

NUMBER SERIES

NATIONALISED BANKS & IBPS SO/MT/SO

Directions (1-5): In the following number series, a wrong number is given. Find out that wrong number.

(Canara Bank PO Exam. 09.02.2003)

1. 2 11 38 197 1172 8227 65806
(1) 11 (2) 38
(3) 197 (4) 1172
(5) 8227
2. 16 19 21 30 46 71 107
(1) 19 (2) 21
(3) 30 (4) 46
(5) 71
3. 7 9 16 25 41 68 107 173
(1) 107 (2) 16
(3) 41 (4) 68
(5) 25
4. 4 2 3.5 7.5 26.25 118.125
(1) 118.125 (2) 26.25
(3) 3.5 (4) 2
(5) 7.5
5. 16 4 2 1.5 1.75 1.875
(1) 1.875 (2) 1.75
(3) 1.5 (4) 2
(5) 4

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

(Syndicate Bank PO Exam. 10.10.2004)

6. 3 10 32 100 ?
(1) 345 (2) 460
(3) 308 (4) 440
(5) None of these
7. 5 3 4 ? 38
(1) 8.5 (2) 6
(3) 7.5 (4) 8
(5) None of these
8. 5 6 ? 57 244
(1) 21 (2) 16
(3) 17 (4) 15
(5) None of these
9. 3 10 21 ? 51
(1) 34 (2) 32
(3) 33 (4) 37
(5) None of these
10. 5 11 ? 55 117
(1) 21 (2) 27
(3) 23 (4) 25
(5) None of these

Directions (11-15): In each of the following questions a number series is given. After the series a number is given followed by (a), (b), (c), (d) and (e). You have to complete the series starting with

the number given, following the sequence of the original series and answer the questions that follow the series.

**(Union Bank of India
PO Exam. 27.11.2005)**

11. 12 30 120 460 1368 2730
16 (a) (b) (c) (d) (e)
What will come in place of (d) ?
(1) 1384 (2) 2642
(3) 2808 (4) 1988
(5) None of these
12. 154 462 231 693 346.5 1039.5
276 (a) (b) (c) (d) (e)
What will come in place of (e) ?
(1) 1746 (2) 621
(3) 1242 (4) 983
(5) None of these
13. 7 91 1001 7007 35035 105
14.5 (a) (b) (c) (d) (e)
What will come in place of (c) ?
(1) 21132.5 (2) 14514.5
(3) 20020.5 (4) 13864.5
(5) None of these
14. 582 574 601 537 662 446
204 (a) (b) (c) (d) (e)
What will come in place of (d) ?
(1) 284 (2) 68
(3) 174 (4) 331
(5) None of these
15. 85 43 44 67.5 137 345
125 (a) (b) (c) (d) (e)
What will come in place of (c) ?
(1) 86 (2) 107.5
(3) 112.5 (4) 97.5
(5) None of these

Directions (16-22) : What will come in place of the question mark (?) in the following number series ?

**(Corporation Bank Po
Exam. 29.07.2006)**

16. 1 ? 27 64 125
(1) 8 (2) 4
(3) 6 (4) 9
(5) None of these
17. 25 16 ? 4 1
(1) 3 (2) 6
(3) 12 (4) 18
(5) None of these
18. 1 6 36 240 1960 ?
(1) 19660 (2) 3680
(3) 36800 (4) 19600
(5) None of these
19. 12 14 17 13 8 14 21 13 4 ?

- (1) 14 (2) 13
(3) 15 (4) 2
(5) None of these
20. 2 5 7 12 19 31 50 ?
(1) 53 (2) 81
(3) 69 (4) 74
(5) None of these
21. 15 12 17 10 ? 8 21 6
(1) 3 (2) 7
(3) 21 (4) 19
(5) None of these
22. 4 6 12 30 90 315 ?
(1) 945 (2) 1102
(3) 1260 (4) 1417.5
(5) None of these

Directions (16-22) : What should come in place of the question mark (?) in the following number series ?

(Bank Of Maharashtra PO Exam. 29.07.2006)

23. 1548 516 129 43 ?
(1) 11 (2) 10.75
(3) 9.5 (4) 12
(5) None of these
24. 949 189.8 ? 22.776 11.388 6.8328
(1) 48.24 (2) 53.86
(3) 74.26 (4) 56.94
(5) None of these
25. 121 144 190 259 ? 466
(1) 351 (2) 349
(3) 374 (4) 328
(5) None of these
26. 14 43.5 264 ? 76188
(1) 3168 (2) 3176
(3) 1587 (4) 1590
(5) None of these
27. 41 164 2624 ? 6045696
(1) 104244 (2) 94644
(3) 94464 (4) 102444
(5) None of these

Directions (28-32) : What should come in place of question mark (?) in the following number series ?

(Indian Overseas Bank PO Exam. 15.06.2008)

28. 12 12 18 45 180 1170 ?
(1) 12285 (2) 10530
(3) 11700 (4) 12870
(5) 7605
29. 444 467 513 582 674 789 ?
(1) 950 (2) 904
(3) 927 (4) 881
(5) 973
30. 1 16 81 256 625 1296 ?
(1) 4096 (2) 2401

- (3) 1764 (4) 3136
(5) 6561

31. 23 25 53 163 657 3291 ?
(1) 16461 (2) 13169
(3) 9877 (4) 23045
(5) 19753
32. 13 13 65 585 7605 129285 ?
(1) 2456415 (2) 2235675
(3) 2980565 (4) 2714985
(5) 2197845

Directions (33-37) : What should come in place of question mark (?) in the following number series ?

(Andhra Bank PO Exam. 14.09.2008)

33. 40280625 732375 16275 46! 18.6 1.24 ?
(1) 0.248 (2) 0.336
(3) 0.424 (4) 0.512
(5) 0.639
34. 14 12 21 59 231 1149 ?
(1) 6987 (2) 6787
(3) 6887 (4) 6687
(5) 6587
35. 1728 2744 4096 5832 8000 10648 ?
(1) 12167 (2) 13824
(3) 15625 (4) 9261
(5) 17576
36. 120 15 105 17.5 87.5 ?
(1) 18.5 (2) 19.5
(3) 21.875 (4) 17.5
(5) 90
37. 3 6 21 28 55 66 ? 120
(1) 103 (2) 104
(3) 108 (4) 106
(5) 105

Directions (38-42) : In each of the following questions a number series is given which has only one **wrong** number. You have to find out the **wrong** number.

(Bank Of Baroda Specialist Officer Exam. 05.10.2008)

38. 7.25 47.5 87.5 157.5 247.5 357.5 487.5
(1) 357.5 (2) 87.5
(3) 157.5 (4) 7.5
(5) 47.5
39. 13 16 21 27 39 52 69
(1) 21 (2) 39
(3) 27 (4) 52
(5) 16
40. 1500 1581 1664 1749 1833 1925 2016
(1) 1581 (2) 1664
(3) 1833 (4) 1925 (5) 1749
41. 66 91 120 153 190 233 276

- (1) 120 (2) 233
(3) 153 (4) 276
(5) 190

42. 1331 2197 3375 4914 6859 9261
12167
(1) 4914 (2) 6859
(3) 9261 (4) 2197
(5) 12167

Directions (43-47): What should come in place of the question mark (?) in the following number series ?

**(Oriental Bank of Commerce
PO Exam. 21.12.2008)**

43. 20 24 33 49 74 110 ?
(1) 133 (2) 147
(3) 159 (4) 163
(5) 171
44. 529 841 961 1369 1681 1849 ?
(1) 2809 (2) 2601
(3) 3249 (4) 3481
(5) 2209
45. 16 24 48 120 360 1260 ?
(1) 3780 (2) 4725
(3) 5355 (4) 5040
(5) 4410
46. 8 31 122 485 1936 7739 ?
(1) 30950 (2) 46430
(3) 34650 (4) 42850
(5) 38540
47. 499 622 868 1237 1729 2344 ?
(1) 3205 (2) 3082
(3) 2959 (4) 3462
(5) 2876

Directions (48-52) : In the following number series only one number is **wrong**. Find out the **wrong** number.

**(PNB Agriculture Officer
Exam. 04.01.2009)**

48. 1 4 27 256 3125 46658
(1) 46658 (2) 4
(3) 27 (4) 3125
(5) None of these
49. 18000 3600 720 142.2 28.8 5.76
(1) 28.8 (2) 3600
(3) 5.76 (4) 142.2
(5) None of these
50. 12 237 406 527 604 657
(1) 237 (2) 406
(3) 527 (4) 657
(5) None of these
51. 3 35 226 1160 4660 13998
(1) 13998 (2) 4660
(3) 226 (4) 1160
(5) None of these
52. 18 119 708 3534 14136 42405

- (1) 708 (2) 3534
(3) 14136 (4) 42405
(5) None of these

Directions (53-57): What should come in place of question mark (?) in the following number series ?

(Canara Bank PO Exam. 15.03.2009)

53. 5 9 18 34 59 95 ?
(1) 272 (2) 168
(3) 116 (4) 148
(5) 144
54. 1200 480 192 76.8 30.72 12.288 ?
(1) 4.9152 (2) 5.8192
(3) 6.7112 (4) 7.6132
(5) 8.5172
55. 963 927 855 747 603 423 ?
(1) 209 (2) 208
(3) 207 (4) 206
(5) 205
56. 841 961 1089 1225 1369 1521 ?
(1) 1581 (2) 1681
(3) 1781 (4) 1881
(5) 1981
57. 18 20 44 138 560 2810 ?
(1) 16818 (2) 16836
(3) 16854 (4) 16872
(5) 16890

Directions (58-62) : In the following number series only one number is **wrong**. Find out the **wrong** number.

(UCO Bank PO Exam. 22.03.2009)

58. 4 6 18 49 201 1011
(1) 1011 (2) 201
(3) 18 (4) 49
(5) None of these
59. 48 72 108 162 243 366
(1) 72 (2) 108
(3) 162 (4) 243
(5) None of these
60. 2 54 300 1220 3674 7350
(1) 3674 (2) 1220
(3) 300 (4) 54
(5) None of these
61. 8 27 64 125 218 343
(1) 27 (2) 218
(3) 125 (4) 343
(5) None of these
62. 19 68 102 129 145 154
(1) 154 (2) 129
(3) 145 (4) 102
(5) None of these

Directions (63-67): What should come in place of the question mark (?) in the following number series ?

**(Indian Overseas Bank
PO Exam. 05.04.2009)**

63. 0 5 18 43 84 145 ?
 (1) 220 (2) 240
 (3) 260 (4) 280
 (5) None of these
64. 10 17 48 165 688 3475 ?
 (1) 27584 (2) 25670
 (3) 21369 (4) 20892
 (5) None of these
65. 1 3 24 360 8640 302400 ?
 (1) 14525100 (2) 154152000
 (3) 14515200 (4) 15425100
 (5) None of these
66. 12 14 32 102 416 2090 ?
 (1) 15522 (2) 12552
 (3) 13525 (4) 17552
 (5) None of these
67. 10 15 15 12.5 9.375 6.5625 ?
 (1) 4.375 (2) 3.2375
 (3) 4.6275 (4) 3.575
 (5) None of these
- Directions (68-72) :** What will come in place of the question mark (?) in each of the following series ?
68. 17 52 158 477 ? 4310
 (1) 1433 (2) 1432
 (3) 1435 (4) 1434
 (5) None of these
69. 3 22 ? 673 2696 8093
 (1) 133 (2) 155
 (3) 156 (4) 134
 (5) None of these
70. 6 13 38 ? 532 2675
 (1) 129 (2) 123
 (3) 172 (4) 164
 (5) None of these
71. 286 142 ? 34 16 7
 (1) 66 (2) 72
 (3) 64 (4) 74
 (5) None of these
72. 17 9 ? 16.5 35 90
 (1) 5 (2) 15
 (3) 10 (4) 20
 (5) None of these
- Directions (73-77):** What will come in place of the question mark (?) in each of the following number series ?
- (Andhra Bank PO Exam 05.07.2009)**
73. 2 8 26 ? 242
 (1) 78 (2) 72
 (3) 82 (4) 84
 (5) None of these
74. 3 4 12 ? 196
 (1) 45 (2) 40
 (3) 41 (4) 49
 (5) None of these

75. 9 17 ? 65 129
 (1) 32 (2) 24
 (3) 35 (4) 33
 (5) None of these
76. 7 13 ? 49 97
 (1) 27 (2) 25
 (3) 23 (4) 29
 (5) None of these
77. 5 3 6 ? 64.75
 (1) 15 (2) 15.5
 (3) 17.5 (4) 17.25
 (5) None of these

Directions (78-82) : What will come in place of the question mark (?) in each of the following number series ?

(PNB Specialist Officer's Exam. 16.08.2009)

78. 16 8 12 30 ?
 (1) 75 (2) 105
 (3) 95 (4) 115
 (5) None of these

(United Bank of India PO Exam. 21.06.2009)

79. 5 6 14 45 ?
 (1) 138 (2) 154
 (3) 118 (4) 184
 (5) None of these
80. 7 12 32 105 ?
 (1) 428 (2) 214
 (3) 218 (4) 416
 (5) None of these
81. 11 23 47 95 ?
 (1) 189 (2) 193
 (3) 181 (4) 195
 (5) None of these
82. 9 17 33 65 ?
 (1) 113 (2) 131
 (3) 129 (4) 118
 (5) None of these

Directions (83-84) : In the following number series only one number is **wrong**. Find out the **wrong** number.

(Corporation Bank PO Exam. 22.11.2009)

83. 8 11 17 47 128 371 1100
 (1) 11 (2) 47
 (3) 17 (4) 371
 (5) 128
84. 1 5 13 31 61 125 253
 (1) 1 (2) 5
 (3) 31 (4) 61
 (5) 125

Directions (85-89) : In the following number series a **wrong** number is given. Find out the **wrong** number.

**(Indian Bank Rural Marketing
Officer Exam. 03.01.2010)**

- 85.** 150 290 560 1120 2140 4230
8400
(1) 2140 (2) 560
(3) 1120 (4) 4230
(5) 290
- 86.** 10 8 13 35 135 671 4007
(1) 8 (2) 671
(3) 135 (4) 13
(5) 35
- 87.** 80 42 24 13.5 8.75 6.375 5.1875
(1) 8.75 (2) 13.5
(3) 24 (4) 6.375
(5) 42
- 88.** 125 75 45 25 16.2 9.72 5.832
(1) 25 (2) 45
(3) 9.72 (4) 16.2
(5) 75
- 89.** 29 37 21 43 13 53 5
(1) 37 (2) 53
(3) 13 (4) 21
(5) 43

Directions (90-94): In the following number series only one number is **wrong**. Find out the **wrong** number.

(Indian Bank PO Exam. 17.10.2010)

- 90.** 13 25 40 57 79 103 130
(1) 25 (2) 40
(3) 57 (4) 79
(5) None of these
- 91.** 850 600 550 500 475 462.5
456.25
(1) 600 (2) 550
(3) 500 (4) 462.5
(5) None of these
- 92.** 2 10 18 54 162 486 1458
(1) 18 (2) 54
(3) 162 (4) 10
(5) None of these
- 93.** 8 12 24 46 72 108 152
(1) 12 (2) 24
(3) 46 (4) 72
(5) None of these
- 94.** 142 119 100 83 65 59 52
(1) 65 (2) 100
(3) 59 (4) 119
(5) None of these

Directions (95-99): What should come in place of the question mark in the following number series ?

**(Bank Of India Banking
Officer Exam. 24.01.2010)**

- 95.** 5 54 90 115 131 140 ?

- (1) 149 (2) 146
(3) 142 (4) 152
(5) None of these

- 96.** 7 4 5 9 ? 52.5 160.5
(1) 32 (2) 16
(3) 14 (4) 20
(5) None of these

- 97.** 6 42 ? 1260 5040 15120 30240
(1) 546 (2) 424
(3) 252 (4) 328
(5) None of these

- 98.** 4 10 40 190 940 ? 23440
(1) 4690 (2) 2930
(3) 5140 (4) 3680
(5) None of these

- 99.** 2 9 30 ? 436 2195 13182
(1) 216 (2) 105
(3) 178 (4) 324
(5) None of these

Directions (100-104): In each question below, a number series is given in which one number is **wrong**. Find out the **wrong** number.

(Allahabad Bank PO Exam. 21.02.2010)

- 100.** 484 240 120 57 26.5 11.25 3.625
(1) 240 (2) 120
(3) 57 (4) 26.5
(5) 11.25

- 101.** 3 5 13 43 176 891 5352
(1) 5 (2) 13
(3) 43 (4) 176
(5) 891

- 102.** 6 7 16 41 90 154 292
(1) 7 (2) 16
(3) 41 (4) 90
(5) 154

- 103.** 5 7 16 57 244 1245 7506
(1) 7 (2) 16
(3) 57 (4) 244
(5) 1245

- 104.** 4 2.5 3.5 6.5 15.5 41.25 126.75
(1) 2.5 (2) 3.5
(3) 6.5 (4) 15.5
(5) 41.25

Directions (105-109): What should come in place of the question mark (?) in the following number series.

**(Corporation Bank PO
Exam. 09.05.2010)**

- 105.** 325 314 292 259 215 ?
(1) 126 (2) 116
(3) 130 (4) 160
(5) None of these

- 106.** 45 46 70 141 ? 1061.5
(1) 353 (2) 353.5
(3) 352.5 (4) 352

107. 620 632 608 644 596 ?
 (1) 536 (2) 556
 (3) 656 (4) 646
 (5) None of these
108. 15 25 40 65 ? 195
 (1) 115 (2) 90
 (3) 105 (4) 120
 (5) None of these
109. 120 320 ? 2070 5195 13007.5
 (1) 800 (2) 920
 (3) 850 (4) 900
 (5) None of these

Directions (110-114): In the following number series only one number is **wrong**. Find out the wrong number.

(Punjab & Sind Bank PO Exam. 16.05.2010)

110. 32 34 37 46 62 87 123
 (1) 34 (2) 37
 (3) 62 (4) 87
 (5) 46
111. 7 18 40 106 183 282 403
 (1) 18 (2) 282
 (3) 40 (4) 106
 (5) 183
112. 850 843 829 808 788 745 703
 (1) 843 (2) 829
 (3) 808 (4) 788
 (5) 745
113. 33 321 465 537 573 590 600
 (1) 321 (2) 465
 (3) 573 (4) 537
 (5) 590
114. 37 47 52 67 87 112 142
 (1) 47 (2) 52
 (3) 67 (4) 87
 (5) 112

Directions (115-119): What will come in place of the question mark (?) in the following number series ?

(Bank Of Baroda PO Exam. 30.05.2010)

115. 13 16 22 33 51 (?)
 (1) 89 (2) 78
 (3) 102 (4) 69
 (5) None of these
116. 39 52 78 117 169 (?)
 (1) 246 (2) 182
 (3) 234 (4) 256
 (5) None of these
117. 62 87 187 412 812 (?)
 (1) 1012 (2) 1437
 (3) 1337 (4) 1457
 (5) None of these
118. 7 8 24 105 361 (?)
 (1) 986 (2) 617

- (3) 486 (4) 1657
 (5) None of these

119. 656 432 320 264 236 (?)
 (1) 222 (2) 229
 (3) 232 (4) 223
 (5) None of these

Directions (120-124): What will come in place of the question mark (?) in the following number series ?

(Central Bank Of India PO Exam. 25.07.2010)

120. 7 20 46 98 202 (?)
 (1) 420 (2) 410
 (3) 310 (4) 320
 (5) None of these
121. 210 209 213 186 202 (?)
 (1) 138 (2) 77
 (3) 177 (4) 327
 (5) None of these
122. 27 38 71 126 203 (?)
 (1) 212 (2) 202
 (3) 301 (4) 312
 (5) None of these
123. 435 354 282 219 165 (?)
 (1) 103 (2) 112
 (3) 120 (4) 130
 (5) None of these
124. 4 200 369 513 634 (?)
 (1) 788 (2) 715
 (3) 734 (4) 755
 (5) None of these

Directions (125-129): What will come in place of the question mark (?) in the following number series ?

