times 5% of 40 \times 50% of 6.5 = 12.5% of ?

$$\Rightarrow 36 \times 2 \times 3.25 = 1/8 \times ?$$

$$\Rightarrow ? = 234 \times 8$$

$$\therefore ? = 1872$$

Sol 357.

$$\sqrt{441} - \sqrt{121} = \sqrt{?}$$

$$21 - 11 = \sqrt{?}$$

$$10^2 = ?$$

$$? = 100$$

Sol 358.

$$\frac{1}{6} + \frac{1}{4} \times \frac{1}{3} \div \frac{1}{5} - \frac{1}{8} \times \frac{1}{2} + \frac{1}{9} = ?$$

$$\Rightarrow \frac{1}{6} + \frac{1}{4} \times \frac{1}{3} \times 5 - \frac{1}{8} \times \frac{1}{2} + \frac{1}{9} = ?$$

$$\Rightarrow \frac{1}{6} + \frac{5}{12} - \frac{1}{16} + \frac{1}{9} = ?$$

$$\Rightarrow \frac{25}{36} - \frac{1}{16} = ?$$

$$\therefore ? = 91/144$$

Sol 359.

$$10.002 \times (13.564)^2 + 14.032 \times 15.087 - 8.563 \times 2.96 = ? \quad \text{---- (I)}$$

Take approximate values

$$\begin{aligned}\Rightarrow 10.002 &\approx 10 \\ \Rightarrow 13.564 &\approx 13.5 \\ \Rightarrow 14.032 &\approx 14 \\ \Rightarrow 15.087 &\approx 15 \\ \Rightarrow 8.563 &\approx 8.5 \\ \Rightarrow 2.96 &\approx 3\end{aligned}$$

Putting approximated values in equation (I)

$$\begin{aligned}\Rightarrow 10 \times (13.5)^2 + 14 \times 15 - 8.5 \times 3 \\ \Rightarrow 10 \times 182.25 + 210 - 25.5 = 2007 \\ \therefore ? = 2007\end{aligned}$$

Sol 360.

Approximating the values to the nearest integer:

$$81.49 \approx 81, 8.88 \approx 9 \text{ and } 181.09 \approx 182$$

$$12.77 \approx 13, 43.74 \approx 44 \text{ and } 1.23 \approx 1$$

$$\Rightarrow (81.49 \times 8.88 + 181.09) \div 12.77 = 43.74 + 1.23 \times ?$$

$$\Rightarrow (81 \times 9 + 181) \div 13 = 44 + 1 \times ?$$

$$\Rightarrow (729 + 181) \div 13 = 44 + 1 \times ?$$

$$\Rightarrow 910 \div 13 = 44 + 1 \times ?$$

$$\Rightarrow 70 = 44 + 1 \times ?$$

$$\Rightarrow 1 \times ? = 26$$

$$\Rightarrow ? = 26 / 1$$

$$\Rightarrow ? \approx 26$$

Sol 361.

Given expression is,

$$34.08 + 76.81 + 10.18 = 14.18\% \text{ of } 1199.80 - ?$$

We can write the given values as:

$$34.08 \approx 34 \text{ and } 76.81 \approx 77$$

$$10.18 \approx 10 \text{ and } 14.18 \approx 14 \text{ and } 1199.80 \approx 1200$$

Then,

$$\Rightarrow 34 + 77 + 10 = 14\% \text{ of } 1200 - ?$$

$$\Rightarrow 34 + 77 + 10 = (14/100) \times 1200 - ?$$

$$\Rightarrow 34 + 77 + 10 = 14 \times 12 - ?$$

$$\Rightarrow 34 + 77 + 10 = 168 - ?$$

$$\Rightarrow 121 = 168 - ?$$

$$\Rightarrow ? = 168 - 121$$

$$\Rightarrow ? \approx 47$$

Sol 362.