(Syndicate Bank PO Exam. 29.08.2010)

125. 495 485 465 425 345 ?
 (1) 195 (2) 165
 (3) 185 (4) 175
 (5) None of these
126. 16 22 33 49 70 ?
 (1) 95 (2) 96
 (3) 85 (4) 91
 (5) None of these
127. 32 36 52 88 152 ?
 (1) 266 (2) 232
 (3) 242 (4) 256
 (5) None of these
128. 17 289 425 493 527 ?
 (1) 534 (2) 542
 (3) 544 (4) 594
 (5) None of these
129. 13 27 55 97 153 ?
 (1) 243 (2) 265
 (3) 215 (4) 223
 (5) None of these

Directions (130-134) : What should come in place of the question mark (?) in the following number series ?

(Punjab National Bank Specialist Officer Exam. 24.10.2010)

- 130.** 50 60 75 97.5 ? 184.275 267.19875
 (1) 120.50 (2) 130.50
 (3) 131.625 (4) 124.25
 (5) None of these
- 131.** 12 15 36 ? 480 2415 14508
 (1) 115 (2) 109
 (3) 117 (4) 121
 (5) None of these
- 132.** 1 2 6 21 88 445 ?
 (1) 2230 (2) 2676
 (3) 2580 (4) 2670
 (5) None of these
- 133.** 20 21 25 34 50 ? 111
 (1) 70 (2) 65
 (3) 60 (4) 75
 (5) None of these
- 134.** 600 125 30 ? 7.2 6.44 6.288
 (1) 6 (2) 10
 (3) 15 (4) 12
 (5) None of these

Directions (135-139): What will come in the place of the question mark (?) in the following number series ?

(Bank Of India PO Exam. 31.10.2010)

- 135.** 11 15 31 67 131 (?)
 (1) 233 (2) 221
 (3) 243 (4) 231
 (5) None of these
- 136.** 483 471 435 375 291 (?)
 (1) 183 (2) 184
 (3) 185 (4) 186
 (5) None of these
- 137.** 5 7 13 25 45 (?)
 (1) 67 (2) 75
 (3) 65 (4) 55
 (5) None of these
- 138.** 4 11 25 53 109 (?)
 (1) 221 (2) 234
 (3) 212 (4) 222
 (5) None of these
- 139.** 15 21 33 51 75 (?)
 (1) 113 (2) 103
 (3) 105 (4) 115
 (5) None of these

Directions (140-144): In the following number series only one number is **wrong**. Find out the **wrong** number.

(United Bank Of India PO Exam. 14.11.2010)

- 140.** 5 348 564 689 716 780 788

- (1) 716 (2) 788
 (3) 348 (4) 689
 (5) 780

- 141.** 4444 2224 1114 556 281.5 142.75 73.375

- (1) 2224 (2) 281.5
 (3) 1114 (4) 556
 (5) 142.75

- 142.** 4.5 16 25 33 38.5 42 43.5

- (1) 33 (2) 38.5
 (3) 42 (4) 43.5
 (5) 25

- 143.** 6 49 305 1545 6196 18603 37218

- (1) 6196 (2) 49
 (3) 305 (4) 1545
 (5) 18603

- 144.** 8 5 6.5 11 26 68 207.5

- (1) 68 (2) 6.5
 (3) 11 (4) 26
 (5) 207.5

Directions (145-149) : What should come in place of the question mark (?) in the following number series ?

(PNB Management Trainee Exam. 28.11.2010)

- 145.** 586 587 586 581 570 ? 522

- (1) 545 (2) 543
 (3) 551 (4) 557
 (5) None of these

- 146.** 64 54 69 49 74 44 ?

- (1) 89 (2) 69
 (3) 59 (4) 99
 (5) None of these

- 147.** 4000 2008 1012 ? 265 140.5 78.25

- (1) 506 (2) 514
 (3) 520 (4) 512
 (5) None of these

- 148.** 5 5 15 75 ? 4725 51975

- (1) 520 (2) 450
 (3) 525 (4) 300
 (5) None of these

- 149.** 52 26 26 39 78 ? 585

- (1) 195 (2) 156
 (3) 234 (4) 117
 (5) None of these

Directions (150-154) .-What will come in place of question mark (?) in the following number series ?

(Bank Of Maharashtra Exam. 19.12.2010)

- 150.** 10 14 25 55 140 (?)

- (1) 386 (2) 398
 (3) 388 (4) 396
 (5) None of these

- 151.** 119 131 155 191 239 (?)

- (1) 289 (2) 290
(3) 279 (4) 280
(5) None of these
152. 11 57 149 333 701 (?)
(1) 1447 (2) 1347
(3) 1368 (4) 1437
(5) None of these
153. 697 553 453 389 353 (?)
(1) 328 (2) 337
(3) 362 (4) 338
(5) None of these
154. 336 224 168 140 126 (?)
(1) 119 (2) 118
(3) 116 (4) 121
(5) None of these

Directions (155-159): What will come in place of the question mark (?) in the following number series ?

**(Oriental Bank Of Commerce PO
Exam. 26.12.2010 (1st Sitting))**

155. 9 15 27 51 99 ?
(1) 165 (2) 195
(3) 180 (4) 190
(5) None of these
156. 13 21 36 58 87 ?
(1) 122 (2) 128
(3) 133 (4) 123
(5) None of these
157. 7 9 19 45 95 ?
(1) 150 (2) 160
(3) 145 (4) 177
(5) None of these
158. 14 15 23 32 96 ?
(1) 121 (2) 124
(3) 152 (4) 111
(5) None of these
159. 20 24 36 56 84 ?
(1) 116 (2) 124
(3) 120 (4) 128
(5) None of these

Directions (160-164) : What should come in place of the question mark (?) In the following number series ?

(Indian Bank PO Exam. 02.01.2011)

160. 3 732 1244 1587 1803 1928 ?
(1) 2144 (2) 1992
(3) 1955 (4) 2053
(5) None of these
161. 16 24 ? 210 945 5197.5 33783.75
(1) 40 (2) 36
(3) 58 (4) 60
(5) None of these
162. 45030 9000 1795 355 68 ? 1.32
(1) 11.6 (2) 12.2
(3) 10.4 (4) 9.8

- (5) None of these
163. 5 12 36 123 ? 2555 15342
(1) 508 (2) 381
(3) 504 (4) 635
(5) None of these
164. 8 11 17 ? 65 165.5 498.5
(1) 27.5 (2) 32
(3) 28 (4) 30.5
(5) None of these

Directions (165-169) : What will come in place of the question mark (?) in the following number series ?

**(Union Bank Of India PO
Exam. 09.01.2001)**

165. 117 389 525 593 627 (?)
(1) 654 (2) 640
(3) 634 (4) 630
(5) None of these
166. 7 11 23 51 103 (?)
(1) 186 (2) 188
(3) 185 (4) 187
(5) None of these
167. 18 27 49 84 132 (?)
(1) 190 (2) 183
(3) 180 (4) 193
(5) None of these
168. 33 43 65 99 145 (?)
(1) 201 (2) 203
(3) 205 (4) 211
(5) None of these
169. 655 439 314 250 223 (?)
(1) 205 (2) 210
(3) 195 (4) 190
(5) None of these

Directions (170-174): What will come in place of the question mark (?) in the following number series ?

**(Corporation Bank PO
Exam. 16.01.2011)**

170. 15 21 39 77 143 (?)
(1) 243 (2) 240
(3) 253 (4) 245
(5) None of these
171. 33 39 57 87 129 (?)
(1) 183 (2) 177
(3) 189 (4) 199
(5) None of these
172. 15 19 83 119 631 (?)
(1) 731 (2) 693
(3) 712 (4) 683
(5) None of these
173. 19 26 40 68 124 (?)
(1) 246 (2) 238
(3) 236 (4) 256
(5) None of these

174. 43 69 58 84 73 (?)
 (1) 62 (2) 98
 (3) 109 (4) 63
 (5) None of these

Directions (175-179): What should come in place of the question mark (?) in the following number series ?

(Punjab & Sind Bank PO Exam. 23.01.2011)

175. 15 18 16 19 17 20 ?
 (1) 23 (2) 22
 (3) 16 (4) 18
 (5) None of these
176. 1050 420 168 67.2 26.88 10.752 ?
 (1) 4.3008 (2) 6.5038
 (3) 4.4015 (4) 5.6002
 (5) None of these
177. 0 6 24 60 120 210 ?
 (1) 343 (2) 280
 (3) 335 (4) 295
 (5) None of these
178. 32 49 83 151 287 559 ?
 (1) 1118 (2) 979
 (3) 1103 (4) 1120
 (5) None of these
179. 462 552 650 756 870 992 ?
 (1) 1040 (2) 1122
 (3) 1132 (4) 1050
 (5) None of these

Directions (180-184): What will come in place of the question mark (?) in the following number series ?

(UCO Bank PO Exam. 30.01.2011)

180. 28 39 63 102 158 (?)
 (1) 232 (2) 242
 (3) 233 (4) 244
 (5) None of these
181. 7 16 141 190 919 (?)
 (1) 1029 (2) 1019
 (3) 1020 (4) 1030
 (5) None of these
182. 12 17 32 57 92 (?)
 (1) 198 (2) 195
 (3) 137 (4) 205
 (5) None of these
183. 19 25 45 87 159 (?)
 (1) 254 (2) 279
 (3) 284 (4) 269
 (5) None of these
184. 83 124 206 370 698 (?)
 (1) 1344 (2) 1324
 (3) 1364 (4) 1334
 (5) None of these

Directions (185-189): What will come in place of the question mark (?) in the following number series.

(Bank Of Baroda PO Exam.13.03.2011)

185. 1 7 49 343 (?)
 (1) 16807 (2) 1227
 (3) 2058 (4) 2401
 (5) None of these
186. 13 20 39 78 145 (?)
 (1) 234 (2) 244
 (3) 236 (4) 248
 (5) None of these
187. 12 35 81 173 357 (?)
 (1) 725 (2) 715
 (3) 726 (4) 736
 (5) None of these
188. 3 100 297 594 991 (?)
 (1) 1489 (2) 1479
 (3) 1478 (4) 1498
 (5) None of these
189. 112 119 140 175 224 (?)
 (1) 277 (2) 276
 (3) 287 (4) 266
 (5) None of these

Directions (190-194): What will come in place of the question mark (?) in the following number series ?

(Allahabad Bank PO Exam.17.04.2011)

190. 958 833 733 658 608 (?)
 (1) 577 (2) 583
 (3) 567 (4) 573
 (5) None of these
191. 11 10 18 51 200 (?)
 (1) 885 (2) 1025
 (3) 865 (4) 995
 (5) None of these
192. 25 48 94 186 370 (?)
 (1) 738 (2) 744
 (3) 746 (4) 724
 (5) None of these
193. 14 24 43 71 108 (?)
 (1) 194 (2) 154
 (3) 145 (4) 155
 (5) None of these
194. 144 173 140 169 136 (?)
 (1) 157 (2) 148
 (3) 164 (4) 132
 (5) None of these

Directions (195-199): What will come in place of the question mark (?) in the following number series ?

(Indian Overseas Bank PO Exam. 22.05.2011)

195. 8 10 18 44 124 (?)
 (1) 344 (2) 366

- (3) 354 (4) 356
(5) None of these
- 196.** 13 25 61 121 205 (?)
(1) 323 (2) 326
(3) 324 (4) 313
(5) None of these
- 197.** 656 352 200 124 86 (?)
(1) 67 (2) 59
(3) 62 (4) 57
(5) None of these
- 198.** 454 472 445 463 436 (?)
(1) 436 (2) 456
(3) 454 (4) 434
(5) None of these
- 199.** 12 18 36 102 360 (?)
(1) 1364 (2) 1386
(3) 1384 (4) 1376
(5) None of these

Directions (200-204): In the following number series only one number is **wrong**. Find out the wrong number.

**(IBPS Bank PO/MT CWE
Exam. 18.09.2011)**

- 200.** 7 12 40 222 1742 17390 208608
(1) 222 (2) 12
(3) 40 (4) 1742
(5) 208608
- 201.** 6 91 584 2935 11756 35277
70558
(1) 6 (2) 70558
(3) 584 (4) 2935
(5) 35277
- 202.** 9050 5675 3478 2147 1418 1077
950
(1) 950 (2) 1418
(3) 5675 (4) 2147
(5) 1077
- 203.** 1 4 25 256 3125 46656
823543
(1) 4 (2) 823543
(3) 46656 (4) 25
(5) 256
- 204.** 8424 4212 2106 1051 526.5 263.25
131.625
(1) 526.5 (2) 1051
(3) 4212 (4) 8424
(5) 263.25

Directions (205-209): In each of these questions a number series is given. In each series **only one** number is wrong. Find out the **wrong** number.

(IBPS Bank PO/MT CWE 17.06.2012)

- 205.** 5531 5506 5425 5304 5135 4910
4621
(1) 5531 (2) 5425

- (3) 4621 (4) 5135
(5) 5506
- 206.** 6 7 9 13 26 37 69
(1) 7 (2) 26
(3) 69 (4) 37
(5) 9
- 207.** 1 3 10 36 152 760 4632
(1) 3 (2) 36
(3) 4632 (4) 760
(5) 152
- 208.** 4 5 13 40 105 229 445
(1) 4 (2) 13
(3) 105 (4) 445
(5) 229
- 209.** 157.5 45 15 6 3 2 1
(1) 1 (2) 2
(3) 6 (4) 157.5
(5) 45

Directions (210-215): What will come in place of the question mark (?) in the following number series ?

(IDBI Bank Officer Exam. 16.09.2012)

- 210.** 123 277 459 669 907 ?
(1) 1179 (2) 1173
(3) 1167 (4) 1169
(5) None of these
- 211.** 456.5 407 368.5 341 324.5 ?
(1) 321 (2) 319
(3) 317 (4) 323
(5) None of these
- 212.** 23 42.2 80.6 157.4 311 ?
(1) 618.2 (2) 623.2
(3) 624.2 (4) 616.6
(5) None of these
- 213.** 36 154 232 278 300 ?
(1) 304 (2) 313
(3) 308 (4) 307
(5) None of these
- 214.** 24 536 487 703 678 ?
(1) 768 (2) 748
(3) 764 (4) 742
(5) None of these
- 215.** 224 576 752 840 884 ?
(1) 960 (2) 890
(3) 906 (4) 908
(5) None of these

Directions (216-220) : What should come in place of the question mark (?) in the following series ?

**(IBPS RRBs Office Assistant CWE
Exam. 09.09.2012)**

- 216.** 5 6 16 57 ? 1245
(1) 244 (2) 148
(3) 296 (4) 271
(5) None of these
- 217.** 12 ? 168 504 1260 2520

- (1) 96 (2) 59
(3) 61 (4) 48
(5) None of these
- 218.** 4 9 29 ? 599 3599
(1) 117 (2) 347
(3) 258 (4) 174
(5) None of these
- 219.** 177 170 159 146 ? 110
(1) 132 (2) 106
(3) 129 (4) 127
(5) None of these
- 220.** 2 3 11 38 102 ?
(1) 402 (2) 182
(3) 227 (4) 168
(5) None of these

Directions (221-225): What will come in place of the question mark (?) in the following number series ?

**(Indian Overseas Bank PO
Online Exam. 01.09.2013)**

- 221.** 21 10.5 ? 15.75 31.5 78.75
(1) 10.5 (2) 11.5
(3) 12.5 (4) 10.25
(5) None of these
- 222.** 6 19 58 ? 214 331
(1) 113 (2) 123
(3) 133 (4) 143
(5) None of these
- 223.** ? 16 28 58 114 204
(1) 7 (2) 9
(3) 14 (4) 6
(5) 10
- 224.** 13.76 14.91 17.21 20.66 ? 31.01
(1) 25.66 (2) 24.36
(3) 24.26 (4) 25.26
(5) 25.36
- 225.** 15 ? 24 33 97 122
(1) 20 (2) 19
(3) 17 (4) 18
(5) 16

Directions (226-230) : In each of the following number series, a number is **wrong**. Find out that wrong number.

**(Corporation Bank Specialist Officer
(Marketing) Exam 22.12.2014)**

- 226.** 2 6 15 30 45 43.5 22.5
(1) 6 (2) 30
(3) 45 (4) 15
(5) 43.5
- 227.** 950 661 436 269 146 65 16
(1) 436 (2) 65
(3) 269 (4) 661
(5) 146
- 228.** 6.5 11.8 22.4 38.3 59.5 87.3 117.8

- (1) 22.4 (2) 59.5
(3) 11.8 (4) 38.3
(5) 87.3

- 229.** 1 2 4 9 23 69 186
(1) 2 (2) 9
(3) 23 (4) 4
(5) 69

- 230.** 250 239 216 181 136 75 4
(1) 239 (2) 181
(3) 75 (4) 216
(5) 136

SBI PO EXAMS

Directions (1-5): One number is wrong in each of the number series given in each of the following questions. You have to identify that number and assuming that a new series starts with that number following the same logic as in the given series, which of the numbers given in (1), (2), (3), (4) and (5) given below each series will be the **third** number in the new series ?

**(SBI Associate Banks PO
Exam. 14.02.1999)**

- 1.** 3 5 12 38 154 914 4634
(1) 1636 (2) 1222
(3) 1834 (4) 3312
(5) 1488
- 2.** 3 4 10 34 136 685 4116
(1) 22 (2) 276
(3) 72 (4) 1374
(5) 12
- 3.** 214 18 162 62 143 90 106
(1) 34 (2) 110
(3) 10 (4) 91
(5) 38
- 4.** 160 80 120 180 1050 4725 25987.5
(1) 60 (2) 90
(3) 3564 (4) 787.5
(5) 135
- 5.** 2 3 7 13 25 47 78
(1) 11 (2) 13
(3) 15 (4) 18
(5) 20

Directions (6-8): In each of the following questions, a number **series** is given. After the series, below it, a number alongwith (a), (b), (c), (d) and (e) is given. You have to complete the series following the same sequence as that of the given series. Then answer the question that follows.

**(SBI Associate Banks PO
Exam. 16.07.2000)**

- 6.** 2 3 10 29 172 885
1 (a) (b) (c) (d) (e)
What will come in place of (b) ?

- (1) 11 (2) 7
(3) 9 (4) 8
(5) None of these
7. 5 7 10 36 136 690
2 (a) (b) (c) (d) (e)
What will come in place of (e) ?
(1) 310 (2) 330
(3) 110 (4) 64
(5) None of these
8. 8 4 6 15 52.5 236.25
4 (a) (b) (c) (d) (e)
Which of the following will come in place of (d) ?
(1) 36.25 (2) 33.25
(3) 26.75 (4) 32.75
(5) None of these

Directions (9-10) : In each of the following questions, a number series is established if the positions of two out of the five marked numbers are in the interchange. The position of the first unmarked number remains the same and it is the beginning of the series. The earlier of the two marked numbers whose positions are interchanged is the answer. For example, if an interchange of number marked '1' and the number marked '4' is required to establish the series, your answer is T. If it is not necessary to interchange the position of the numbers to establish the series, give 5 as your answer. Remember that when the series is established, the numbers change from left to right (i.e. from the unmarked number to the last marked number) in a specific order.

(SBI Banks PO Exam. 20.08.2000)

9. 40 14 60 24 80 19
(1) (2) (3) (4) (5)
10. 120 15 105 21.875 87.5 17.5
(1) (2) (3) (4) (5)

Directions (11-15) : In each of the following number-series only one number is **wrong**. If the wrong number is corrected, the series gets established following a certain logic. Below the series a number is given followed by (a), (b), (c), (d), (e) and (f). You have to complete the series following the same logic as in the given series after correcting the **wrong** number, now answer the following questions giving the correct values for the letter in the questions.