Given expression is,

$$(311.85 \div 7.91) + 70.80 = 33.11 \times 3.90 - ?$$

We can write the given values as:

$$311.85 \approx 312 \text{ and } 7.91 \approx 8$$

$$70.80 \approx 71 \text{ and } 33.11 \approx 33 \text{ and } 3.90 \approx 4$$

Then,

$$\Rightarrow (312 \div 8) + 71 = 33 \times 4 - ?$$

$$\Rightarrow 39 + 71 = 33 \times 4 - ?$$

$$\Rightarrow 39 + 71 = 132 - ?$$

$$\Rightarrow 110 = 132 - ?$$

$$\Rightarrow ? = 132 - 110$$

$$\Rightarrow ? \approx 22$$

Sol 363.

Given expression is,

$$182.20 + 77.80 - 70.89 = 18.75 \times 8.88 + ?$$

We can write the given values as:

$$182.20 \approx 182 \text{ and } 77.80 \approx 78$$

$$70.89 \approx 71 \text{ and } 18.75 \approx 19 \text{ and } 8.88 \approx 9$$

Then,

$$\Rightarrow 182 + 78 - 71 = 19 \times 9 + ?$$

$$\Rightarrow 182 + 78 - 71 = 171 + ?$$

$$\Rightarrow 260 - 71 = 171 + ?$$

$$\Rightarrow 189 = 171 + ?$$

$$\begin{aligned}\Rightarrow ? &= 189 - 171 \\ \Rightarrow ? &\approx 18\end{aligned}$$

Sol 364.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first.

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next.

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated.

Step-4: Last but not the least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$[1729 \div (5^3 \times 2^3 + 3^3 \div 3^{-3}) + 1729] = (39 - 390) \div 1.3 + ? \times 10^2$$

$$\Rightarrow [1729 \div (125 \times 8 + 3^{(3+3)}) + 1729] = (-351) \div 1.3 + ? \times 100$$

$$\Rightarrow [1729 \div (1000 + 3^6) + 1729] = (-270) + ? \times 100$$

$$\Rightarrow [1729 \div 1729 + 1729] = (-270) + ? \times 100$$

$$\Rightarrow [1 + 1729] = (-270) + ? \times 100$$

$$\Rightarrow 1730 = (-270) + ? \times 100$$

$$\Rightarrow 1730 + 270 = ? \times 100$$

$$\Rightarrow 2000/100 = ?$$

$$\therefore ? = 20$$

Sol 365.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3- Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4- Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$\Rightarrow \left(\frac{28}{5} \text{ of } \frac{25}{7} \right) \text{ of } \frac{11}{10} = 57 - ?$$

$$\Rightarrow \left(\frac{28}{5} \times \frac{25}{7} \right) \times \frac{11}{10} = 57 - ?$$

$$\Rightarrow 20 \times \frac{11}{10} = 57 - ?$$

$$\Rightarrow 22 = 57 - ?$$

$$\Rightarrow 35 = ?$$

$$\Rightarrow ? = 35 \times 2 = 70$$

$$\Rightarrow ? = 70$$

Sol 366.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3- Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4- Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$\Rightarrow 5 \frac{1}{6} - 3 \frac{4}{9} + ? = \frac{7}{3} \times 4 \frac{1}{6}$$

$$\Rightarrow \frac{31}{6} - \frac{31}{9} + ? = \frac{7}{3} \times \frac{25}{6}$$

$$\Rightarrow 31 \left(\frac{1}{6} - \frac{1}{9} \right) + ? = \left(\frac{175}{18} \right)$$

$$\Rightarrow 31 \left(\frac{3}{54} \right) + ? = \frac{175}{18}$$

$$\Rightarrow \frac{31}{18} + ? = \frac{175}{18}$$

$$\Rightarrow ? = 144/18$$

$$\Rightarrow ? = 8$$

Sol 367.

$$\frac{25.5}{100} \times 1500 + \frac{3.2}{100} \times 1800 = (?)^2 \times 15$$

$$\Rightarrow 25.5 \times 15 + 3.2 \times 18 = (?)^2 \times 15$$

$$\Rightarrow 255/10 \times 15 + 32/10 \times 18 = (?)^2 \times 15$$

$$\Rightarrow 382.5 + 57.6 = (?)^2 \times 15$$

$$\Rightarrow (?)^2 = 29.34$$

$$\Rightarrow ? = \sqrt{29.34}$$

Sol 368.

$$(50)^2 - \sqrt{625} = (50)^2 - (5)^2 = (50 - 5)(50 + 5) = 2475$$

Sol 369.

$$? = (2.5)^3 + (1.5)^3 / (2.5)^3 - (1.5)^3$$

$$? = (25/10)^3 + (15/25)^3 - (15/10)^3$$

$$? = (5/2)^3 + (3/5)^3 - (3/2)^3$$

$$? = 125/8 + 27/125 - 27/8$$

$$? = 27/125 + 98/8$$

$$? = 216/1000 + 12250/1000 = 12466/1000 = 6233/500$$

Sol 370.

$$\Rightarrow \sqrt{30976} \times \sqrt{2401} - (79)^2 = (?)^2 + (43)^2 + 5$$

$$\Rightarrow 176 \times 49 - 6241 = (?)^2 + 1849 + 5$$

$$\Rightarrow 8624 - 6241 = (?)^2 + 1854$$

$$\Rightarrow 2383 = (?)^2 + 1854$$

$$\Rightarrow (?)^2 = 2383 - 1854$$

$$\Rightarrow (?)^2 = 529$$

$$\Rightarrow ? = 23$$

Sol 371.

$$\Rightarrow (4444 \div 44) + (635 \div 25) + (3835 \div 25) = ?$$

$$\Rightarrow 101 + 25.4 + 153.4 = ?$$

$$\Rightarrow ? = 279.8$$

Sol 372.

Given expression is,

$$\Rightarrow 32\% \text{ of } (14\% \text{ of } 1200) = 64\% \text{ of } ?$$

$$\Rightarrow \frac{32}{100} \times \left(\frac{14}{100} \times 1200 \right) = \frac{64}{100} \times ?$$

$$\Rightarrow \frac{32}{100} \times (14 \times 12) = \frac{64}{100} \times ?$$

$$\Rightarrow \frac{32}{100} \times (168) = \frac{64}{100} \times ?$$

$$\Rightarrow 32 \times 168 = 64 \times ?$$

$$\Rightarrow ? = \frac{32 \times 168}{64} = 84$$

$$\Rightarrow ? = 84$$

Sol 373.

Given expression is,

$$\Rightarrow ?\% \text{ of } 1100 + 40\% \text{ of } 680 = 98\% \text{ of } 600 + 12\% \text{ of } 300$$

$$\Rightarrow \frac{?}{100} \times 1100 + \frac{40}{100} \times 680 = \frac{98}{100} \times 600 + \frac{12}{100} \times 300$$

$$\Rightarrow 11 \times ? + 4 \times 68 = 98 \times 6 + 12 \times 3$$

$$\Rightarrow 11 \times ? + 272 = 588 + 36$$

$$\Rightarrow 11 \times ? + 272 = 624$$

$$\Rightarrow 11 \times ? = 624 - 272$$

$$\Rightarrow 11 \times ? = 352$$

$$\Rightarrow ? = 352/11 = 32$$

$$\Rightarrow ? = 32$$

Sol 374.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3- Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4- Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$\Rightarrow \left\{ \left(9 + \frac{1}{2} \right) \div \frac{38}{3} \right\} + 1 = \frac{5}{4} + ?$$

$$\Rightarrow \left(\frac{19}{2} \div \frac{38}{3} \right) + 1 = \frac{5}{4} + ?$$

$$\Rightarrow \left(\frac{19}{2} \times \frac{3}{38} \right) + 1 = \frac{5}{4} + ?$$

$$\Rightarrow \frac{3}{4} + 1 = \frac{5}{4} + ?$$

$$\Rightarrow \frac{7}{4} = \frac{5}{4} + ?$$

$$\Rightarrow ? = \frac{2}{4} = \frac{1}{2}$$

$$\Rightarrow ? = 1/2$$

Sol 375.