(SBI Banks PO Exam. 11.02.2001)

11. 2 3 2 15 76 254 1434
3 (a) (b) (c) (d) (e) (f)
What will come in place of (c) ?
(1) 18 (2) 22
(3) 24 (4) 21
(5) None of these
12. 1 2 8 33 148 740 4626

- 2 (a) (b) (c) (d) (e) (f)
What will come in place of (d) ?
(1) 156 (2) 164
(3) 168 (4) 152
(5) None of these

13. 2 4.5 11 30 93 312 1136
1 (a) (b) (c) (d) (e) (i)
What will come in place of (b) ?
(1) 6 (2) 81
(3) 16.75 (4) 18.75
(5) None of these
14. 2 14 18 46 82 176 338
4 (a) (b) (c) (d) (e) (i)
What will come in place of (e) ?
(1) 238 (2) 338
(3) 218 (4) 318
(5) None of these
15. 1 3 7 11 21 43 85
4 (a) (b) (c) (d) (e) (f)
What will come in place of (f) ?
(1) 275 (2) 279
(3) 277 (4) 273
(5) None of these

Directions (16-20) : Find out the wrong number in the following given sequence.

(SBI Associate Banks PO Exam. 21.07.2002)

16. 7 4 6 9 20 52.5 160.5
(1) 6 (2) 4
(3) 20 (4) 9
(5) 52.5
17. 4 6 12 30 75 315 1260
(1) 315 (2) 75
(3) 12 (4) 6
(5) 30
18. 3 4 13 38 87 166 289
(1) 38 (2) 13
(3) 87 (4) 166
(5) 4
19. 4 5 9 29 111 556 325
(1) 5 (2) 9
(3) 29 (4) 111
(5) 556
20. 2 6 16 38 84 176 368
(1) 6 (2) 16
(3) 38 (4) 84
(5) 176

Directions (21-26) : In each of the following number series, a **wrong** number is given. Find out the **wrong** number.

(SBI Banks PO Exam. 18.05.2003)

21. 2 3 6 18 109 194 209952
(1) 3 (2) 6
(3) 18 (4) 109
(5) 1944
22. 1 3 6 11 20 39 70

- (1) 3 (2) 39
(3) 11 (4) 20
(5) 6
23. 2 13 27 113 561 3369 23581
(1) 13 (2) 27
(3) 113 (4) 51
(5) 3369
24. 50 51 47 56 42 65 29
(1) 51 (2) 47
(3) 56 (4) 42
(5) 65
25. 3 9 23 99 479 2881 20159
(1) 9 (2) 23
(3) 99 (4) 479
(5) 2881
26. 2 4 5 8 13 21 34
(1) 4 (2) 5
(3) 8 (4) 13
(5) 21

Directions (27-31) : In each of the following questions a number series is given. After the **series** a number is given followed by (a), (b), (c), (d) and (e). You have to complete the series starting with the given number, following the sequence of original series and answer the questions that follow the series.

(SBI PO Exam. 09.01.2005)

27. 3 19 103 439 1381 2887
5 (a) (b) (c) (d) (e)
What will come in place of (b) ?
(1) 139 (2) 163
(3) 161 (4) 157
(5) None of these
28. 4 13 40 135 552 2765
2 (a) (b) (c) (d) (e)
What will come in place of (c) ?
(1) 123 (2) 133
(3) 127 (4) 131
(5) None of these
29. 5 12 4 10 3 8
6 (a) (b) (c) (d) (e)
What will come in place of (d) ?
(1) 3 (2) 5
(3) 4 (4) 7
(5) None of these
30. 3 13 37 87 191 401
1 (a) (b) (c) (d) (e) What
will come in place of (d) ? (1)
169 (2) 161
(3) 171 (4) 159
(5) None of these
31. 8 4 6 15 52.5 236.25
12 (a) (b) (c) (d) (e)
What will come in place of (c) ?
(1) 18.25 (2) 19

- (3) 22.5 (4) 20.75
(5) None of these

Directions (32-36): In each of the following questions a number series is given. After the **series**, a number is given followed by (a), (b), (c), (d) and (e). You have to complete the series starting with the number given following the sequence of the given series. Then answer the question given below it.

(SBI PO Exam. 26.11.2006)

32. 9 19.5 41 84.5
12 (a) (b) (c) (d) (e)
Which of the following numbers will come in place of (c) ?
(1) 111.5 (2) 118.5
(3) 108.25 (4) 106.75
(5) None of these
33. 4 5 22 201
7 (a) (b) (c) (d) (e)
Which of the following number will come in place of (d) ?
(1) 4948 (2) 4840
(3) 4048 (4) 4984
(5) None of these
34. 5 5.25 11.5 36.75
(a) (b) (c) (d) (e)
Which of the following number will come in place of (c) ?
(1) 34.75 (2) 24.75
(3) 24.5 (4) 34.5
(5) None of these
35. 38 19 28.5 71.25
18 (a) (b) (c) (d) (e)
Which of the following number will come in place of (d) ?
(1) 118.75 (2) 118.25
(3) 108.25 (4) 118.125
(5) None of these
36. 25 146 65 114
39 (a) (b) (c) (d) (e)
Which of the following number will come in place of (e) ?
(1) 122 (2) 119
(3) 112 (4) 94
(5) None of these

Directions (37-41) : In each of these questions a number series is given. Only one number is **wrong** in each series. You have to find out the **wrong** number.

(SBI Associate Banks PO Exam. 07.01.2007)

37. 10 15 24 35 54 75 100
(1) 35 (2) 75
(3) 24 (4) 15
(5) 54

38. 1 3 4 7 11 18 27 47
(1) 4 (2) 11
(3) 18 (4) 7
(5) 27
39. 3 2 3 6 12 37.5 115.5
(1) 37.5 (2) 3
(3) 6 (4) 2
(5) 12
40. 2 8 32 148 765 4626 32431
(1) 765 (2) 148
(3) 8 (4) 32
(5) 4626
41. 2 3 11 38 102 229 443
(1) 11 (2) 229
(3) 102 (4) 38
(5) 3

Directions (42-46): What should come in place of the question mark(?) in the following number series ?

**(SBI PO Preliminary (Tire-I)
Exam. 27.04.2008)**

42. 7413 7422 7440 ? 7503 7548
(1) 7464 (2) 7456
(3) 7466 (4) 7477
(5) None of these
43. 4 16 36 64 100 ?
(1) 120 (2) 180
(3) 136 (4) 144
(5) None of these
44. 12 33 96 ? 852 2553
(1) 285 (2) 288
(3) 250 (4) 384
(5) None of these
45. 70000 14000 2800 ? 112 22.4
(1) 640 (2) 420
(3) 560 (4) 540
(5) None of these
46. 102 99 104 97 106 ?
(1) 96 (2) 95
(3) 100 (4) 94
(5) None of these

Directions (47-51): What will come in place of the question mark (?) in the following number series which has only one number wrong by a margin of + 1 or - 1 ? The first and last number in the series are correct ?

**(SBI PO Preliminary (Tire-I)
Exam. 27.07.2008)**

47. 93 95 99 ? 110 121 134
(1) 104 (2) 96
(3) 82 (4) 103
(5) None of these
48. 8 12 18 26 40.5 60.75 136.6875
(1) 104.125 (2) 121.125
(3) 96.125 (4) 83.125

- (5) None of these
49. 4 7 11 18 28 ? 76 12
(1) 59 (2) 38
(3) 46 (4) 53
(5) None of these
50. 3 10 ? 172 886 5346 3747
299832
(1) 39 (2) 27
(3) 24 (4) 34
(5) None of these
51. 15 22 57 183 ? 748 3751 22542
(1) 709 (2) 698
(3) 748 (4) 800
(5) None of these

Directions (52-56): In each of the series questions a number series is given. In each series **only one** number is **wrong**. Find out the **wrong** number.

**(SBI Associate Banks PO
Exam. 07.08.2011)**

52. 3601 3602 1803 604 154 36 12
(1) 3602 (2) 1803
(3) 604 (4) 154
(5) 36
53. 4 12 42 196 1005 6066 42511
(1) 12 (2) 42
(3) 1005 (4) 196
(5) 6066
54. 2 8 12 20 30 42 56
(1) 8 (2) 42
(3) 30 (4) 20
(5) 12
55. 32 16 24 65 210 945 5197.5
(1) 945 (2) 16
(3) 24 (4) 210
(5) 65
56. 7 13 25 49 97 194 385
(1) 13 (2) 49
(3) 97 (4) 194
(5) 25

Directions (57-61): In each of the following questions, a number series is given. After the series a number is given followed by (a), (b), (c), (d) and (e). You have to complete the 'series starting with the number given, following the sequence of the original series and answer the questions that follow the series.

**(SBI Management Executive
Exam. 23.02.2014)**

57. 37 19 20 31.5 65 165
21 (a) (b) (c) (d) (e)
What will come in the place of (e) ?
(1) 105 (2) 41
(3) 110 (4) 108
(5) 116

58. 5 6 16 57 244 1245
9 (a) (b) (c) (d) (e)
What will come in the place of (d) ?
(1) 366 (2) 364
(3) 368 (4) 378
(5) 382
59. 7 5 11 49 335 3005
13 (a) (b) (c) (d) (e)
What will come in the place of (b) ?
(1) 31 (2) 27
(3) 29 (4) 28
(5) 30
60. 12 47 152 467 1412 4247
33 (a) (b) (c) (d) (e)
What will come in the place of (d) ?
(1) 3131 (2) 1133
(3) 3311 (4) 3113
(5) 3123
61. 54 50 84 188 496 1456
42 (a) (b) (c) (d) (e)
What will come in the place of (d) ?
(1) 304 (2) 286
(3) 293 (4) 281
(5) 301

RBI GRADE-B OFFICER EXAMS

Directions (1-5) : In each of the following questions a number series is given. After the series a number is given followed by (a), (b) (c), (d) and (e). You have to complete the series starting with the number given, following the sequence of the original series and answer the questions that follow the series.

(RBI Grade-B Officer Exam. 17.11.2002)

1. 5 6 16 57 244 1245
2 (a) (b) (c) (d) (e) What
will come in place of (d) ? (1)
46 (2) 39
(3) 156 (4) 172
(5) None of these
2. 3 5 9 17 33 65
7 (a) (b) (c) (d) (e)
What will come in place of (d)
(1) 95 (2) 51
(3) 99 (4) 49
(5) None of these
3. 7 4 5 9 20 52.5
3 (a) (b) (c) (d) (e)
What will come in place of (c) ?
(1) 4.5 (2) 2
(3) 6 (4) 7
(5) None of these
4. 3 10 32 111 460 2315
2 (a) (b) (c) (d) (e)
What will come in place of (b) ?

- (1) 29 (2) 30
(3) 26 (4) 28
(5) None of these

5. 5 8 6 10 7 12
7 (a) (b) (c) (d) (e)
What will come in place of (c) ?
(1) 14 (2) 16
(3) 9 (4) 11
(5) None of these

Directions (6-10) : What should come in place of the question mark (?) in the following number series ?

(RBI Grade-B Officer Exam. 2007)

6. 104 109 99 114 94 9
(1) 69 (2) 124
(3) 120 (4) 78
(5) None of these
7. 980 392 156.8 ? 25.088 10.0352
(1) 65.04 (2) 60.28
(3) 62.72 (4) 63.85
(5) None of these
8. 14 16 35 109 441 ?
(1) 2651 (2) 2205
(3) 2315 (4) 2211
(5) None of these
9. 1331 2197 4913 6859 ? 24389
(1) 12167 (2) 13824
(3) 9261 (4) 15625
(5) None of these
10. 3600 725 150 35 12 ?
(1) 8 (2) 7.4
(3) 10.5 (4) 10
(5) None of these

Directions (11-15) : What should come in place of question mark (?) in the following number series ?

(RBI Grade-B Officer Exam. 2008)

11. 13 14 30 93 376 1885 ?
(1) 10818 (2) 10316
(3) 11316 (4) 11318
(5) None of these
12. 4 6 9 13.5 20.25 30.375
(1) 40.25 (2) 45.5625
(3) 42.7525 (4) 48.5625
(5) None of these
13. 400 240 144 86.4 51.84 31.104 ?
(1) 19.2466 (2) 17.2244
(3) 16.8824 (4) 18.6625
(5) None of these
14. 9 4.5 4.5 6.75 13.5 33.75 ?
(1) 101.25 (2) 103.75
(3) 99.75 (4) 105.50
(5) None of these
15. 705 728 774 843 935 1050 ?

- (1) 1190 (2) 1180
 (3) 1185 (4) 1187
 (5) None of these

Directions (16-20) : In each of these questions a number series is given. Below the series one number is given followed by (a), (b), (c), (d) and (e) You have to complete this series following the same logic as in the original series and answer the question that follows.

(RBI Grade-B Officer Exam.11.10.2009)

- 16.** 5 9 25 91 414 2282 5
 3 (a) (b) (c) (d) (e)
 What will come in place of (c) ?
 (1) 63.25 (2) 63.75
 (3) 64.25 (4) 64.75
 (5) None of these

- 17.** 15 9 8 12 36 170
 19 (a) (b) (C) (d) (e)
 What will come in place of (b) ?
 (1) 18 (2) 16
 (3) 22 (4) 24
 (5) None of these

- 18.** 7 6 10 27 104 515
 9 (a) (b) (c) (d) (e)
 What will come in place of (d) ?
 (1) 152 (2) 156
 (3) 108 (4) 112
 (5) None of these

- 19.** 6 16 57 244 1245 7506
 4 (a) (b) (c) (d) (e)
 What will come in place of (d) ?
 (1) 985 (2) 980
 (3) 1004 (4) 1015
 (5) None of these

- 20.** 8 9 20 63 256 1285
 5 (a) (b) (c) (d) (e)
 What will come in place of (e)
 (1) 945 (2) 895
 (3) 925 (4) 845
 (5) None of these

Directions (21-25) : In the following number series only one number is **wrong**. Find out the **wrong** number.

(RBI Grade-B Officer Exam.06.02.2011)

- 21.** 4 3 4.5 8.5 20 53 162.5
 (1) 3 (2) 4.5
 (3) 8.5 (4) 20
 (5) 53
- 22.** 12000 2395 472 89.8 12.96 -
 2.408 -5.4816
 (1) -5.4816 (2) 472
 (3) 12.96 (4) - 2.408
 (5) 2395
- 23.** 1 8 28 99 412 2075 12460
 (1) 28 (2) 99

- (3) 412 (4) 2075
 (5) 12460

- 24.** 144 215 540 1890 8505 46777.5
 304053.75

- (1) 215 (2) 540
 (3) 1890 (4) 8505
 (5) 46777.5

- 25.** 2222 1879 1663 1538 1474 1447
 1440
 (1) 1879 (2) 1538
 (3) 1474 (4) 1447
 (5) 1440

Directions (26 - 30) : What will come in place of the question mark (?) in the following number series ?

(RBI Grade 'B' Officer's Exam. 18.12.2011)

- 26.** 9 31 73 141 (?)
 (1) 164 (2) 280
 (3) 239 (4) 241
 (5) None of these

- 27.** 35 256 451 620 763 (?)
 (1) 680 (2) 893
 (3) 633 (4) 880
 (5) None of these

- 28.** 130 139 155 180 216 (?)
 (1) 260 (2) 290
 (3) 265 (4) 996
 (5) None of these

- 29.** 2890 (?) 1162 874 730 658
 (1) 1684 (2) 1738
 (3) 1784 (4) 1672
 (5) None of these

- 30.** 14 1004 1202 1251.5 1268 (?)
 (1) 1267.5 (2) 1276.25
 (3) 1324.5 (4) 1367.25
 (5) None of these

Directions (31-35) : What will come in place of the question mark (?) in the following number series ?

(RBI Officer Grade 'B' Online Exam. 25.08.2013)

- 31.** 224 576 752 840 884 ?
 (1) 960 (2) 890
 (3) 906 (4) 908
 (5) None of these

- 32.** 55 66.15 88.45 121.9 166.5 ?
 (1) 212.25 (2) 322.25
 (3) 224.25 (4) 222.25
 (5) None of these

- 33.** 36 49 75 88 114 (?)
 (1) 130 (2) 140
 (3) 132 (4) 128
 (5) 127

INSURANCE EXAMS

1. What will come in place of the question mark (?) in the following series ?
3 7 18 26 ? 53 64 96

(1) 34 (2) 37
(3) 32 (4) 38

**(United India Insurance Co. AAO
Exam. 21.04.2002)**

2. What will come in place of the question mark (?) in the following series ?
1.7 3.2 2.7 4.2 3.7 ? 4.7 6.2

(1) 6.2 (2) 5.5
(3) 5.2 (4) 4.3

**(United India Insurance Co.
AAO Exam. 21.04.2002)**

Directions (3-7) : In each of the following questions, a number series is given. **Only** one number is **wrong** in this series. Find out that **wrong** number, and taking this wrong number as the first term of the second series formed following the same logic, find out the fourth term of the second series.

**(LIC Assistant Administrative
Officer (AAO) Exam. 24.04.2008)**

3. 8 4 4 6 12 28 90
(1) 18 (2) 42
(3) 21 (4) 24
(5) None of these
4. 17 17.25 18.25 20.75 24.5 30.75
(1) 23.25 (2) 24.25
(3) 24.5 (4) 24.75
(5) None of these
5. 438 487 447 476 460 469
(1) 485 (2) 425
(3) 475 (4) 496
(5) None of these
6. 2 7 18 45 99 209 431
(1) 172 (2) 171
(3) 174 (4) 175
(5) None of these
7. 6 8 10 42 146 770 4578
(1) 868 (2) 8872
(3) 858 (4) 882
(5) None of these

Directions (8-12) : Find out the wrong number in the following given sequence.

**(LIC Assistant Administrative
Officer (AAO) Exam. 2006)**

8. 7 4 6 9 20 52.5 160.5
(1) 6 (2) 4
(3) 20 (4) 9
(5) 52.5
9. 4 6 12 30 75 315 1260

(1) 315 (2) 75
(3) 12 (4) 6
(5) 30

10. 3 4 13 38 87 166 289
(1) 38 (2) 13
(3) 87 (4) 166
(5) 4

11. 4 5 9 29 111 556 3325
(1) 5 (2) 9
(3) 29 (4) 111
(5) 556

12. 2 6 16 38 84 176 368
(1) 6 (2) 16
(3) 38 (4) 84
(5) 176

Directions (13 - 17) : What should come in place of the question mark (?) in the following number series ?

**(New India Assurance AO
Exam. 25.10.2009)**

13. 3 52 88 113 129 ?
(1) 128 (2) 142
(3) 133 (4) 145
(5) None of these
14. 2 3 8 ? 112 565
(1) 36 (2) 14
(3) 27 (4) 45
(5) None of these
15. 6 4 8 23 ? 385.25
(1) 84.5 (2) 73
(3) 78.5 (4) 82
(5) None of these
18. 8 84 216 512 ? 1728
(1) 729 (2) 1331
(3) 684 (4) 1000
(5) None of these
17. 5 11 32 108 444 ?
(1) 1780 (2) 2230
(3) 1784 (4) 2225
(5) None of these
18. If $S = 1^2 - 2^2 + 3^2 - 4^2 + \dots + 199^2 - 200^2$, then the value of S is
(1) 19900 (2) 20100
(3) -20100 (4) -19900

**(New India Assurance AO
Exam. 25.10.2009)**

19. The expression $\frac{3}{4} + \frac{5}{36} + \frac{7}{144} + \dots + \frac{17}{5184}$ is equal to
(1) 0.9 (2) 0.95
(3) 0.99 (4) 1.91

Directions (20- 24) : What will come in place of the question mark (?) in the following number series ?