Given expression,

$$4 - 5 \times \frac{1}{5} + 20 = ? - 16$$

$$4 - 1 + 20 = ? - 16$$

$$3 + 20 = ? - 16$$

$$23 + 16 = ?$$

$$? = 39$$

Sol 376.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3- Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4- Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$27 + (15 \times 4 \div 8 \times 6) = \frac{9}{25} \times ?$$

$$\Rightarrow 27 + \left(15 \times \frac{1}{2} \times 6 \right) = \frac{9}{25} \times ?$$

$$\Rightarrow 27 + 45 = \frac{9}{25} \times ?$$

$$\Rightarrow 72 = \frac{9}{25} \times ?$$

$$\Rightarrow ? = \frac{72 \times 25}{9}$$

$$\Rightarrow ? = 200$$

Sol 377.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$\Rightarrow [(6.5)^2 - (1.2)^2] = ?^2 - 8.19$$

$$\Rightarrow (6.5 - 1.2)(6.5 + 1.2) = ?^2 - 8.19$$

$$\Rightarrow 5.3 \times 7.7 = ?^2 - 8.19$$

$$\Rightarrow 40.81 = ?^2 - 8.19$$

$$\Rightarrow ?^2 = 49$$

$$\Rightarrow ? = 7$$

Sol 378.

$$800 \div \{(76 \div 13 - 5) \text{ of } 2/9\} = ?$$

$$\begin{aligned} \Rightarrow 800 \div \{(76/13 - 5) \text{ of } 2/9\} &= ? \\ \Rightarrow 800 \div \{((76-65)/13) \text{ of } 2/9\} &= ? \\ \Rightarrow 800 \div \{(11/13) \text{ of } 2/9\} &= ? \\ \Rightarrow 800 \div \{(11/13) \times 2/9\} &= ? \\ \Rightarrow 800 \div \{(11/13) \times 2/9\} &= ? \\ \Rightarrow 800 \div \{(22/117)\} &= ? \\ \Rightarrow 800 \times \{(117/22)\} &= ? \\ \therefore ? = 93600/22 &= 4254.54 \end{aligned}$$

Sol 379.

Follow BODMAS rule to solve this question as per order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first.

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next.

Step-3- Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated.

Step-4- Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression:

$$\begin{aligned} 6 \times \{(768 + 123 - 6787 \div 17) \text{ of } 4/7\} &= ? \\ \Rightarrow 6 \times \{(768 + 123 - 6787/17) \text{ of } 4/7\} &= ? \\ \Rightarrow 6 \times \{(891 - 6787/17) \text{ of } 4/7\} &= ? \\ \Rightarrow 6 \times \{(15147 - 6787/17) \text{ of } 4/7\} &= ? \\ \Rightarrow 6 \times \{(8360/17) \times (4/7)\} &= ? \\ \therefore ? = 200640/119 &= 1686 \end{aligned}$$

Sol 380.

$$\Rightarrow 62.5\% \text{ of } 40 - 2.5\% \text{ of } 160 = 12.5\% \text{ of } 240 - ?$$

$$\Rightarrow \frac{62.5}{100} \times 40 - \frac{2.5}{100} \times 160 = \frac{12.5}{100} \times 240 - ?$$

$$\Rightarrow 25 - 4 = 30 - ?$$

$$\Rightarrow 21 = 30 - ?$$

$$\Rightarrow ? = 30 - 21$$

$$\Rightarrow ? = 9$$

Sol 381.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated

$$14.2 - 0.4 \text{ of } (8.3 - 5.1) + 4.5 \times 2.03 = ?$$

$$\Rightarrow 14.2 - 0.4 \text{ of } (3.2) + 4.5 \times 2.03 = ?$$

$$\Rightarrow 14.2 - 1.28 + 4.5 \times 2.03 = ?$$

$$\Rightarrow 14.2 - 1.28 + 9.135 = ?$$

$$\Rightarrow 14.2 + 7.855 = ?$$

$$\therefore ? = 22.055$$

Sol 382.

$$\begin{aligned} \frac{27}{35} + 7\frac{1}{7} + 5\frac{3}{5} + 14\frac{2}{5} - 7\frac{3}{7} &= \frac{?}{35} \\ \Rightarrow \frac{27}{35} + \frac{50}{7} + \frac{28}{5} + \frac{72}{5} - \frac{52}{7} &= \frac{?}{35} \\ \Rightarrow \frac{27+50\times 5+28\times 7+72\times 7-52\times 5}{35} &= \frac{?}{35} \\ \Rightarrow \frac{717}{35} &= \frac{?}{35} \\ \therefore ? = 717 & \end{aligned}$$

$$\therefore ? = 717$$

Sol 383.