**(United India Insurance AO
Exam. 27.03.2011)**

20. 8 14 32 70 136 (?)
(1) 248 (2) 247
(3) 237 (4) 238
(5) None of these
21. 25 41 89 169 281 (?)
(1) 425 (2) 415
(3) 409 (4) 419
(5) None of these
22. 461 474 465 478 469 (?)
(1) 460 (2) 482
(3) 456 (4) 478
(5) None of these
23. 980 516 284 168 110 (?)
(1) 73 (2) 71
(3) 83 (4) 91
(5) None of these
24. 4 4 10 34 94 (?)
(1) 230 (2) 214
(3) 220 (4) 209
(5) None of these
25. The sum $1 + 3 - 5 + 7 + 9 - 11 + 13 + 15 - 17 + \dots + 61 + 63 - 65$ is equal to
(1) 319 (2) 330
(3) 341 (4) 451

**(New India Insurance
AAO Exam. 22.05.2011)**

26. If $x = \frac{1}{2} + \frac{1}{6} + \frac{1}{12} + \frac{1}{20} + \frac{1}{30} + \frac{1}{42} + \frac{1}{56} + \frac{1}{63}$
then value of x is closest to
(1) 1.1 (2) 1
(3) 0.9 (4) 0.8

**(Ntw India Insurance AAO
Exam. 22.05.2011)**

27. If $\left(1 - \frac{1}{2^2}\right) \left(1 - \frac{1}{3^2}\right) \left(1 - \frac{1}{4^2}\right) \dots \left(1 - \frac{1}{2011^2}\right) = x$
then the value of x is
(1) 1 (2) 2010
(3) 2011 (4) 2012

**(United India Insurance AAO
Exam. 03.06.2012)**

Directions (28 - 32) : Find the wrong number in the following number series .

**(LIC Assistant Administrative Officer
(AAO) Exam. 12.05.2013)**

28. 1050 510 242 106 46 16 3
(1) 3 (2) 106
(3) 242 (4) 510
(5) None of these
29. 550 546 537 521 494 460 411
(1) 494 (2) 546
(3) 521 (4) 460
(5) None of these
30. 8 21 47 86 140 203 281
(1) 47 (2) 86
(3) 140 (4) 203
(5) None of these
31. 4 24 161 965 4795 19176 57525
(1) 161 (2) 965
(3) 57525 (4) 19176
(5) None of these
32. 1 2 8 24 120 720 5040
(1) 120 (2) 24
(3) 8 (4) 720
(5) None of these

Directions (33-38) : What should come in place of the question mark (?) in the following number series ?

**(United India Insurance AO
Exam. 26.05.2013)**

33. 1548 516 129 43 ?
(1) 11 (2) 10.75
(3) 9.5 (4) 12
(5) None of these
34. 949 189.8 ? 22.776 11.388 6.8328
(1) 48.24 (2) 53.86
(3) 74.26 (4) 56.94
(5) None of these
35. 121 144 190 259 ? 466
(1) 351 (2) 349
(3) 374 (4) 328
(5) None of these
36. 14 43.5 264 ? 76188
(1) 3168 (2) 3176
(3) 1587 (4) 1590
(5) None of these
37. $\frac{41}{1} \frac{164}{44} \frac{2624}{?} \frac{6045696}{?}$
(1) 042 (2) 94644
(3) 94464 (4) 102444
(5) None of these
38. Find the missing number in the series :
2, 5, 9, ?, 20, 27
(1) 14 (2) 16
(3) 18 (4) 24

**(NICL (GIC) Administrative
Officer Exam. 15.1.2.2013)**

**SHORT ANSWERS
NATIONALISED BANKS
& IBPS PO/MT/SO**

1.	(4)	2.	(1)	105.	(4)	106.	(2)
3.	(4)	4.	(3)	107.	(3)	108.	(5)
5.	(2)	6.	(3)	109.	(5)	110.	(1)
7.	(5)	8.	(2)	111.	(3)	112.	(4)
9.	(1)	10.	(4)	113.	(5)	114.	(1)
11.	(3)	12.	(5)	115.	(2)	116.	(3)
13.	(2)	14.	(1)	117.	(2)	118.	(1)
15.	(4)	16.	(1)	119.	(1)	120.	(2)
17.	(5)	18.	(1)	121.	(2)	122.	(5)
19.	(1)	20.	(2)	123.	(3)	124.	(3)
21.	(4)	22.	(3)	125.	(3)	126.	(2)
23.	(2)	24.	(4)	127.	(5)	128.	(3)
25.	(1)	26.	(5)	129.	(4)	130.	(3)
27.	(3)	28.	(1)	131.	(3)	132.	(2)
29.	(3)	30.	(2)	133.	(4)	134.	(5)
31.	(5)	32.	(4)	135.	(4)	136.	(1)
33.	(1)	34.	(3)	137.	(2)	138.	(1)
35.	(2)	36.	(3)	139.	(3)	140.	(1)
37.	(5)	38.	(5)	141.	(4)	142.	(5)
39.	(3)	40.	(3)	143.	(3)	144.	(3)
41.	(2)	42.	(1)	145.	(3)	146.	(5)
43.	(3)	44.	(5)	147.	(2)	148.	(3)
45.	(4)	46.	(1)	149.	(1)	150.	(3)
47.	(2)	48.	(1)	151.	(5)	152.	(4)
49.	(4)	50.	(5)	153.	(2)	154.	(1)
51.	(3)	52.	(2)	155.	(2)	156.	(4)
53.	(5)	54.	(1)	157.	(4)	158.	(1)
55.	(3)	56.	(2)	159.	(3)	160.	(2)
57.	(4)	58.	(3)	161.	(4)	162.	(1)
59.	(5)	60.	(1)	163.	(1)	164.	(4)
61.	(2)	62.	(4)	165.	(5)	166.	(4)
63.	(5)	64.	(4)	167.	(4)	168.	(2)
65.	(3)	66.	(2)	169.	(5)	170.	(4)
67.	(1)	68.	(3)	171.	(1)	172.	(1)
69.	(4)	70.	(1)	173.	(3)	174.	(5)
71.	(5)	72.	(3)	175.	(4)	176.	(1)
73.	(5)	74.	(1)	177.	(5)	178.	(3)
75.	(4)	76.	(2)	179.	(2)	180.	(3)
77.	(3)	78.	(2)	181.	(5)	182.	(3)
79.	(4)	80.	(1)	183.	(4)	184.	(5)
81.	(5)	82.	(3)	185.	(4)	186.	(4)
83.	(3)	84.	(3)	187.	(1)	188.	(5)
85.	(3)	86.	(2)	189.	(3)	190.	(2)
87.	(3)	88.	(1)	191.	(4)	192.	(1)
89.	(5)	90.	(3)	193.	(2)	194.	(5)
91.	(1)	92.	(4)	195.	(2)	196.	(4)
93.	(3)	94.	(1)	197.	(1)	198.	(3)
95.	(5)	96.	(4)	199.	(2)	200.	(4)
97.	(3)	98.	(1)	201.	(3)	202.	(5)
99.	(2)	100.	(2)	203.	(4)	204.	(2)
101.	(4)	102.	(5)	205.	(1)	206.	(2)
103.	(1)	104.	(3)	207.	(4)	208.	(3)
				209.	(1)	210.	(2)
				211.	(2)	212.	(1)
				213.	(5)	214.	(4)

215. (3)
217. (4)
219. (3)
221. (1)
223. (3)
225. (5)
227. (3)
229. (5)

216. (1)
218. (5)
220. (3)
222. (2)
224. (4)
226. (5)
228. (5)
230. (5)

SBI PO EXAMS

1. (3)
3. (4)
5. (1)
7. (2)
9. (3)
11. (4)
13. (5)
15. (3)
17. (2)
19. (3)
21. (4)
23. (1)
25. (3)
27. (2)
29. (3)
31. (3)
33. (1)
35. (4)
37. (1)
39. (4)
41. (2)
43. (4)
45. (3)
47. (4)
49. (5)
51. (3)
53. (2)
55. (3)
57. (1)
59. (3)

2. (3)
4. (5)
6. (4)
8. (5)
10. (3)
12. (5)
14. (1)
16. (1)
18. (4)
20. (5)
22. (2)
24. (4)
26. (1)
28. (1)
30. (4)
32. (3)
34. (2)
36. (3)
38. (5)
40. (4)
42. (5)
44. (1)
46. (2)
48. (5)
50. (1)
52. (4)
54. (1)
56. (4)
58. (2)
60. (4)

61. (5)

RBI GRADE-B OFFICER EXAMS

1. (4)	2. (5)
3. (3)	4. (2)
5. (1)	6. (5)
7. (3)	8. (4)
9. (1)	10. (2)
11. (3)	12. (2)
13. (4)	14. (1)
15. (5)	16. (4)
17. (2)	18. (1)
19. (5)	20. (3)
21. (3)	22. (2)
23. (5)	24. (1)
25. (5)	26. (4)
27. (4)	28. (3)
29. (2)	30. (2)
31. (3)	32. (4)
33. (5)	

INSURANCE EXAMS

1. (2)	2. (3)
3. (3)	4. (2)
5. (1)	6. (5)
7. (4)	8. (1)
9. (2)	10. (4)
11. (3)	12. (5)
13. (5)	14. (3)
15. (1)	16. (4)
17. (2)	18. (3)
19. (3)	20. (4)
21. (1)	22. (2)
23. (5)	24. (5)
25. (1)	26. (1)
27. (4)	28. (2)
29. (1)	30. (3)
31. (2)	32. (3)
33. (2)	34. (4)
35. (1)	36. (5)
37. (3)	38. (1)

EXPLANATIONS
NATIONALISED BANKS
& IBPS PO/MT/SO

1. (4) The series is based on the following pattern:

$$11 = 2 \times 3 + 5$$

$$38 = 11 \times 4 - 6$$

$$197 = 38 \times 5 + 7$$

$$1172 \neq 197 \times 6 - 8$$

\therefore **1172** is wrong and it should be replaced by $197 \times 6 - 8 = 1174$

2. (1) The series is based on the following pattern:

$$107 - 71 = 36 = 6^2$$

$$71 - 46 = 25 = 5^2$$

$$46 - 30 = 16 = 4^2$$

$$30 - 21 = 9 = 3^2$$

$$21 - 19 = 2 \neq 2^2$$

\therefore **19** should be replaced by 17 for which $21 - 17 = 2^2$

3. (4) The series is based on the following pattern:

$$16 = 9 + 7$$

$$25 = 16 + 9$$

$$41 = 25 + 16$$

$$\mathbf{68} \neq 41 + 25$$

4. (3) The series is based on the following pattern:

Obviously, 3.5 is the wrong number which should be replaced by 3.

5. (2) The series is based on the following pattern:

Obviously, 1.75 is the wrong number which should be replaced by 1.5.

6. (3) The given series is based on the following pattern:

Hence, 308 will come in place of question mark.

7. (5) The given series is based on the following pattern:

Hence, 10 will come in place of question mark.

8. (2) The given series is based on the following pattern:

$$5 \times 1 + (1)^2 = 6$$

$$6 \times 2 + (2)^2 = \mathbf{16}$$

$$16 \times 3 + (3)^2 = 57$$

$$57 \times 4 + (4)^2 = 244$$

Hence, 16 will come in place of question mark.

9. (1) The given series is based on the following patterns.

Hence, 34 will come in place of question mark.

10. (4) The given series is based on the following pattern:

$$5 \times 2 + 1 = 11$$

$$11 \times 2 + 3 = \mathbf{25}$$

$$25 \times 2 + 5 = 55$$

$$55 \times 2 + 7 = 117$$

11. (3) The given series is based on the following pattern:

$$30 = 12 \times 6 - 7 \times 6$$

$$120 = 30 \times 5 - 6 \times 5$$

$$460 = 120 \times 4 - 5 \times 4$$

$$1368 = 460 \times 3 - 4 \times 3$$

$$2730 = 1368 \times 2 - 3 \times 2$$

Similarly,

$$(a) = 16 \times 6 - 7 \times 6 = 96 - 42 = 54$$

$$(b) = 54 \times 5 - 6 \times 5 = 240$$

$$(c) = 240 \times 4 - 5 \times 4 = 940$$

$$(d) = 940 \times 3 - 4 \times 3 = \mathbf{2808}$$

Hence, 2808 will come in place of (d).

12. (5) The given series is based on the following pattern:

Similarly,

Hence, 1863 will come in place of (e).

13. (2) The given series is based on the following pattern:

Similarly,

14. Hence, 14514.5 will come in place of (c).
(1) The given series is based on the following pattern :

Similarly,

15. Hence, 284 will come in place of (d).
(4) The given series is based on the following pattern:

Similarly,

16. Hence, **97.5** will come in place of (c).
(1) The given series is based on the following pattern :
 $1 = 1^3$
 $27 = 3^3$
 $125 = 5^3$

Hence, 8 will come in place of the question mark.

17. (5) The given series is based on the following pattern :
 $25 = 5^2$
 $? = 3^2 = \mathbf{9}$
 $1 = 1^2$

Hence, 9 will come in place of the question mark,

18. (1) The given series is based on the following pattern:
 $1 \times 2 + 2 \times 2 = 6$
 $6 \times 4 + 4 \times 3 = 36$
 $36 \times 6 + 6 \times 4 = 240$
 $240 \times 8 + 8 \times 5 = 1960$
 $1960 \times 10 + 10 \times 6 = \mathbf{19660}$

Hence, 19660 will come in place of the question mark.

19. (1) The given series is based on the following pattern :

Hence, 14 will come in place of the question mark.

20. (2) The given series is based on the following pattern :
 $2 + 5 = 7$
 $12 + 7 = 19$
 $31 + 19 = 50$

21.

Hence, 81 will come in place of the question mark.

(4) The given series is based on the following pattern:

22.

Hence, 19 will come in place of the question mark.

(3) The given series is based on the following pattern :

23.

Hence, 1260 will come in place of the question mark.

(2) The given number series is based on the following pattern :

24.

Hence, 10.75 will replace the question mark.

(4) The given number series is based on the following pattern :

25.

Hence, 56.94 will replace the question mark.

(1) The given number series is based on the following pattern :

$$\begin{aligned} 121 + 23 \times 1 &= 144 \\ 144 + 23 \times 2 &= 190 \\ 190 + 23 \times 3 &= 259 \\ \therefore ? &= 259 + 23 \times 4 \\ &= 259 + 92 = 351 \end{aligned}$$

Hence, **351** will replace the question mark.

26.

(5) The given number series is based on the following pattern :

$$\begin{aligned} 14 \times 3 + 1.5 &= 43.5 \\ 43.5 \times 6 + 1.5 \times 2 &= 264 \\ 264 \times 12 + 1.5 \times 4 &= \mathbf{3174} \\ 3174 \times 24 + 1.5 \times 8 &= 76188 \end{aligned}$$

Hence, 3174 will replace the question mark.

27.

(3) The given number series is based on the following pattern :

$$\begin{aligned} 41 \times 2^2 &= 164 \\ 164 \times 4^2 &= 2624 \\ 2624 \times 6^2 &= \mathbf{94464} \end{aligned}$$

$$94464 \times 8^2 = 6045696$$

Hence, 94464 will replace the question mark.

28.

(1) The given number series is based on the following pattern :

$$\begin{aligned} 12 \times 1 &= 12 \\ 12 \times 1.5 &= 18 \end{aligned}$$

Clearly, 27 is the wrong number. It should be replaced by 28.

40. (3) The given number series is based on the following pattern :

$$\begin{aligned} 1500 + 81 &= 1581 \\ 1581 + 83 &= 1664 \\ 1664 + 85 &= 1749 \\ 1749 + 87 &= 1836 \neq \mathbf{1833} \\ 1836 + 89 &= 1925 \\ 1925 + 91 &= 2016 \end{aligned}$$

Clearly, 1833 is the wrong number. It should be replaced by 1836.

41. (2) The given number series is based on the following pattern :

$$\begin{aligned} 66 + 25 &= 91 \\ 91 + 29 &= 120 \\ 120 + 33 &= 153 \\ 153 + 37 &= 190 \\ 190 + 41 &= 231 \neq \mathbf{233} \\ 231 + 45 &= 276 \end{aligned}$$

Clearly, 233 is the wrong number. It should be replaced by 231.

42. (1) The given number series is based on the following pattern :

$$\begin{aligned} 11 \times 11 \times 11 &= 1331 \\ 13 \times 13 \times 13 &= 2197 \\ 15 \times 15 \times 15 &= 3375 \\ 17 \times 17 \times 17 &= 4913 \neq \mathbf{4914} \\ 19 \times 19 \times 19 &= 6859 \end{aligned}$$

Clearly, 4914 is the wrong number. It should be replaced by 4913.

43. (3) The given number series is based on the following pattern :

$$\begin{aligned} 20 + 2^2 &= 24 \\ 24 + 3^2 &= 33 \\ 33 + 4^2 &= 49 \\ 49 + 5^2 &= 74 \\ 74 + 6^2 &= 110 \\ \therefore ? &= 110 + 7^2 \\ &= 110 + 49 = \mathbf{159} \end{aligned}$$

44. (5) The given number series is based on the following pattern :

$$\begin{aligned} 529 &= 23 \times 23 \\ 841 &= 29 \times 29 \\ 961 &= 31 \times 31 \\ 1369 &= 37 \times 37 \\ 1681 &= 41 \times 41 \\ 1849 &= 43 \times 43 \\ \therefore ? &= 47 \times 47 = \mathbf{2209} \end{aligned}$$

Here, the numbers are formed by squaring the prime numbers greater than 23.

45. (4) The given number series is based on the following pattern :

$$\begin{aligned} 16 \times 1.5 &= 24 \\ 24 \times 2 &= 48 \end{aligned}$$

$$48 \times 2.5 = 120$$

$$120 \times 3 = 360$$

$$360 \times 3.5 = 1260$$

$$\therefore ? = 1260 \times 4 = \mathbf{5040}$$

46. (1) The given number series is based on the following pattern :

$$\begin{aligned} 8 \times 4 - 1 &= 32 - 1 = 31 \\ 31 \times 4 - 2 &= 124 - 2 = 122 \\ 122 \times 4 - 3 &= 488 - 3 = 485 \\ 485 \times 4 - 4 &= 1940 - 4 = 1936 \\ 1936 \times 4 - 5 &= 7744 - 5 = 7739 \\ \therefore ? &= 7739 \times 4 - 6 \end{aligned}$$

$$= 30956 - 6 = \mathbf{30950}$$

47. (2) The given number series is based on the following pattern :

$$\begin{aligned} 499 + 1 \times 123 &= 622 \\ 622 + 2 \times 123 &= 868 \\ 868 + 3 \times 123 &= 1237 \\ 1237 + 4 \times 123 &= 1729 \\ 1729 + 5 \times 123 &= 2344 \\ \therefore ? &= 2344 + 6 \times 123 \end{aligned}$$

$$= 2344 + 738 = \mathbf{3082}$$

48. (1) The given number series is based on the following pattern

$$\begin{aligned} 1^1 &= 1; 2^2 = 4 \\ 3^3 &= 27; 4^4 = 256 \\ 5^5 &= 3125; 6^6 = \mathbf{46656} \end{aligned}$$

Hence 46658 is the wrong number.

49. (4) The given number series is based on the following pattern

$$\begin{aligned} 18000 \div 5 &= 3600 \\ 3600 \div 5 &= 720 \\ 720 \div 5 &= 144 \neq \mathbf{142.2} \\ 144 \div 5 &= 28.3 \\ 28.3 \div 5 &= 5.76 \end{aligned}$$

Hence 142.2 is the wrong number.

50. (5) The given number series is based on the following pattern :

$$\begin{aligned} 12 + 15^2 &= 12 + 225 = 237 \\ 237 + 13^2 &= 237 + 169 = 406 \\ 406 + 11^2 &= 406 + 121 = 527 \\ 527 + 81 &= 608 \\ 608 + 7^2 &= 608 + 49 = 657 \end{aligned}$$

Hence 604 is the wrong number.

51. (3) The given number series is based on the following pattern :

$$\begin{aligned} 3 \times 7 + 2 \times 7 &= 21 + 14 = 35 \\ 35 \times 6 + 3 \times 6 &= 210 + 18 \\ &= 228 \neq \mathbf{226} \end{aligned}$$

$$228 \times 5 + 4 \times 5 = 1140 + 20 = 1160$$

$$1160 \times 4 + 5 \times 4 = 4640 + 20 = 4660$$

$$4660 \times 3 + 6 \times 3 = 13980 + 18 = 13998$$

Hence 226 is the wrong number

52. (2) The given number series is based on the following pattern :

- $18 \times 7 - 7 = 126 - 7 = 119$
 $119 \times 6 - 6 = 714 - 6 = 708$
 $708 \times 5 - 5 = 3540 - 5 = 3535 \neq \mathbf{3534}$
 $3535 \times 4 - 4 = 14140 - 4 = 14136$
 Hence 3534 is the wrong number.
- 53.** (5) $5 + 2^2 = 5 + 4 = 9$
 $9 + 3^2 = 9 + 9 = 18$
 $18 + 4^2 = 18 + 16 = 34$
 $34 + 5^2 = 34 + 25 = 59$
 $59 + 6^2 = 59 + 36 = 95$
 $\therefore ? = 95 + 7^2 = 95 + 49 = \mathbf{144}$
- 54.** (1) $1200 \div 2.5 = 480$
 $480 \div 2.5 = 192$
 $192 \div 2.5 = 76.8$
 $76.8 \div 2.5 = 30.72$
 $30.72 \div 2.5 = 12.288$
 $\therefore ? = 12.288 \div 2.5 = \mathbf{4.9152}$
- 55.** (3) $963 - 1 \times 36 = 963 - 36 = 927$
 $927 - 2 \times 36 = 927 - 72 = 855$
 $855 - 3 \times 36 = 855 - 108 = 747$
 $747 - 4 \times 36 = 747 - 144 = 603$
 $603 - 5 \times 36 = 603 - 180 = 423$
 $\therefore ? = 423 - 6 \times 36 = 423 - 216 = \mathbf{207}$
- 56.** (2) $29 \times 29 = 841$
 $31 \times 31 = 961$
 $33 \times 33 = 1089$
 $35 \times 35 = 1225$
 $37 \times 37 = 1369$
 $39 \times 39 = 1521$
 $\therefore ? = 41 \times 41 = \mathbf{1681}$
- 57.** (4) $18 \times 1 + 2 = 18 + 2 = 20$
 $20 \times 2 + 4 = 40 + 4 = 44$
 $44 \times 3 + 6 = 132 + 6 = 138$
 $138 \times 4 + 8 = 552 + 8 = 560$
 $560 \times 5 + 10 = 2800 + 10 = 2810$
 $\therefore ? = 2810 \times 6 + 12 = 16860 + 12 = \mathbf{16872}$
- 58.** (3) $4 \times 1 + 2 = 4 + 2 = 6$
 $6 \times 2 + 3 = 12 + 3 = 15 \neq \mathbf{18}$
 $15 \times 3 + 4 = 45 + 4 = 49$
 $49 \times 4 + 5 = 196 + 5 = 201$
 $201 \times 5 + 6 = 1005 + 6 = 1011$
- 59.** (5) $48 \times \frac{1}{2} = 24$; $72 \times \frac{1}{2} = 36$
 $108 \times \frac{3}{2} = 162$; $162 \times \frac{3}{2} = 243$
 $243 \times \frac{3}{2} = 364.5 \neq \mathbf{366}$
- 60.** (1) $2 \times 6 + 7 \times 6 = 12 + 42 = 54$
 $54 \times 5 + 6 \times 5 = 270 + 30 = 300$
 $300 \times 4 + 5 \times 4 = 1200 + 20 = 1220$
 $1220 \times 3 + 4 \times 3 = 3660 + 12 = 3672 \neq \mathbf{3674}$
 $3672 \times 2 + 3 \times 2 = 7344 + 6 = 7350$

- $= 7350$
61. (2) $2^3 = 8$; $3^3 = 27$
 $4^3 = 64$; $5^3 = 125$
 $6^3 = 216 \neq \mathbf{218}$
 $7^3 = 343$
- 62.** (4) $19 + 7^2 = 19 + 49 = 68$
 $68 + 6^2 = 68 + 36 = 104 \neq \mathbf{102}$
 $104 + 5^2 = 104 + 25 = 129$
 $129 + 4^2 = 129 + 16 = 145$
 $145 + 3^2 = 145 + 9 = 154$
- 63.** (5)
 $0 + 5 = 5$
 $5 + 13 = 18$
 $18 + 25 = 43$
 $43 + 41 = 84$
 $84 + 61 = 145$
 $\therefore ? = 145 + 85 = \mathbf{230}$
- 64.** (4) $10 \times 1 + 1 \times 7 = 10 + 7 = 17$
 $17 \times 2 + 2 \times 7 = 34 + 14 = 48$
 $48 \times 3 + 3 \times 7 = 144 + 21 = 165$
 $165 \times 4 + 4 \times 7 = 660 + 28 = 688$
 $688 \times 5 + 5 \times 7 = 3440 + 35 = 3475$
 $\therefore ? = 3475 \times 6 + 6 \times 7 = 20850 + 42 = \mathbf{20892}$
- 65.** (3) $1 \times 3 = 3$
 $3 \times 8 = 24$
 $24 \times 15 = 360$
 $360 \times 24 = 8640$
 $8640 \times 35 = 302400$
 $\therefore ? = 302400 \times 48 = \mathbf{14515200}$
- 66.** (2) $12 \times 1 + 2 \times 1 = 12 + 2 = 14$
 $14 \times 2 + 2 \times 2 = 28 + 4 = 32$
 $32 \times 3 + 2 \times 3 = 96 + 6 = 102$
 $102 \times 4 + 2 \times 4 = 408 + 8 = 416$
 $416 \times 5 + 2 \times 5 = 2080 + 10 = 2090$
 $\therefore ? = 2090 \times 6 + 2 \times 6 = 12540 + 12 = \mathbf{12552}$
- 67.** (1) $10 \times \frac{3}{2} = 15$
 $15 \times \frac{4}{3} = 20$
 $20 \times \frac{5}{4} = 25$
 $25 \times \frac{6}{5} = 30$
 $30 \times \frac{7}{6} = 35$
 $35 \times \frac{8}{7} = 40$
 $40 \times \frac{9}{8} = 45$
 $45 \times \frac{10}{9} = 50$
 $50 \times \frac{11}{10} = 55$
 $55 \times \frac{12}{11} = 60$
 $\therefore ? = 6.5625 \times \frac{12}{11} = \mathbf{4.375}$

68. (3) The pattern of the number series is :
 $17 \times 3 + 1 = 51 + 1 = 52$
 $52 \times 3 + 2 = 156 + 2 = 158$
 $158 \times 3 + 3 = 474 + 3 = 477$
 $477 \times 3 + 4 = 1431 + 4 = \mathbf{1435}$

69. (4) The pattern of the number series is :
 $3 \times 7 + 1 = 21 + 1 = 22$
 $22 \times 6 + 2 = 132 + 2 = \mathbf{134}$
 $134 \times 5 + 3 = 670 + 3 = 673$
 $673 \times 4 + 4 = 2692 + 4 = 2696$

70. (1) The pattern of the number series is :
 $6 \times 1 + 1 \times 7 = 6 + 7 = 13$
 $13 \times 2 + 2 \times 6 = 26 + 12 = 38$
 $38 \times 3 + 3 \times 5 = 114 + 15 = \mathbf{129}$
 $129 \times 4 + 4 \times 4 = 516 + 16 = 532$

71. (5) The pattern of the number series is :
286
 $2 - 1 = 143 - 1 = 142$
142
 $2 - 1 = 71 - 1 = \mathbf{70}$
70
 $2 - 1 = 35 - 1 = 34$
34
 $2 - 1 = 17 - 1 = 16$

72. (3) The pattern of the number series is :
 $17 \times 0.5 + 0.5 = 9$
 $9 \times 1 + 1 = \mathbf{10}$
 $10 \times 1.5 + 1.5 = 16.5$
 $16.5 \times 2 + 2 = 35$

73. (5) The pattern is :
 $2 \times 3 + 2 = 6 + 2 = 8$
 $8 \times 3 + 2 = 24 + 2 = 26$
 $26 \times 3 + 2 = 78 + 2 = \mathbf{80}$
 $80 \times 3 + 2 = 240 + 2 = 242$

74. (1) The pattern is :
 $3 \times 1 + 1^2 = 3 + 1 = 4$
 $4 \times 2 + 2^2 = 8 + 4 = 12$
 $12 \times 3 + 3^2 = 36 + 9 = \mathbf{45}$
 $45 \times 4 + 4^2 = 180 + 16 = 196$

75. (4) The pattern is :
 $9 \times 2 - 1 = 18 - 1 = 17$
 $17 \times 2 - 1 = 34 - 1 = \mathbf{33}$
 $33 \times 2 - 1 = 66 - 1 = 65$
 $65 \times 2 - 1 = 130 - 1 = 129$

76. (2) The pattern is :
 $7 \times 2 - 1 = 14 - 1 = 13$
 $13 \times 2 - 1 = 26 - 1 = \mathbf{25}$
 $25 \times 2 - 1 = 50 - 1 = 49$
 $49 \times 2 - 1 = 98 - 1 = 97$

77. (3) The pattern is :
 $5 \times 0.5 + 0.5 = 2.5 + 0.5 = 3$
 $3 \times 1.5 + 1.5 = 4.5 + 1.5 = 6$

$6 \times 2.5 + 2.5 = 15 + 2.5 = \mathbf{17.5}$
 $17.5 \times 3.5 + 3.5 = 61.25 + 3.5 = 64.75$

78. (2) The pattern is :
 $16 \times 0.5 = 8$ $8 \times 1.5 = 12$
 $12 \times 2.5 = 30$ $30 \times 3.5 = \mathbf{105}$

79. (4) The pattern is :
 $5 \times 1 + 1 = 6$
 $6 \times 2 + 2 = 14$
 $14 \times 3 + 3 = 45$
 $45 \times 4 + 4 = 184$

80. (1) The pattern is :
 $7 \times 1 + 1 \times 5 = 12$
 $12 \times 2 + 2 \times 4 = 32$
 $32 \times 3 + 3 \times 3 = 105$
 $105 \times 4 + 4 \times 2 = \mathbf{428}$

81. (5) The pattern is :
 $11 \times 2 + 1 = 23$
 ~~$23 \times 2 + 1 = 47$~~
 $47 \times 2 + 1 = 95$
 $95 \times 2 + 1 = \mathbf{191}$

82. (3) The pattern is :
 $9 \times 2 - 1 = 17$
 $17 \times 2 - 1 = 33$
 $33 \times 2 - 1 = 65$
 $65 \times 2 - 1 = \mathbf{129}$

83. (3) The pattern of the number series is :
 $8 + 3 = 11$
 $11 + 3^2 = 11 + 9 = 20 \neq \mathbf{17}$
 $20 + 3^3 = 20 + 27 = 47$
 $47 + 3^4 = 47 + 81 = 128$
 $128 + 3^5 = 128 + 243 = 371$

84. (3) The pattern of the number series is :
 $1 + 2^2 = 1 + 4 = 5$
 $5 + 2^3 = 5 + 8 = 13$
 $13 + 2^4 = 13 + 16 = 29 \neq \mathbf{31}$
 $29 + 2^5 = 29 + 32 = 61$
 $61 + 2^6 = 61 + 64 = 125$

85. (3) The pattern is :
 $150 \times 2 - 1 \times 10 = 300 - 10 = 290$
 $290 \times 2 - 2 \times 10 = 580 - 20 = 560$
 $560 \times 2 - 3 \times 10 = 1120 - 30 = 1090 \neq \mathbf{1120}$
 $1090 \times 2 - 4 \times 10 = 2180 - 40 = 2140$
 $2140 \times 2 - 5 \times 10 = 4280 - 50 = 4230$

86. (2) The pattern is : $10 \times 1 - 2 = 8$
 $8 \times 2 - 3 = 13$
 $13 \times 3 - 4 = 35$
 $35 \times 4 - 5 = 135$
 $135 \times 5 - 6 = 675 - 6 = 669 \neq \mathbf{671}$
 $669 \times 6 - 7 = 4014 - 7 = 4007$

87. (3) The pattern is :
 $(80 \div 2) + 2 = 40 + 2 = 42$

- $(42 \div 2) + 2 = 21 + 2 = 23 \neq \mathbf{24}$
 $(23 \div 2) + 2 = 11.5 + 2 = 13.5$
 $(13.5 \div 2) + 2 = 6.75 + 2 = 8.75$
 $(8.75 \div 2) + 2 = 4.375 + 2 = 6.375$
88. (1) The pattern is :

$$125 \times \frac{3}{5} = 75$$

$$75 \times \frac{3}{5} = 45$$

$$45 \times \frac{3}{5} = 27 \neq \mathbf{25}$$

$$27 \times \frac{3}{5} = 16.2$$

- 89.** (5) The pattern is :
 $29 + 1 \times 8 = 37$
 $37 - 2 \times 8 = 37 - 16 = 21$
 $21 + 3 \times 8 = 21 + 24 = 45 \neq \mathbf{43}$
 $45 - 4 \times 8 = 45 - 32 = 13$
 $13 + 5 \times 8 = 13 + 40 = 53$
 $53 - 6 \times 8 = 53 - 48 = 5$

- 90.** (3) The pattern is:
 $13 + 12 = 25$; $25 + 15 = 40$
 $40 + 18 = 58 \neq \mathbf{57}$
 $58 + 21 = 79$

- 91.** (1) The pattern is :
 $850 - 200 = 650 \neq \mathbf{600}$
 $650 - 100 = 550$
 $550 - 50 = 500$
 $500 - 25 = 475$
 $475 - 12.5 = 462.5$

- 92.** (4) The pattern is:
 $2 \times 3 = 6 \neq \mathbf{10}$
 $6 \times 3 = 18$; $18 \times 3 = 54$
 $54 \times 3 = 162$

- 93.** (3) The pattern is:
 $8 + 4 \times 1 = 12$; $12 + 4 \times 3 = 24$
 $24 + 4 \times 5 = 44 \neq \mathbf{46}$
 $44 + 4 \times 7 = 72$
 $72 + 4 \times 9 = 108$

- 94.** (1) The pattern is :
 $142 - 23 = 119$; $119 - 19 = 100$
 $100 - 17 = 83$
 $83 - 13 = 70 \neq \mathbf{65}$
 $70 - 11 = 59$
 $59 - 7 = 52$

- 95.** (5) The pattern is :
 $5 + 7^2 = 54$
 $54 + 6^2 = 90$
 $90 + 5^2 = 115$
 $115 + 4^2 = 131$

$$131 + 3^2 = 140$$

$$140 + 2^2 = 140 + 4 = \mathbf{144}$$

- 96.** (4) The pattern is :
 $7 \times 0.5 + 0.5 = 3.5 + 0.5 = 4$
 $4 \times 1 + 1 = 4 + 1 = 5$
 $5 \times 1.5 + 1.5 = 7.5 + 1.5 = 9$
 $9 \times 2 + 2 = 18 + 2 = \mathbf{20}$

- 97.** (3) The pattern is :
 $6 \times 7 = 42$
 $42 \times 6 = \mathbf{252}$

- 98.** (1) The pattern is:
 $4 \times 5 - 10 = 10$
 $10 \times 5 - 10 = 40$
 $40 \times 5 - 10 = 190$
 $190 \times 5 - 10 = 940$
 $940 \times 5 - 10 = 4700 - 10$
 $= \mathbf{4690}$

- 99.** (2) The pattern is :
 $2 \times 1 + 1 \times 7 = 9$
 $9 \times 2 + 2 \times 6 = 30$
 $30 \times 3 + 3 \times 5 = \mathbf{105}$
 $105 \times 4 + 4 \times 4 = 436$
 $436 \times 5 + 5 \times 3 = 2195$

- 100.** (2) The pattern of the number series is :
 $(484 \div 2) - 2 = 242 - 2 = 240$
 $(240 \div 2) - 2 = 120 - 2 = 118 = 120$
 $(118 \div 2) - 2 = 59 - 2 = 57$
 $(57 \div 2) - 2 = 28.5 - 2 = 26.5$

- 101.** (4) The pattern of the number series is :
 $3 \times 1 + 2 = 5$
 $5 \times 2 + 3 = 13$
 $13 \times 3 + 4 = 43$
 $43 \times 4 + 5 = 177 \neq \mathbf{176}$
 $177 \times 5 + 6 = 891$

- 102.** (5) The Pattern of the number series is :
 $6 + 1^2 = 6 + 1 = 7$
 $7 + 3^2 = 7 + 9 = 16$
 $16 + 5^2 = 16 + 25 = 41$
 $41 + 7^2 = 41 + 49 = 90$
 $90 + 9^2 = 90 + 81 = 177 \neq \mathbf{154}$
 $171 + 11^2 = 171 + 121 = 292$

- 103.** (1) The pattern of the number series is :
 $5 \times 1 + 1^2 = 6 \neq \mathbf{7}$
 $6 \times 2 + 2^2 = 16$
 $16 \times 3 + 3^2 = 57$
 $57 \times 4 + 4^2 = 228 + 16 = 244$
 $244 \times 5 + 5^2 = 1220 + 25 = 1245$

- 104.** (3) The pattern of the number series is :
 $4 \times 0.5 + 0.5 = 2 + 0.5 = 2.5$
 $2.5 \times 1 + 1 = 3.5$
 $3.5 \times 1.5 + 1.5 = 6.75 \neq \mathbf{65}$
 $6.75 \times 2 + 2 = 15.5$
 $15.5 \times 2.5 + 2.5 = 38.75 + 2.5 = 41.25$
 $41.25 \times 3 + 3 = 123.75 + 3 = 126.75$

105. (4) The pattern of the number series is :
 $325 - 1 \times 11 = 314$
 $314 - 2 \times 11 = 292$
 $292 - 3 \times 11 = 259$
 $259 - 4 \times 11 = 215$
 $215 - 5 \times 11 = \neq \mathbf{160}$
106. (2) The pattern of the number series is :
 $45 \times 1 + 1 = 46$
 $46 \times 1.5 + 1 = 70$
 $70 \times 2 + 1 = 141$
 $141 \times 2.5 + 1$
 $= 352.5 + 1 = \mathbf{353.5}$
107. (3) The pattern of the number series is :
 $620 + 1 \times 12 = 632$
 $632 - 2 \times 12 = 608$
 $608 + 3 \times 12 = 644$
 $644 - 4 \times 12 = 596$
 $596 + 5 \times 12 = \mathbf{j656j}$
108. (5) The pattern of the number series is :
 $15 \times 2 - 1 \times 5 = 25$
 $25 \times 2 - 2 \times 5 = 40$
 $40 \times 2 - 3 \times 5 = 65$
 $65 \times 2 - 4 \times 5 = \mathbf{110}$
 $110 \times 2 - 5 \times 5 = 195$
109. (5) The pattern of the number series is :
 $120 \times 2.5 + 20 = 320$
 $320 \times 2.5 + 20 = \mathbf{820}$
 $820 \times 2.5 + 20 = 2070$
 $2070 \times 2.5 + 20 = 5195$
110. (1) The pattern of the number series is :
 $32 + 1^2 = 32 + 1 = 33 \neq \mathbf{34}$
 $33 + 2^2 = 33 + 4 = 37$
 $37 + 3^2 = 37 + 9 = 46$
 $46 + 4^2 = 46 + 16 = 62$
 $62 + 5^2 = 62 + 25 = 87$
111. (3) The pattern of the number series is :
 $7 + 1 \times 11 = 7 + 11 = 18$
 $18 + 3 \times 11 = 18 + 33 = 51 \neq \mathbf{40}$
 $51 + 5 \times 11 = 51 + 55 = 106$
 $106 + 7 \times 11 = 106 + 77 = 183$
 $183 + 9 \times 11 = 183 + 99 = 282$
112. (4) The pattern of the number series is :
 $850 - 1 \times 7 = 843$
 $843 - 2 \times 7 = 829$
 $829 - 3 \times 7 = 808$
 $808 - 4 \times 7 = 780 \neq \mathbf{788}$
 $780 - 5 \times 7 = 745$
 $745 - 6 \times 7 = 703$
113. (5) The pattern of the number series is :
 $33 + 288 = 321$
 $321 + 144 = 465$
 $465 + 72 = 537$
 $537 + 36 = 573$
 $573 + 18 = 591 \neq \mathbf{590}$
 $591 + 9 = 600$
114. (1) The pattern of the number series is :
 $37 + 1 \times 5 = 42 \neq \mathbf{47}$
 $42 + 2 \times 5 = 52$
 $52 + 3 \times 5 = 67$
 $67 + 4 \times 5 = 87$
 $87 + 5 \times 5 = 112$
 $112 + 6 \times 5 = 142$
115. (2) The pattern of the number series is :
 $13 + 3 = 16$
 $16 + (3 + 3) = 22$
 $22 + (6 + 5) = 33$
 $33 + (11 + 7) = 51$
 $51 + (18 + 9) = \mathbf{78}$
116. (3) The pattern of the number series is :
 $39 + 1 \times 13 = 52$
 $52 + 2 \times 13 = 78$
 $78 + 3 \times 13 = 117$
 $117 + 4 \times 13 = 169$
 $169 + 5 \times 13 = \mathbf{234}$
117. (2) The pattern of the number series is :
 $62 + 5^2 = 62 + 25 = 87$
 $87 + 10^2 = 87 + 100 = 187$
 $187 + 15^2 = 187 + 225 = 412$
 $412 + 20^2 = 412 + 400 = 812$
 $812 + (25)^2 = 812 + 625 = \mathbf{1437}$
118. (1) The pattern of the number series is :
 $7 + 1^2 = 8$
 $8 + 4^2 = 24$
 $24 + 9^2 = 105$
 $105 + 16^2 = 361$
 $361 + 25^2 = \mathbf{986}$
119. (1) The pattern of the number series is :
 $656 - 224 = 432$
 $432 - 112 = 320$
 $320 - 56 = 264$
 $264 - 28 = 236$
 $236 - 14 = \mathbf{222}$
120. (2) The pattern of the number series is :
 $7 \times 2 + 6 = 20$
 $20 \times 2 + 6 = 46$
 $46 \times 2 + 6 = 98$
 $98 \times 2 + 6 = 202$
 $202 \times 2 + 6 = 404 + 6 = \mathbf{410}$
121. (2) The pattern of the number series is :
 $210 - 1^3 = 209$
 $209 + 2^2 = 213$
 $213 - 3^3 = 186$
 $186 + 4^2 = 202$
 $202 - 5^3 = 202 - 125 = \mathbf{77}$
122. (5) The pattern of the number series is :
 $27 + 11 = 38$
 $38 + 33 = 71$
 $71 + 55 = 126$
 $126 + 77 = 203$
 $203 + 99 = \mathbf{302}$