Given expression,

$$\begin{aligned} 85.4\% \text{ of } 198600 + 97\% \text{ of } 2346800 &= ? + 34\% \text{ of } 23460 \\ \Rightarrow (85.4/100) \times 198600 + (97/100) \times 2346800 &= ? + (34/100) \times 23460 \\ \Rightarrow 85.4 \times 1986 + 97 \times 23468 = ? + 3.4 \times 2346 & \\ \Rightarrow 169604.4 + 2276396 &= ? + 7976.4 \\ \Rightarrow 2446000.4 - 7976.4 &= ? \\ \Rightarrow ? = 2438024 & \end{aligned}$$

Sol 384.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$\begin{aligned} \Rightarrow 7.2\% \text{ of } 800 + 11.5\% \text{ of } 600 &= 11^2 + 1.4\% \text{ of } ? \\ \Rightarrow \frac{7.2}{100} \times 800 + \frac{11.5}{100} \times 600 &= 121 + \frac{1.4}{100} \times ? \\ \Rightarrow 7.2 \times 8 + 11.5 \times 6 &= 121 + (1.4/100) \times ? \\ \Rightarrow 57.6 + 69 &= 121 + (1.4/100) \times ? \\ \Rightarrow 126.6 - 121 &= (1.4/100) \times ? \\ \Rightarrow 5.6 \times 100 &= 1.4 \times ? \\ \Rightarrow 400 &= ? \\ \Rightarrow ? = 400 & \end{aligned}$$

Sol 385.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$(24.63\% \text{ of } 660) + (81\% \text{ of } 900.15) = ? - 63$$

$$\Rightarrow 660 \times 25/100 + 900 \times 81/100 = ? - 63$$

$$\Rightarrow 165 + 729 = ? - 63$$

$$\Rightarrow 894 + 63 = ?$$

$$\Rightarrow 957 = ?$$

Sol 386.

Let the numbers be X & Y.

ATQ

$$\text{Product after the alterations} = \frac{2}{3} \times x \times \frac{125}{100} \times y = 5xy/6$$

Product originally = xy

Required percentage,

$$\left(\frac{\frac{5xy}{6}}{xy} \right) \times 100 = 16.67\%$$

~ 17%

Sol 387.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$33.33\% \text{ of } 288 + 9.09\% \text{ of } \sqrt[3]{1331.22} + 19.12\% \text{ of } \sqrt[4]{624} = ?$$

It can be approximated as

$$1/3 \times 288 + 1/11 \times 11 + 20\% \text{ of } \sqrt[4]{625} = ?$$

$$\Rightarrow 96 + 1 + 1/5 \times 5 = ?$$

$$\Rightarrow 97 + 1 = ?$$

$$\Rightarrow ? = 98$$

Sol 388.

Follow BODMAS rule to solve this question, as per the order is given below:

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4: Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$1/12.12 \times 4116.23 + 7/15 \times 945.33 + 200\% \text{ of } 1 = ? + 339$$

It can be approximated as

$$\Rightarrow 1/12 \times 4116 + 7/15 \times 945 + 2 = ? + 339$$

$$\Rightarrow 343 + (7*63) + 2 = ? + 339$$

$$\Rightarrow 343 + 441 + 2 = ? + 339$$

$$\Rightarrow 786 = ? + 339$$

$$\Rightarrow ? = 786 - 339$$

$$\therefore ? = 447$$

Sol 389.