123. (3) The pattern of the number series is :

$$435 - 9 \times 9 = 354$$

$$354 - 9 \times 8 = 282$$

$$282 - 9 \times 7 = 219$$

$$219 - 9 \times 6 = 165$$

$$165 - 9 \times 5 = \mathbf{120}$$

124. (3) The pattern of the number series is :

$$4 + 14^2 = 4 + 196 = 200$$

$$200 + 13^2 = 200 + 169 = 369$$

$$369 + 12^2 = 369 + 144 = 513$$

$$513 + 11^2 = 513 + 121 = 634$$

$$634 + 10^2 = 634 + 100 = \mathbf{734}$$

125. (3) The pattern of the number series is :

$$\begin{array}{r} 495 \\ 485 \end{array} - \frac{1}{2} \times \frac{10}{10} = \begin{array}{r} 485 \\ 465 \end{array}$$

$$465 - 4 \times 10 = 425$$

$$425 - 8 \times 10 = 345$$

$$345 - 16 \times 10 = \mathbf{185}$$

126. (2) The pattern of the number series is :

$$16 + 6 = 22$$

$$22 + 11 = 33$$

$$33 + 16 = 49$$

$$49 + 21 = 70$$

$$70 + 26 = \mathbf{96}$$

127. (5) The pattern of the number series is :

$$32 + 2^2 = 36$$

$$36 + 4^2 = 52$$

$$52 + 6^2 = 88$$

$$88 + 8^2 = 152$$

$$152 + 10^2 = 252$$

128. (3) The pattern of the number series is :

$$17 + 272 = 289$$

$$289 + 136 = 425$$

$$425 + 68 = 493$$

$$493 + 34 = 527$$

$$527 + 17 = \mathbf{544}$$

129. (4) The pattern of the number series is :

$$13 + 1 \times 14 = 27$$

$$27 + 2 \times 14 = 55$$

$$55 + 3 \times 14 = 97$$

$$97 + 4 \times 14 = 153$$

$$153 + 5 \times 14 = \mathbf{223}$$

130. (3) The pattern of the number series is :

$$50 \times 1.2 = 60$$

$$60 \times 1.25 = 75$$

$$75 \times 1.3 = 97.5$$

$$97.5 \times 1.35 = \mathbf{131.625}$$

$$131.625 \times 1.4 = 184.275$$

131. (3) The pattern of the number series is :

$$12 \times 1 + 3 \times 1 = 15$$

$$15 \times 2 + 3 \times 2 = 36$$

$$36 \times 3 + 3 \times 3 = \mathbf{117}$$

$$117 \times 4 + 3 \times 4 = 480$$

$$480 \times 5 + 3 \times 5 = 2415$$

132. (2) The pattern of the number series is :

$$1 \times 1 + 1 = 2$$

$$2 \times 2 + 2 = 6$$

$$6 \times 3 + 3 = 21$$

$$21 \times 4 + 4 = 88$$

$$88 \times 5 + 5 = 445$$

$$445 \times 6 + 6 = \mathbf{2676}$$

133. (4) The pattern of the number series is :

$$20 + 1^2 = 21$$

$$21 + 2^2 = 25$$

$$25 + 3^2 = 34$$

$$34 + 4^2 = 50$$

$$50 + 5^2 = \mathbf{75}$$

134. (5) The pattern of the number series is :

$$\begin{array}{r} 600 \\ 5 \end{array} + 5 = \begin{array}{r} 125 \\ 5 \end{array}$$

$$125$$

$$\begin{array}{r} 5 \\ 30 \end{array} + 5 = 30$$

$$30$$

$$\begin{array}{r} 5 \\ 11 \end{array} + 5 = \mathbf{11}$$

$$11$$

$$\begin{array}{r} 5 \\ 7.2 \end{array} + 5 = 7.2$$

135. (4) The pattern of the number series is :

$$11 + 2^2 = 11 + 4 = 15$$

$$15 + 4^2 = 15 + 16 = 31$$

$$31 + 6^2 = 31 + 36 = 67$$

$$67 + 8^2 = 67 + 64 = 131$$

$$131 + 10^2 = 131 + 100 = \mathbf{231}$$

136. (1) The pattern of the number series is :

$$483 - 1 \times 12 = 483 - 12 = 471$$

$$471 - 3 \times 12 = 471 - 36 = 435$$

$$435 - 5 \times 12 = 435 - 60 = 375$$

$$375 - 7 \times 12 = 375 - 84 = 291$$

$$291 - 9 \times 12 = 291 - 108 = \mathbf{183}$$

137. (2) The pattern of the number series is :

$$5 + 1 \times 2 = 7$$

$$7 + 2 \times 3 = 13$$

$$13 + 3 \times 4 = 25$$

$$25 + 4 \times 5 = 45$$

$$45 + 5 \times 6 = \mathbf{75}$$

138. (1) The pattern of the number series is :

$$4 + 1 \times 7 = 11$$

$$11 + 2 \times 7 = 25$$

$$25 + 4 \times 7 = 53$$

$$53 + 8 \times 7 = 109$$

$$109 + 16 \times 7 = 109 + 112 = \mathbf{221}$$

139. (3) The pattern of the number series is :

$$15 + 6 \times 1 = 21$$

$$21 + 6 \times 2 = 33$$

$$33 + 6 \times 3 = 51$$

$$51 + 6 \times 4 = 75$$

$$75 + 6 \times 5 = 105$$

140. (1) The pattern of the number series is :

$$5 + 7^3 = 5 + 343 = 348$$

$$348 + 6^3 = 348 + 216 = 564$$

$$564 + 5^3 = 564 + 125 = 689$$

$$689 + 4^3 = 689 + 64 = 753, \text{ not } \mathbf{716}$$

$$753 + 3^3 = 753 + 27 = 780$$

141. (4) The pattern of the number series is :

$$\underline{4444}$$

$$\begin{array}{r} 2 \\ 2 \end{array} + 2 = 2224$$

$$2224$$

$$\begin{array}{r} 2 \\ 2 \end{array} + 2 = 1114$$

$$1114$$

$$\begin{array}{r} 2 \\ 2 \end{array} + 2 = 559 \text{ not } \mathbf{556}$$

$$\underline{559}$$

$$\begin{array}{r} 2 \\ 2 \end{array} + 2 = 281.5$$

142. (5) The pattern of the number series is :

$$4.5 + 11.5 = 16$$

$$16 + 9.5 = 25.5, \text{ not } \mathbf{25}$$

$$25.5 + 7.5 = 33$$

$$33 + 5.5 = 38.5$$

143. (3) The pattern of the number series is :

$$6 \times 7 + 1 \times 7 = 49$$

$$49 \times 6 + 2 \times 6 = 306, \text{ not } \mathbf{305}$$

$$306 \times 5 + 3 \times 5 = 1545$$

$$1545 \times 4 + 4 \times 4 = 6196$$

$$6196 \times 3 + 5 \times 3 = 18603$$

144. (3) The pattern of the number series is :

$$8 \times 0.5 + 1 = 5$$

$$5 \times 1 + 1.5 = 6.5$$

$$6.5 \times 1.5 + 2 = 9.75 + 2 = 11.75, \text{ not } \mathbf{11}$$

$$11.75 \times 2 + 2.5 = 23.5 + 2.5 = 26$$

$$26 \times 2.5 + 3 = 68$$

145. (3) The pattern of the number series is :

$$586 + 1 = 587$$

$$587 + (1 - 2) = 587 - 1 = 586$$

$$586 + (-1 - 4) = 586 - 5 = 581$$

$$581 + (-5 - 6) = 581 - 11 = 570$$

$$570 + (-11 - 8) = 570 - 19 = 551$$

$$551 + (-19 - 10) = 551 - 29 = 522$$

146. (5) The pattern of the number series is :

$$64 - 10 = 54$$

$$54 + 15 = 69$$

$$69 - 20 = 49$$

$$49 + 25 = 74$$

$$74 - 30 = 44$$

$$44 + 35 = \mathbf{79}$$

147. (2) The pattern of the number series is :

$$(4000 \div 2) + 8 = 2008$$

$$(2008 \div 2) + 8 = 1012$$

$$(1012 \div 2) + 8 = \mathbf{514}$$

$$(514 \div 2) + 8 = 265$$

148. (3) The pattern of the number series is :

$$5 \times 1 = 5$$

$$5 \times 3 = 15$$

$$15 \times 5 = 75$$

$$75 \times 7 = \mathbf{525}$$

$$525 \times 9 = 4725$$

149. (1) The pattern of the number series is :

$$52 \times \begin{array}{r} 1 \\ 2 \end{array} = 26$$

$$26 \times 1 = 26$$

$$26 \times \begin{array}{r} 3 \\ 2 \end{array} = 39$$

$$39 \times 2 = 78$$

$$78 \times \begin{array}{r} 5 \\ 2 \end{array} = \mathbf{195}$$

150. (3) The pattern of the number series is :

$$14 - 10 = 4$$

$$25 - 14 = 11 = 4 \times 3 - 1$$

$$55 - 25 = 30 = 11 \times 3 - 3$$

$$140 - 55 = 85 = 30 \times 3 - 5$$

$$\therefore ? = 140 + 85 \times 3 - 7$$

$$= 140 + 248 = \mathbf{388}$$

151. (5) The pattern of the number series is :

$$119 + 1 \times 12 = 131$$

$$131 + 2 \times 12 = 155$$

$$155 + 3 \times 12 = 191$$

$$191 + 4 \times 12 = 239$$

$$239 + 5 \times 12 = \mathbf{299}$$

152. (4) The pattern of the number series is :

$$11 + 1 \times 46 = 11 + 46 = 57$$

$$57 + 2 \times 46 = 57 + 92 = 149$$

$$149 + 2 \times 92 = 149 + 184 = 333$$

$$333 + 2 \times 184 = 333 + 368 = 701$$

$$701 + 2 \times 368 = 701 + 736 = \mathbf{1437}$$

153. (2) The pattern of the number series is :

$$697 - 553 = 144 = 12^2$$

$$553 - 453 = 100 = 10^2$$

$$453 - 389 = 64 = 8^2$$

$$389 - 353 = 36 = 6^2$$

$$\therefore ? = 353 - 4^2 = 353 - 16 = \mathbf{337}$$

154. (1) The pattern of the number series is :

$$336 - 224 = 112$$

$$224 - 168 = 56$$

$$168 - 140 = 28$$

$$140 - 126 = 14$$

$$\therefore ? = 126 - 7 = 119$$

155. (2) The pattern of the number series is :

$$9 \times 2 - 3 = 18 - 3 = 15$$

$$15 \times 2 - 3 = 30 - 3 = 27$$

$$27 \times 2 - 3 = 54 - 3 = 51$$

$$51 \times 2 - 3 = 102 - 3 = 99$$

$$99 \times 2 - 3 = 198 - 3 = \mathbf{195}$$

156. (4) The pattern of the number series is :

$$13 + 8 = 21$$

$$21 + 8 + 7 = 21 + 15 = 36$$

- $36 + 15 + 7 = 36 + 22 = 58$
 $58 + 22 + 7 = 58 + 29 = 87$
 $87 + 29 + 7 = 87 + 36 = \mathbf{123}$
157. (4) The pattern of the number series is :
 $7 + 2 + 0 = 9$
 $9 + (2 + 8) = 19$
 $19 + (10 + 16) = 45$
 $45 + (26 + 24) = 95$
 $95 + (50 + 32) = \mathbf{177}$
158. (1) The pattern of the number series is :
 $14 + 1^2 = 15$
 $15 + 2^3 = 23$
 $23 + 3^2 = 32$
 $32 + 4^3 = 96$
 $96 + 5^2 = 96 + 25 = \mathbf{121}$
159. (3) The pattern of the number series is :
 $20 + 1 \times 4 = 20 + 4 = 24$
 $24 + 3 \times 4 = 24 + 12 = 36$
 $36 + 5 \times 4 = 36 + 20 = 56$
 $56 + 7 \times 4 = 56 + 28 = 84$
160. $84 + 9 \times 4 = 84 + 36 = \mathbf{120}$
 (2) The pattern of the number series is :
 $732 - 3 = 729 = 9^3$
 $1244 - 732 = 512 = 8^3$
 $1587 - 1244 = 343 = 7^3$
 $1803 - 1587 = 216 = 6^3$
 $1928 - 1803 = 125 = 5^3$
 $\therefore ? = 1928 + 4^3 = 1928 + 64 = \mathbf{1992}$
161. (4) The pattern of the number series is :
 $16 \times 1.5 = 24$
 $24 \times 2.5 = \mathbf{60}$
 $60 \times 3.5 = 210$
 $210 \times 4.5 = 945$
162. (1) The pattern of the number series is :
 $(45030 \div 5) - 6 = 9000$
 $(9000 \div 5) - 5 = 1795$
 $(1795 \div 5) - 4 = 355$
 $(355 \div 5) - 3 = 68$
 $(68 \div 5) - 2 = 13.6 - 2 = \mathbf{11.6}$
163. (1) The pattern of the number series is :
 $5 \times 1 + 1 \times 7 = 12$
 $12 \times 2 + 2 \times 6 = 36$
 $36 \times 3 + 3 \times 5 = 123$
 $123 \times 4 + 4 \times 4 = 492 + 16 = \mathbf{508}$
 $508 \times 5 + 5 \times 3 = 2540 + 15 = 2555$
164. (4) The pattern of the number series is :
 $8 \times 0.5 + 7 = 4 + 7 = 11$
 $11 \times 1 + 6 = 17$
 $17 \times 1.5 + 5 = 25.5 + 5 = \mathbf{30.5}$
 $30.5 \times 2 + 4 = 61 + 4 = 65$
165. (5) The pattern of the number series is :
 $389 - 117 = 272$
 $525 - 389 = 136$
 $593 - 525 = 68$
 $627 - 593 = 34$
- $\therefore ? = 627 + 17 = \mathbf{644}$
166. (4) The pattern of the number series is :
 $7 + 1 \times 4 = 11$
 $11 + (1 + 2) \times 4 = 11 + 3 \times 4 = 23$
 $23 + (3 + 4) \times 4 = 23 + 7 \times 4 = 51$
 $51 + (7 + 6) \times 4 = 51 + 13 \times 4 = 103$
 $103 + (13 + 8) \times 4 = 103 + 21 \times 4 = \mathbf{187}$
167. (4) The pattern of the number series is :
 $18 + 9 = 27$
 $27 + (9 + 13) = 49$
 $49 + (9 + 26) = 84$
 $84 + (9 + 39) = 132$
168. (2) The pattern of the number series is :
 $33 + 10 = 43$
 $43 + (10 + 12) = 65$
 $65 + (10 + 24) = 99$
 $99 + (10 + 36) = 145$
 $145 + (10 + 48) = \mathbf{203}$
169. (5) The pattern of the number series is :
 $655 - 439 = 216 = 6^3$
 $439 - 314 = 125 = 5^3$
 $314 - 250 = 64 = 4^3$
 $250 - 223 = 27 = 3^3$
 $\therefore ? = 223 - 2^3 = 223 - 8 = \mathbf{215}$
170. (4) The pattern of the number series is :
 $15 + 6 = 21$
 $21 + 18 (= 6 + 12) = 39$
 $39 + 38 (= 18 + 20) = 77$
 $77 + 66 (= 38 + 28) = 143$
 $143 + 102 (= 66 + 36) = \mathbf{245}$
171. (1) The pattern of the number series is :
 $33 + 6 = 39$
 $39 + 18 (= 6 + 12) = 57$
 $57 + 30 (= 18 + 12) = 87$
 $87 + 42 (= 30 + 12) = 129$
 $129 + 54 (= 42 + 12) = \mathbf{183}$
172. (1) The pattern of the number series is :
 $19 - 15 = 4 = 2^2$
 $83 - 19 = 64 = 4^3$
 $119 - 83 = 36 = 6^2$
 $631 - 119 = 512 = 8^3$
 $\therefore ? = 631 + 10^2 = 631 + 100 = \mathbf{731}$
173. (3) The pattern of the number series is :
 $19 + 1 \times 7 = 19 + 7 = 26$
 $26 + 2 \times 7 = 26 + 14 = 40$
 $40 + 4 \times 7 = 40 + 28 = 68$
 $68 + 8 \times 7 = 68 + 56 = 124$
 $124 + 16 \times 7 = 124 + 112 = \mathbf{236}$
174. (5) The pattern of the number series is :
 $69 - 43 = 26$
 $58 - 69 = -11$
 $84 - 58 = 26$
 $73 - 84 = -11$

- $\therefore ? = 73 + 26 = \mathbf{99}$
175. (4) The pattern of the number series is :
 $15 + 3 = 18$
 $18 - 2 = 16$
 $16 + 3 = 19$
 $19 - 2 = 17$
 $17 + 3 = 20$
 $20 - 2 = \mathbf{18}$
176. (1) The pattern of the number series is :

$$\begin{array}{r} 2 \\ 1050 \times \frac{2}{5} = 420 \\ 2 \\ 420 \times \frac{2}{5} = 168 \\ 2 \\ 168 \times \frac{2}{5} = 67.2 \\ 2 \\ \therefore 10.752 \times \frac{2}{5} = \mathbf{4.3008} \end{array}$$
177. (5) The pattern of the number series is :
 $0 + 1 \times 6 = 6$
 $6 + 2 \times 9 = 24$
 $24 + 3 \times 12 = 60$
 $60 + 4 \times 15 = 120$
 $120 + 5 \times 18 = 210$
 $210 + 6 \times 21 = 210 + 126 = \mathbf{336}$
178. (3) The pattern of the number series is :
 $32 + 1 \times 17 = 32 + 17 = 49$
 $49 + 2 \times 17 = 49 + 34 = 83$
 $83 + 4 \times 17 = 83 + 68 = 151$
 $151 + 8 \times 17 = 151 + 136 = 287$
 $287 + 16 \times 17 = 287 + 272 = 559$
 $559 + 32 \times 17 = 559 + 544 = \mathbf{1103}$
179. (2) The pattern of the number series is :
 $552 - 462 = 90$
 $650 - 552 = 98$
 $756 - 650 = 106$
 $870 - 756 = 114$
 $992 - 870 = 122$
 $\therefore ? = 992 + 130 = \mathbf{1122}$
180. (3) The pattern of the number series is :
 $28 + 11 = 39$
 $39 + 24 (= 11 + 13) = 63$
 $63 + 39 (= 24 + 15) = 102$
 $102 + 56 (= 39 + 17) = 158$
 $158 + 75 (= 56 + 19) = \mathbf{233}$
181. (5) The pattern of the number series is :
 $7 + 3^2 = 7 + 9 = 16$
 $16 + 5^3 = 16 + 125 = 141$
 $141 + 7^2 = 141 + 49 = 190$
 $190 + 9^3 = 190 + 729 = 919$
 $919 + 11^2 = 919 + 121 = \mathbf{1040}$
182. (3) The pattern of the number series is :
 $12 + 5 \times 1 = 17$