LCM of 3,6 and 8 is 24

$$\text{So, } (8 + 4 + 3)/24 = 15/24 = 5/8$$

Sol 390.

$$7 + 36 = 39 + 100 - ?$$

$$\therefore ? = 96$$

Sol 391.

$$13/4 + 11/2 + 57/8 = (26 + 44 + 57)/8$$

$$127/8 = 15.875$$

$$\text{Sol 392. } 173 + 333 = 506$$

Sol 393.

$$9 + 54 = ? - 120$$

$$63 + 120 = ?$$

$$\therefore ? = 183$$

Sol 394.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3- Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4- Last but not the least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$\sqrt[3]{4.913 \div 0.085 \times 7.8 + 23\% \text{ of } 1250 \div 23} = ? \text{ of } 337$$

Applying BODMAS Rule;

$$\Rightarrow 1.7 \div 0.085 \times 7.8 + 287.5 \div 23 = 337 \times ?$$

$$\Rightarrow 20 \times 7.8 + 12.5 = 337 \times ?$$

$$\Rightarrow 156 + 12.5 = 337 \times ?$$

$$\Rightarrow 168.5 = 337 \times ?$$

$$\therefore ? = 0.5$$

Sol 395.

Follow BODMAS rule to solve this question, as per the order given below,

Step-1- Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2- Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3- Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4- Last but not the least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Given expression is,

$$45\% \text{ of } \sqrt{(255 \div 34 \times 146 - 6)} + \frac{7}{12} \text{ of } (5.4)^2 = ?$$

Applying BODMAS Rule;

$$\Rightarrow 45\% \text{ of } \sqrt{(7.5 \times 146 - 6)} + \frac{7}{12} \text{ of } (5.4)^2 = ?$$

$$\Rightarrow 45\% \text{ of } \sqrt{1089} + \frac{7}{12} \text{ of } 29.16 = ?$$

$$\Rightarrow 45\% \text{ of } 33 + 17.01 = ?$$

$$\Rightarrow 14.85 + 17.01 = ?$$

$$\therefore ? = 31.86$$

Sol 396.

Follow BODMAS rules to solve the equation

Step-1: The part of the equation containing 'Brackets' must be solved first, and in the bracket,

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are solved

Step-4: At last, the part of the equation that contains 'Addition' and 'Subtraction' should be solved.

$$[(23 \times 2^2 \times 24^2)] \div (2 \times \sqrt{1296}) = (3)^? + 7$$

$$\Rightarrow (23 \times 4 \times 576) / (2 \times 36) = 7 + (3)^? [\because \sqrt{1296} = 36]$$

$$\Rightarrow (23 \times 32) = 7 + (3)^?$$

$$\Rightarrow 736 = 7 + (3)^?$$

$$\Rightarrow 729 = (3)^?$$

$$\Rightarrow (3)^6 = (3)^?$$

$$\therefore ? = 6$$

Sol 397.

Follow BODMAS rule to solve this question, as per the order given below.

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and following BODMAS rule in the bracket -

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next.

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated.

Step - 4: Last but not the least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Since, we need to find out the approximate value, we can write these values to their nearest integers.

Given expression is

$$639.929 + 31.972 \times 20.891 - 45.951 = \sqrt[4]{?} + 6^4$$

Approximating the value to the nearest integer:

$$\Rightarrow 640 + 32 \times 21 - 46 = \sqrt[4]{?} + 6^4$$

$$\Rightarrow \sqrt[4]{?} = 640 + 672 - 46 - 1296$$

$$\Rightarrow \sqrt[4]{?} = 1266 - 1296$$

$$\Rightarrow (?) = (-30)^4$$

$$\Rightarrow (?) = 810000$$

Sol 398.

$$\sqrt{[3992.87 \div 1330.95 \times \sqrt{120.98}]} = (?)^2$$

Approximating the values to the nearest integer:

$$\Rightarrow \sqrt{[3993 \div 1331 \times \sqrt{121}]} = (?)^2$$

$$\Rightarrow (?)^2 = \sqrt{[3 \times \sqrt{121}]}$$

$$\Rightarrow (?)^2 = \sqrt{3} \times 11$$

$$\Rightarrow (?) = \sqrt{33}$$

Sol 399.