- $17 + 5 \times 3 = 32$
 $32 + 5 \times 5 = 57$
 $57 + 5 \times 7 = 92$
 $92 + 5 \times 9 = 137$
183. (4) The pattern of the number series is :
 $19 + 2 \times 3 = 19 + 6 = 25$
 $25 + 4 \times 5 = 25 + 20 = 45$
 $45 + 6 \times 7 = 45 + 42 = 87$
 $87 + 8 \times 9 = 87 + 72 = 159$
 $159 + 10 \times 11 = 159 + 110 = \mathbf{269}$
184. (5) The pattern of the number series is :
 $83 + 41 \times 1 = 124$
 $124 + 41 \times 2 = 124 + 82 = 206$
 $206 + 41 \times 4 = 206 + 164 = 370$
 $370 + 41 \times 8 = 370 + 328 = 698$
 $698 + 41 \times 16 = 698 + 656 = \mathbf{1354}$
185. (4) The pattern of the number series is :
 $1 \times 7 = 7$
 $7 \times 7 = 49$
 $49 \times 7 = 343$
 $343 \times 7 = \mathbf{2401}$
186. (4) The pattern of the number series is :
 $13 + 7 = 20$
 $20 + 19 (= 7 + 12) = 39$
 $39 + 39 (= 19 + 20) = 78$
 $78 + 67 (= 39 + 28) = 145$
 $145 + 103 (= 67 + 36) = \mathbf{248}$
187. (1) The pattern of the number series is :
 $12 + 1 \times 23 = 35$
 $35 + 2 \times 23 = 35 + 46 = 81$
 $81 + 2 \times 46 = 81 + 92 = 173$
 $173 + 2 \times 92 = 173 + 184 = 357$
 $357 + 2 \times 184 = 357 + 368 = \mathbf{725}$
188. (5) The pattern of the number series is :
 $3 + 97 = 100$
 $100 + 197 = 297$
 $297 + 297 = 594$
 $594 + 397 = 991$
 $991 + 497 = \mathbf{1488}$
189. (3) The pattern of the number series is :
 $112 + 1 \times 7 = 119$
 $119 + 3 \times 7 = 119 + 21 = 140$
 $140 + 5 \times 7 = 140 + 35 = 175$
 $175 + 7 \times 7 = 175 + 49 = 224$
 $224 + 9 \times 7 = 224 + 63 = \mathbf{287}$
190. (2) The pattern of the number series is :
 $958 - 833 = 125$
 $833 - 733 = 100$
 $733 - 658 = 75$
 $658 - 608 = 50$
 $\therefore ? = 608 - 25 = \mathbf{583}$
191. (4) The pattern of the number series is :
 $11 \times 1 - 1 = 10$
 $10 \times 2 - 2 = 18$
 $18 \times 3 - 3 = 51$

$$51 \times 4 - 4 = 200$$

$$200 \times 5 - 5 = \mathbf{995}$$

192. (1) The pattern of the number series is :

$$25 \times 2 - 2 = 50 - 2 = 48$$

$$48 \times 2 - 2 = 96 - 2 = 94$$

$$94 \times 2 - 2 = 188 - 2 = 186$$

$$186 \times 2 - 2 = 372 - 2 = 370$$

$$370 \times 2 - 2 = 740 - 2 = \mathbf{738}$$

193. (2) The pattern of the number series is :

$$14 + 10 = 24$$

$$24 + 19 (=10 + 9) = 43$$

$$43 + 28 (= 19 + 9) = 71$$

$$71 + 37 (= 28 + 9) = 108$$

$$108 + 46 (=37 + 9) = \mathbf{154}$$

194. (5) The pattern of the number series is :

$$144 + 29 = 173$$

$$173 - 33 = 140$$

$$140 + 29 = 169$$

$$169 - 33 = 136$$

$$136 + 29 = \mathbf{165}$$

195. (2) The pattern of the number series is :

$$8 + 2 = 10$$

$$10 + 8 (= 2 \times 3 + 2) = 18$$

$$18 + 26 (= 3 \times 8 + 2) = 44$$

$$44 + 80 (=3 \times 26 + 2) = 124$$

$$124 + 242 (= 3 \times 80 + 2) = \mathbf{366}$$

196. (4) The pattern of the number series is :

$$13 + 1 \times 12 = 13 + 12 = 25$$

$$25 + 3 \times 12 = 25 + 36 = 61$$

$$61 + 5 \times 12 = 61 + 60 = 121$$

$$121 + 7 \times 12 = 121 + 84 = 205$$

$$205 + 9 \times 12 = 205 + 108$$

$$= \mathbf{313}$$

197. (1) The pattern of the number series is :

$$656$$

$$2 + 24 = 328 + 24 = 352$$

$$352$$

$$2 + 24 = 176 + 24 = 200$$

$$200$$

$$2 + 24 = 100 + 24 = 124$$

$$124$$

$$2 + 24 = 62 + 24 = 86$$

$$86$$

$$2 + 24 = 43 + 24 = \mathbf{67}$$

198. (3) The pattern of the number series is :

$$454 + 18 = 472$$

$$472 - 27 = 445$$

$$445 + 18 = 463$$

$$463 - 27 = 436$$

$$436 + 18 = \mathbf{454}$$

199. (2) The pattern of the number series is :

$$12 \times 4 - 30 = 48 - 30 = 18$$

$$18 \times 4 - 36 = 72 - 36 = 36$$

$$36 \times 4 - 42 = 144 - 42 = 102$$

$$102 \times 4 - 48 = 408 - 48 = 360$$

$$360 \times 4 - 54 = 1440 - 54 = \mathbf{1386}$$

200. (4) The pattern of the number series is :

$$7 \times 2 - 2 = 12$$

$$12 \times 4 - (2 + 6) = 48 - 8 = 40$$

$$40 \times 6 - (8 + 10) = 240 - 18 = 222$$

$$222 \times 8 - (18 + 14) = 1776 - 32$$

$$= 1744 \neq \mathbf{1742}$$

$$1744 \times 10 - (32 + 18) = 17440 - 50 = 17390$$

201. (3) The pattern of the number series is :

$$6 \times 7 + 7^2 = 42 + 49 = 91$$

$$91 \times 6 + 6^2 = 546 + 36 = 582$$

$$582 \times 5 + 5^2 = 2910 + 25 = 2935$$

$$2935 \times 4 + 4^2 = 11740 + 16 = 11756$$

$$11756 \times 3 + 3^2 = 35268 + 9 = 35277$$

202. (5) The pattern of the number series is :

$$9050 - 15^3 = 9050 - 3375 = 5675$$

$$5675 - 13^3 = 5675 - 2197 = 3478$$

$$3478 - 11^3 = 3478 - 1331 = 2147$$

$$2147 - 9^3 = 2147 - 729 = 1418$$

$$1418 - 7^3 = 1418 - 343 = 1075 \neq \mathbf{1077}$$

203. (4) The pattern of the number series is :

$$1 = 1$$

$$2^2 = 4$$

$$3^3 = 27 \neq \mathbf{25}$$

$$4^4 = 256$$

$$5^5 = 3125$$

$$6^6 = 46656$$

204. (2) The pattern of the number series is :

$$8424 \div 2 = 4212$$

$$4212 \div 2 = 2106$$

$$2106 \div 2 = 1053 \neq \mathbf{1051}$$

$$1053 \div 2 = 526.5$$

$$526.5 \div 2 = 263.25$$

205. (1) The pattern is :

$$5531 - 5506 = 25 = 5^2$$

$$5555 - 5506 = 49 = 7^2$$

$$5506 - 5425 = 81 = 9^2$$

$$5425 - 5304 = 121 = 11^2$$

$$5304 - 5135 = 169 = 13^2$$

$$5135 - 4910 = 225 = 15^2$$

$$4910 - 4621 = 289 = 17^2$$

Clearly, 5531 is wrong which should be substituted by 5555.

206. (2) The pattern is :

$$6 + 1 = 7$$

$$7 + 1 \times 2 = 9$$

$$9 + 2 \times 2 = 13$$

$$13 + 8 = 21 \neq \mathbf{26}$$

$$21 + 16 = 37$$

$$37 + 32 = 69$$

207. (4) The pattern is :

$$1 \times 1 + 2 = 3$$

$$\begin{aligned}
 3 \times 2 + 4 &= 10 \\
 10 \times 3 + 6 &= 36 \\
 36 \times 4 + 8 &= 152 \\
 152 \times 5 + 10 &= 770 \neq \mathbf{760} \\
 770 \times 6 + 12 &= 4632
 \end{aligned}$$

208. (3) The pattern is :

$$\begin{aligned}
 4 + 1^3 &= 5 \\
 5 + 2^3 &= 13 \\
 13 + 3^3 &= 40 \\
 40 + 4^3 &= 104 \neq \mathbf{105} \\
 104 + 5^3 &= 229 \\
 229 + 6^3 &= 445
 \end{aligned}$$

209. (1) The pattern is :

$$\begin{aligned}
 157.5 \div 3.5 &= 45 \\
 45 \div 3 &= 15 \\
 15 \div 2.5 &= 6 \\
 6 \div 2 &= 3 \\
 3 \div 1.5 &= 2 \\
 2 \div 1 &= 2 \neq \mathbf{1}
 \end{aligned}$$

210. (2) The pattern is :

$$\begin{aligned}
 123 + 11 \times 14 &= 123 + 154 = 277 \\
 277 + 13 \times 14 &= 277 + 182 = 459 \\
 459 + 15 \times 14 &= 459 + 210 = 669 \\
 669 + 17 \times 14 &= 669 + 238 = 907 \\
 907 + 19 \times 14 &= 907 + 266 \\
 &= \mathbf{1173}
 \end{aligned}$$

211. (2) The pattern is :

$$\begin{aligned}
 456.5 - 407 &= 49.5 \\
 407 - 368.5 &= 38.5 \\
 368.5 - 341 &= 27.5 \\
 341 - 324.5 &= 16.5 \\
 \therefore ? &= 324.5 - 5.5 = \mathbf{319}
 \end{aligned}$$

212. (1) The pattern is :

$$\begin{aligned}
 23 + 1 \times 19.2 &= 42.2 \\
 42.2 + 2 \times 19.2 &= 80.6 \\
 80.6 + 4 \times 19.2 &= 157.4 \\
 157.4 + 8 \times 19.2 &= 311 \\
 311 + 16 \times 19.2 &= 311 + 307.2 \\
 &= \mathbf{618.2}
 \end{aligned}$$

213. (5) The pattern is :

$$\begin{aligned}
 154 - 36 &= 118 \\
 232 - 154 &= 78 \\
 278 - 232 &= 46 \\
 300 - 278 &= 22 \\
 \therefore ? - 300 &= 6 \\
 \Rightarrow ? &= \mathbf{306}
 \end{aligned}$$

214. (4) The pattern is :

$$\begin{aligned}
 24 + 8^3 &= 24 + 512 = 536 \\
 536 - 7^2 &= 536 - 49 = 487 \\
 487 + 6^3 &= 487 + 216 = 703 \\
 703 - 5^2 &= 703 - 25 = 678 \\
 678 + 4^3 &= 678 + 64 = 742
 \end{aligned}$$

215. (3) The pattern is :

$$\begin{aligned}
 576 - 224 &= 352 \\
 752 - 576 &= 176
 \end{aligned}$$

$$\begin{aligned}
 840 - 752 &= 88 \\
 884 - 840 &= 44 \\
 \therefore ? &= 884 + 22 = \mathbf{906}
 \end{aligned}$$

216. (1) The pattern is :

$$\begin{aligned}
 5 \times 1 + 1^2 &= 5 + 1 = 6 \\
 6 \times 2 + 2^2 &= 12 + 4 = 16 \\
 16 \times 3 + 3^2 &= 48 + 9 = 57 \\
 57 \times 4 + 4^2 &= 228 + 16 = \mathbf{244}
 \end{aligned}$$

217. (4) The pattern is :

$$\begin{aligned}
 12 \times 4 &= \mathbf{48} \\
 48 \times 3.5 &= 168 \\
 168 \times 3 &= 504 \\
 504 \times 2.5 &= 1260 \\
 1260 \times 2 &= 2520
 \end{aligned}$$

218. (5) The pattern is :

$$\begin{aligned}
 4 \times 2 + 1 &= 8 + 1 = 9 \\
 9 \times 3 + 2 &= 27 + 2 = 29 \\
 29 \times 4 + 3 &= 116 + 3 = \mathbf{119} \\
 119 \times 5 + 4 &= 595 + 4 = 599 \\
 599 \times 6 + 5 &= 3594 + 5 = 3599
 \end{aligned}$$

219. (3) The pattern is :

$$\begin{aligned}
 177 - 7 &= 170 \\
 170 - 11 &= 159 \\
 159 - 13 &= 146 \\
 146 - 17 &= \mathbf{129} \\
 129 - 19 &= 110
 \end{aligned}$$

Note : Consecutive prime numbers have been subtracted.

220. (3) The pattern is :

$$\begin{aligned}
 2 + 1^3 &= 2 + 1 = 3 \\
 3 + 2^3 &= 3 + 8 = 11 \\
 11 + 3^3 &= 11 + 27 = 38 \\
 38 + 4^3 &= 38 + 64 = 102 \\
 102 + 5^3 &= 102 + 125 = \mathbf{227}
 \end{aligned}$$

221. (1) The pattern of the number series is :

$$\begin{aligned}
 21 \times 0.5 &= 10.5 \\
 10.5 \times 1 &= \mathbf{10.5} \\
 10.5 \times 1.5 &= 15.75 \\
 15.75 \times 2 &= 31.50 \\
 31.50 \times 2.5 &= 78.75
 \end{aligned}$$

222. (2) The pattern of the number series is :

$$\begin{aligned}
 6 + 1 \times 13 &= 6 + 13 = 19 \\
 19 + 3 \times 13 &= 19 + 39 = 58 \\
 58 + 5 \times 13 &= 58 + 65 = \mathbf{123} \\
 123 + 7 \times 13 &= 123 + 91 = 214 \\
 214 + 9 \times 13 &= 214 + 117 = 331
 \end{aligned}$$

223. (3) The pattern of the number series is :

$$\begin{aligned}
 \mathbf{14} + 1 \times 2 &= \mathbf{16} \\
 16 + 3 \times 4 &= 16 + 12 = 28 \\
 28 + 5 \times 6 &= 28 + 30 = 58 \\
 58 + 7 \times 8 &= 58 + 56 = 114 \\
 114 + 9 \times 10 &= 114 + 90 = 204
 \end{aligned}$$

224. (4) The pattern of the number series is :

$$\begin{aligned}
 13.76 + 1 \times 1.15 &= 14.91 \\
 14.91 + 2 \times 1.15 &= 14 + 2.30 = 17.21
 \end{aligned}$$

$$17.21 + 3 \times 1.15 = 17.21 + 3.45 = 20.66$$

$$20.66 + 4 \times 1.15 = 20.66 + 4.60 = \mathbf{25.26}$$

$$25.26 + 5 \times 1.15 = 25.26 + 5.75 = 31.01$$

225. (5) The pattern of the number series is :

$$15 + 1^2 = \mathbf{16}$$

$$16 + 2^3 = 16 + 8 = 24$$

$$24 + 3^2 = 24 + 9 = 33$$

$$33 + 4^3 = 33 + 64 = 97$$

$$97 + 5^2 = 97 + 25 = 122$$

226. (5) The pattern is :

$$2 \times 3 = 6$$

$$6 \times 2.5 = 15$$

$$15 \times 2 = 30$$

$$30 \times 1.5 = 45$$

$$45 \times 1 = 45 \neq \mathbf{43.5}$$

$$45 \times 0.5 = 22.5$$

227. (3) The pattern is :

$$950 - 661 = 289 = 17^2$$

$$661 - 436 = 225 = 15^2$$

$$436 - \mathbf{269} = 167 \neq 13^2$$

$$\therefore 436 - 267 = 169 = 13^2$$

$$267 - 146 = 121 = 11^2$$

$$146 - 65 = 81 = 9^2$$

228. (5) The pattern is :

$$6.5 + 5.3 = 11.8$$

$$11.8 + 2 \times 5.3 = 11.8 + 10.6 = 22.4$$

$$22.4 + 3 \times 5.3 = 22.4 + 15.9 = 38.3$$

$$38.3 + 4 \times 5.3 = 38.3 + 21.2 = 59.5$$

$$59.5 + 5 \times 5.3 = 59.5 + 26.5 = 86$$

$$\neq \mathbf{87.3}$$

$$86 + 6 \times 5.3 = 86 + 31.8 = 117.8$$

229. (5) The pattern is :

$$1 \times 3 - 1 = 2$$

$$2 \times 3 - 2 = 4$$

$$4 \times 3 - 3 = 9$$

$$9 \times 3 - 4 = 23$$

$$23 \times 3 - 5 = 69 - 5 = 64 \neq \mathbf{69}$$

$$64 \times 3 - 6 = 192 - 6 = 186$$

230. (5) The pattern is :

$$250 - 11 = 239$$

$$239 - (11 \times 2 + 1) = 239 - 23 = 216$$

$$216 - (11 \times 3 + 2) = 216 - 35 = 181$$

$$181 - (11 \times 4 + 3) = 181 - 47 = 134 \neq \mathbf{136}$$

$$134 - (11 \times 5 + 4) = 134 - 59 = 75$$

$$75 - (11 \times 6 + 58) = 75 - 71 = 4$$

SBI PO EXAMS

1. (3) The series is based on following pattern:

$$3 \times 1 + 2 = 5$$

$$5 \times 2 + 2 = 12$$

$$12 \times 3 + 2 = 38$$

$$38 \times 4 + 2 = 154$$

$$154 \times 5 + 2 = \mathbf{772}$$

$$772 \times 6 + 2 = 4634$$

Therefore, the number 914 is wrong.

\therefore According to question, the new series is as follows:

$$914 \times 1 + 2 = 916$$

$$916 \times 2 + 2 = \mathbf{1834}$$

$$1834 \times 3 + 2 = 5504$$

Therefore, the required number is 1834.

2. (3) The series is based on following pattern :

$$3 \times 1 + 1 = 4$$

$$4 \times 2 + 2 = 10$$

$$10 \times 3 + 3 = \mathbf{33}$$

$$33 \times 4 + 4 = 136$$

$$136 \times 5 + 5 = 685$$

$$685 \times 6 + 6 = 4116$$

Therefore, the number 34 is wrong.

\therefore According to question, the new series starts from the number 34 in the same pattern.

$$34 \times 1 + 1 = 35$$

$$35 \times 2 + 2 = \mathbf{72}$$

Hence, the number 72 is required answer.

3. (4) The series is based on following pattern :

$$214 - (14)^2 = 18$$

$$18 + (12)^2 = 162$$

$$162 - (10)^2 = 62$$

$$62 + (8)^2 = \mathbf{126}$$

$$126 - (6)^2 = 90$$

$$90 + (4)^2 = 106$$

Therefore the number 143 is wrong.

\therefore According to question, the new series starts from the number 143 in

$$143 - (14)^2 = -53$$

$$-53 + (12)^2 = \mathbf{91}$$

Hence, the number 91 is required answer.