Laws of Indices:

$$1. a^m \times a^n = a^{m+n}$$

$$2. a^m \div a^n = a^{m-n}$$

$$3. (a^m)^n = a^{mn}$$

$$4. (a)^{-m} = 1/a^m$$

$$5. (a)^{m/n} = \sqrt[n]{a^m}$$

$$6. (a)^0 = 1$$

$$\frac{2^4 \times 3^2 \div 4^2 + 6}{5^2 \times 2^2 - 2} = ?$$

$$\Rightarrow ? = \frac{(16 \times 9/16) + (6)}{25 \times 4 - 2}$$

$$\Rightarrow ? = \frac{9+6}{100-2}$$

$$\therefore ? = 15/98$$

Sol 400.

According to the BODMAS rule, the priority in which the operations should be done is:

4. $(a)^{-m} = 1/a^m$

5. $(a)^{m/n} = \sqrt[n]{a^m}$

6. $(a)^0 = 1$

$$\frac{2^4 \times 3^2 \div 4^2 + 6}{5^2 \times 2^2 - 2} = ?$$

$$\Rightarrow ? = \frac{(16 \times 9 / 16) + (6)}{25 \times 4 - 2}$$

$$\Rightarrow ? = \frac{9+6}{100-2}$$

$$\therefore ? = 15/98$$

Sol 400.

According to the BODMAS rule, the priority in which the operations should be done is:

Operations	Symbols
------------	---------

B- Bracket	()
------------	-----

O- Of	Of
-------	----

D- Division	÷, /
-------------	------

M- Multiplication	×
-------------------	---

A- Addition	+
-------------	---

S- Subtraction	-
----------------	---

$$\Rightarrow (34.978)^2 - [(46.0501)^2 \div (23.101)] + 13.905^2 = (?)^2 - 39.806$$

Approximating the value to the nearest integer:

$$\Rightarrow 35^2 - [46^2 \div 23] + 14^2 = (?)^2 - 40$$

$$\Rightarrow 1225 - (46 \times 46) / 23 + 196 = (?)^2 - 40$$

$$\Rightarrow 1225 - 92 + 196 = (?)^2 - 40$$

$$\Rightarrow 1329 = (?)^2 - 40$$

$$\Rightarrow 1329 + 40 = (?)^2$$

$$\Rightarrow 1369 = (?)^2$$

$$\Rightarrow (?) = \sqrt{1369} = 37$$

Sol 401.

According to the BODMAS rule, the priority in which the operations should be done is:

Operations	Symbols
------------	---------

B- Bracket	()
------------	-----

O- Of	Of
-------	----

D- Division	÷, /
-------------	------

M- Multiplication	×
-------------------	---

A- Addition	+
-------------	---

S- Subtraction	-
----------------	---

$$\Rightarrow (59.91\% \text{ of } 1649.97 - 32.02\% \text{ of } 1124.89) \div 62.97 = (?)$$

Approximating the value to the nearest integer:

$$(?) = (60\% \times 1650 - 32\% \times 1125) \div 63$$

$$(?) = (60/100 \times 1650 - 32/100 \times 1125) \div 63$$

$$(?) = (990 - 360) \div 63$$

$$(?) = 630 \div 63$$

$$(?) = 10.$$

Get Complete Smart Book

from AMAZON here: <https://amzn.to/3lARyqx>

or



Scan QR Code to buy

3 UNIQUE FEATURES OF SMART PRACTICE QUESTIONS



BEST 4000 SELECTED QUESTIONS:

01

Questions are selected from Testbook Online question bank based on attempt and performance data of lakhs of students on our platform. Machine learning technology has been used to accurately select the best questions for the most efficient exam preparation.

TIME TO ANSWER (TTA):

02

TTA will help you master Time Management. If you spend the right amount of time on each question, you will maximise your score in the exam. TTA has been calculated using Machine Learning & Data Science technology.



SMART ANSWER KEY:

03

Exam will have a mix of easy, medium, and tough questions. Learning which questions to attempt and which to skip is a very important part of Exam strategy. Knowing how other students tackled every question gives you much deeper insights of your performance.



To purchase book online visit:
www.schandpublishing.com



For any queries and feedback email:
support@testbook.com