4. (5) The series is based on following pattern:

$$160 \times 0.5 = 80$$

$$80 \times 1.5 = 120$$

$$120 \times 2.5 = \mathbf{300}$$

$$300 \times 3.5 = 1050$$

$$1050 \times 4.5 = 4725$$

$$4725 \times 5.5 = 25987.5$$

Therefore, the number 180 is wrong.

\therefore According to question, the new series starts from the number 180 in the same pattern:

$$180 \times 0.5 = 90$$

$$90 \times 1.5 = \mathbf{135}$$

Hence, the number 135 is required answer.

5. (1) The series is based on following pattern:

$$2 + 1^2 - 0 = 3$$

$$3 + 2^2 - 1 = \mathbf{6}$$

$$6 + 3^2 - 2 = 13$$

$$13 + 4^2 - 3 = 26$$

$$26 + 5^2 - 4 = 47$$

$$47 + 6^2 - 5 = 78$$

Therefore, the number 7 is wrong.
According to question, the new series starts from the number 7 in the same pattern.

$$7 + 1^1 - 0 = 8$$

$$8 + 2^2 - 1 = 11$$

Hence, the number 11 is required answer.

6. (4) The series is based on following pattern :

$$2 \times 1 + 1^2 = 3$$

$$3 \times 2 + 2^2 = 10$$

$$10 \times 3 + 3^2 = 39$$

$$39 \times 4 + 4^2 = 172$$

$$172 \times 5 + 5^2 = 885$$

Similarly, the new series is as follows :

$$1 \times 1 + 1^2 = 2 \dots (a)$$

$$2 \times 2 + 2^2 = 8 \dots (b)$$

$$8 \times 3 + 3^2 = 33 \dots (c)$$

Therefore, the number 8 will come in place of (b).

7. (2) The series is based on the following pattern:

$$5 \times 1 + 2 = 7$$

$$7 \times 2 - 4 = 10$$

$$10 \times 3 + 6 = 36$$

$$36 \times 4 - 8 = 136$$

$$136 \times 5 + 10 = 690$$

Similarly, the new series is as follows:

$$2 \times 1 + 2 = 4 \dots (a)$$

$$4 \times 2 - 4 = 4 \dots (b)$$

$$4 \times 3 + 6 = 18 \dots (c)$$

$$18 \times 4 - 8 = 64 \dots (d)$$

$$64 \times 5 + 10 = 330 \dots (e)$$

Therefore, the number 330 will come in place of (e).

8. (5) The series is based on following pattern:

$$8 \times 0.5 = 4$$

$$4 \times 1.5 = 6$$

$$6 \times 2.5 = 15$$

$$15 \times 3.5 = 52.6$$

$$52.5 \times 4.5 = 236.25$$

Therefore, the number 236.25 will come in place of (d).

9. (3) Interchanging (3) and (5)

10. (3) Interchanging (3) and (5)

11. (4) The series is based on following pattern
 $2 \times 1 + (1)^2 = 3$

$$3 \times 2 - (2)^2 = 2$$

$$2 \times 3 + (3)^2 = 15$$

$$15 \times 4 - (4)^2 = 44$$

$$44 \times 5 + (5)^2 = 245$$

$$245 \times 6 - (6)^2 = 1434$$

Similarly,

$$3 \times 1 + (1)^2 = 4 \dots (a)$$

$$4 \times 2 - (2)^2 = 4 \dots (b)$$

$$4 \times 3 + (3)^2 = 21 \dots (c)$$

$$21 \times 4 - (4)^2 = 68 \dots (d)$$

Therefore, the 21 will come in place of (c).

12. (5) The series is based on following pattern

$$1 \times 1 + (1)^2 = 2$$

$$2 \times 2 + (2)^2 = 8$$

$$8 \times 3 + (3)^2 = 33$$

$$33 \times 4 + (4)^2 = 148$$

$$148 \times 5 + (5)^2 = 765$$

$$765 \times 6 + (6)^2 = 4626$$

Similarly,

$$2 \times 1 + (1)^2 = 3 \dots (a)$$

$$3 \times 2 + (2)^2 = 10 \dots (b)$$

$$10 \times 3 + (3)^2 = 39 \dots (c)$$

$$39 \times 4 + (4)^2 = 172 \dots (d)$$

Therefore, the number 172 will come in place of (d).

13. (5) The series is based on following pattern :

$$2 \times 2 + 0.5 = 4.5$$

$$4.5 \times 2 + (0.5) \times 4 = 11$$

$$11 \times 2 + 2 \times 4 = 30$$

$$30 \times 2 + 8 \times 4 = 92$$

$$92 \times 2 + 32 \times 4 = 312$$

$$312 \times 2 + 128 \times 4 = 1136$$

Similarly,

$$1 \times 2 + 0.5 = 2.5 \dots (a)$$

$$2.5 \times 2 + (0.5) \times 4 = 7 \dots (b)$$

Therefore, the number 7 will come in place of (b)

14. (1)

In the given series 176 should be replaced by 174.238 will come in place of (e)

15. (3)

16. In the given series 7 should be replaced by 5. and 277 should come in place of (f).
(1) The given number series is based on the following pattern

17. Hence the wrong number is 6
(2) The given number series is based on the following pattern:

18. Hence, the wrong number is 75
(4) The given number series is based on the following pattern
 $4 - 3 = 1^2$
 $13 - 4 = 9 = 3^2$
 $38 - 13 = 25 = 5^2$
 $87 - 38 = 49 = 7^2$
 $168 - 87 = 81 = 9^2$
 $289 - 168 = 121 = 11^2$
 Obviously, 166 is the wrong number.
 19. (3) The number series follows the rule as mentioned below:

20. Hence 29 is the wrong number.
(5) The followed pattern is:

21. Hence the wrong number is 176
(4) The given series is based on the following pattern
 $2 \times 3 = 6$
 $6 \times 3 = 18$
 $18 \times 6 \neq 109$ but 108
 $108 \times 18 = 1944$
 $1944 \times 108 = 209952$
 Obviously, 109 is the wrong number and it should be replaced with 108.

22. (2) The given series is based on the following pattern :

23. Obviously, 39 is the wrong number and it should be replaced with 37.
(1) The given series is based on the following pattern :

$$2 \times 2 + 7 = 11 \text{ (not 13)}$$

$$11 \times 3 - 6 = 27$$

$$27 \times 4 + 5 = 113$$

$$113 \times 5 - 4 = 561$$

- Obviously the number 13 is wrong and it should be replaced with 11.

24. (4) The given series is based on the following pattern.

$$50 + (1^2) = 51$$

$$51 - (2^2) = 47$$

$$47 + (3^2) = 56$$

$$56 - (4^2) = 40 \text{ (not 42)}$$

$$40 + (5^2) = 65$$

- Obviously, the number 42 is wrong and it should be replaced with 40.

25. (3) The given series is based on the following pattern :

$$3 \times 2 + 3 = 9$$

$$9 \times 3 - 4 = 23$$

$$23 \times 4 + 5 = 97 \text{ (not 99)}$$

$$97 \times 5 - 6 = 479$$

- Obviously, the number 99 is wrong and it should be replaced with 97.

26. (1) The given series is based on the following pattern:

$$2 + 3 = 5$$

$$5 + 3 = 8$$

$$8 + 5 = 13$$

$$13 + 8 = 21$$

$$21 + 13 = 34$$

- Obviously, the number 4 is wrong and it should be replaced with 3.

27. (2) The given series is based on the following pattern :

Similarly,

Hence, 163 will come in place of (b).

28. (1) The given series is based on the following pattern

$$13 = 4 \times 1 + 1 \times 9$$

$$40 = 13 \times 2 + 2 \times 7$$

$$135 = 40 \times 3 + 3 \times 5$$

$$552 = 135 \times 4 + 4 \times 3$$

$$2765 = 552 \times 5 + 5 \times 1$$

Similarly,

$$(a) = 2 \times 1 + 1 \times 9 = 11$$

$$(b) = 11 \times 2 + 2 \times 7 = 36$$

$$(c) = 36 \times 3 + 3 \times 5 = 123$$

Hence, 123 will come in place of (c).

29. (3) The given series is based on the following pattern:

Similarly,

Hence, 4 will come in place of (d).

30. (4) The given series is based on the following pattern :

7, 11, 13, 17, 19, are consecutive prime numbers)

Similarly,

Hence, 159 will come in place of (d).

31. (3) The given series is based on the following pattern :

Similarly,

- 32.

Hence, 22.5 will come in place of (c).

(3) The given series is based on the following pattern :

$$9 \times 2 + 1.5 = 19.5$$

$$19.5 \times 2 + 2 = 41$$

$$41 \times 2 + 2.5 = 84.5$$

Therefore, the new series is as follows :

$$12 \times 2 + 1.5 = 25.5 \quad \dots(a)$$

$$25.5 \times 2 + 2 = 53 \quad \dots(b)$$

$$53 \times 2 + 2.5 = \mathbf{108.5} \quad \dots(c)$$

$$108.5 \times 2 + 3 = 220 \quad \dots(d)$$

$$220 \times 2 + 3.5 = 443.5 \quad \dots(e)$$

Therefore, the number 108.5 will come in place of (C) in the new series.

33. (1) The series is based on following pattern:

$$4 \times 1 + 1 = 5$$

$$\downarrow + 3$$

$$5 \times 4 + 2 = 22$$

$$\downarrow + 5$$

$$22 \times 9 + 3 = 201$$

Similarly the new series is as follows :

$$7 \times 1 + 1 = 8 \quad \dots(a)$$

$$8 \times 4 + 2 = 34 \quad \dots(b)$$

$$34 \times 9 + 3 = 309 \quad \dots(c)$$

$$309 \times 16 + 4 = \mathbf{4948} \quad \dots(d)$$

Therefore, the number 4948 will come in place of (d) in the new series.

34. (2) The series is based on following pattern :

$$5 \times 1 + 0.25 \times 1 = 5.25$$

$$\downarrow + 3$$

$$5.25 \times 2 + 0.25 \times 4 = 11.5$$

$$\downarrow + 5$$

$$11.5 \times 3 + 0.25 \times 9 = 36.75$$

Similarly, the new series is as follows.

$$3 \times 1 + 0.25 \times 1 = 3.25 \quad \dots(a)$$

$$3.25 \times 2 + 0.25 \times 4 = 7.5 \quad \dots(b)$$

$$7.5 \times 3 + 0.25 \times 9 = \mathbf{24.75} \quad \dots(c)$$

Therefore, the number 24.75 will come in place of (c) in the new series.

35. (4) The series is based on following pattern :

$$38 \times 0.5 = 19$$

$$19 \times 1.5 = 28.5$$

$$28.5 \times 2.5 = 71.25$$

Similarly, the new series is as follows :

$$18 \times 0.5 = 9 \quad \dots(a)$$

$$9 \times 1.5 = 13.5 \quad \dots(b)$$

$$13.5 \times 2.5 = 33.75 \quad \dots(c)$$

$$33.75 \times 3.5 = \mathbf{118.125} \quad \dots(d)$$

Therefore, the number 118.125 will come

- in place of (d) in the new series.
36. (3) The series is based on following pattern:
 $25 + (11)^2 \Rightarrow 25 + 121 = 146$
 $146 - (9)^2 \Rightarrow 146 - 81 = 65$
 $65 + (7)^2 \Rightarrow 65 + 49 = 114$
 Similarly, the new series is as follows :
 $39 + (11)^2 \Rightarrow 39 + 121$
 $= 190 \dots\dots(a)$
 $160 - (9)^2 \Rightarrow 160 - 81$
 $= 79 \dots\dots(b)$
 $79 + (7)^2 \Rightarrow 79 + 49$
 $= 128 \dots\dots(c)$
 $128 + (5)^2 \Rightarrow 128 - 25$
 $= 103 \dots\dots(d)$
 $103 + (3)^2 \Rightarrow 103 + 9$
 $= 111 \dots\dots(e)$
 Therefore, the number 112 will come in place of (e) in new series.
37. (1) The given series is based on following pattern
 $15 - 10 = 5$
 $24 - 15 = 9$
 $37 - 24 = 13$
 $54 - 37 = 17$
 $75 - 54 = 21$
 $100 - 75 = 25$
 Obviously, 35 is wrong number.
38. (5) Here the middle number = difference of succeeding number and preceding number.
 i.e., $4 - 1 = 3$
 $7 - 3 = 4$
 $11 - 4 = 7$
 $18 - 7 = 11$
 $27 - 11 = 16$
 Here the sequence gets disturbed
 $\therefore 29 - 11 = 18$
 $47 - 18 = 29$
 Hence, 27 is the wrong number.
39. (5) The sequence is based on following pattern:
 $3 \times 0.5 + 0.5 = 2$
 $2 \times 1 + 1 = 3$
 $3 \times 1.5 + 1.5 = 6$
 $6 \times 2 + 2 = 14$
 $14 \times 2.5 + 2.5 = 37.5$
 $37.5 \times 3 + 3 = 115.5$
 Obviously, 12 is the wrong number.
40. (4) $32431 = 7 \times 4626 + 7^2$
 $4626 = 6 \times 765 + 6^2$
 $765 = 5 \times 148 + 5^2$
 $148 = 4 \times 32 + 4^2$
 But $148 = 4 \times 33 + 4^2$
 $33 = 3 \times 8 + 3^2$
41. $8 = 2 \times 2 + 2^2$
 Obviously 32 is the wrong number.
 (2) The sequence is based on following pattern:
 $3 - 2 = 1^3$
 $11 - 3 = 8 = 2^3$
 $38 - 11 = 27 = 3^3$
 $102 - 38 = 64 = 4^3$
 But,
 $229 - 102 = 127 \neq 5^3$
 $227 - 102 = 125 = 5^3$
 $443 - 227 = 216 = 6^3$
 Obviously 229 is the wrong number.
42. (5) The given number series is based on the following pattern :
 $7413 + 9 \times 1 = 7422$
 $7422 + 9 \times 2 = 7440$
 $7440 + 9 \times 3 = 7467$
 $7467 + 9 \times 4 = 7503$
 Hence, 7467 will replace the question mark.
43. (4) The given number series is based on the following pattern :
 $4 = 2^2$; $16 = 4^2$;
 $36 = 6^2$; $64 = 8^2$;
 $100 = 10^2$.
 $\therefore ? = 12^2 = 144$
 Hence, 144 will replace the question mark.
44. (1) The given number series is based on the following pattern:
 $12 \times 3 - 3 = 33$
 $33 \times 3 - 3 = 96$
 $96 \times 3 - 3 = 285$
 $285 \times 3 - 3 = 852$
 Hence, 285 will replace the question mark.
45. (3) The given number series is based on the following pattern :
 $70000 \div 5 = 14000$
 $14000 \div 5 = 2800$
 $2800 \div 5 = 560$
 $560 \div 5 = 112$
 $112 \div 5 = 22.4$
 Hence, 560 will replace the question mark.
46. (2) The given number series is based on the following pattern :
 $102 - 3 = 99$
 $99 + 5 = 104$
 $104 - 7 = 97$
 $97 + 9 = 106$
 $106 - 11 = 95$
 Hence, 95 will replace the question mark.
47. (4) The given number series is based on the following pattern
 $93 + 2$ (prime number) = 95
 $95 + 3 = 98 \neq 99$
 $98 + 5 = 103$

- $103 + 7 = 110$
 $110 + 11 = 121$
 $121 + 13 = 134$
 Hence, 103 will replace the question mark
 48. (5) The given number series is based on the following pattern:
 $8 \times 1.5 = 12$
 $12 \times 1.5 = 18$
 $18 \times 1.5 = 27 \neq 26$
 $27 \times 1.5 = 40.5$
 $40.5 \times 1.5 = 60.75$
 $\therefore ? = 60.75 \times 1.5 = \mathbf{91.125}$
 Hence, 91.125 will replace the question mark.
49. (5) The given number series is based on the following pattern : $4 + 7 = 11$
 $11 + 7 = 18$
 $18 + 11 = 29 \neq 28$
 $\therefore ? = 29 + 18 = \mathbf{47}$
 Hence, 47 will replace the question mark.
50. (1) The given number series is based on the following pattern:
 $3 \times 2 + 2^2 = 10$
 $10 \times 3 + 3^2 = \mathbf{39}$
 $39 \times 4 + 4^2 = 172$
 $172 \times 5 + 5^2 = 885 \neq 886$
 $885 \times 6 + 6^2 = 5346$
 Hence, 39 will replace the question mark.
51. (3) The given number series is based on the following pattern :
 $15 \times 1 + 1 \times 7 = 22$
 $22 \times 2 + 2 \times 6 = 56 \neq 57$
 $56 \times 3 + 3 \times 5 = 183$
 $183 \times 4 + 4 \times 4 = \mathbf{748}$
 $748 \times 5 + 5 \times 3 = 3755$
 $3755 \times 6 + 6 \times 2 = 22542$
 Hence, 748 will replace the question mark.
52. (4) The pattern of the number series is :
 $3601 \div 1 + 1 = 3602$
 $3602 \div 2 + 2 - 1801 + 2 = 1803$
 $1803 \div 3 + 3 - 601 + 3 - 604$
 $604 \div 4 + 4 = 151 + 4 = 155 \neq \mathbf{154}$
 $155 \div 5 + 5 = 31 + 5 = 36$
 $36 \div 6 + 6 = 6 + 6 = 12$
53. (2) The pattern of the number series is :
 $4 \times 2 + 2^2 = 8 + 4 = 12$
 $12 \times 3 + 3^2 = 36 + 9 = 45 \neq \mathbf{42}$
 $45 \times 4 + 4^2 = 180 + 16 = 196$
 $196 \times 5 + 5^2 = 980 + 25 = 1005$
 $1005 \times 6 + 6^2 = 6030 + 36 = 6066$
54. (1) The pattern of the number series is :
 $2 + 4 = 6 \neq \mathbf{8}$
 $6 + 6 = 12$
 $12 + 8 = 20$
 $20 + 10 = 30$
- $30 + 12 = 42$
 55. (5) The pattern of the number series is :
 1
 $32 \times \frac{1}{2} = 16$
 3
 $16 \times \frac{1}{2} = 8$
 5
 $24 \times \frac{1}{2} = 12 \neq \mathbf{65}$
 7
 $60 \times \frac{1}{2} = 30$
 9
 $210 \times \frac{1}{2} = 105$
 11
 $945 \times \frac{1}{2} = 472.5$
56. (4) The pattern of the number series is :
 $7 \times 2 - 1 = 14 - 1 = 13$
 $13 \times 2 - 1 = 26 - 1 = 25$
 $25 \times 2 - 1 = 50 - 1 = 49$
 $49 \times 2 - 1 = 98 - 1 = 97$
 $97 \times 2 - 1 = 194 - 1 = 193 \neq \mathbf{194}$
 $193 \times 2 - 1 = 386 - 1 = 385$
57. (1) The pattern of the given series is :
 $37 \times 0.5 + 0.5 = 18.5 + 0.5 = 19$
 $19 \times 1 + 1 = 19 + 1 = 20$
 $20 \times 1.5 + 1.5 = 30 + 1.5 = 31.5$
 $31.5 \times 2 + 2 = 63 + 2 = 65$
 $65 \times 2.5 + 2.5 = 162.5 + 2.5 = 165$
 Similarly,
 $21 \times 0.5 + 0.5 = 10.5 + 0.5 = 11$ (a)
 $11 \times 1 + 1 = 11 + 1 = 12$ (b)
 $12 \times 1.5 + 1.5 = 18 + 1.5 = 19.5$ (c)
 $19.5 \times 2 + 2 = 39 + 2 = 41$ (d)
 $41 \times 2.5 + 2.5 = 102.5 + 2.5 = \mathbf{105}$ (e)
58. (2) The pattern of the given series is :
 $5 \times 1 + 1^2 = 5 + 1 = 6$
 $6 \times 2 + 2^2 = 12 + 4 = 16$
 $16 \times 3 + 3^2 = 48 + 9 = 57$
 $57 \times 4 + 4^2 = 228 + 16 = 244$
 $244 \times 5 + 5^2 = 1220 + 25 = 1245$
 Similarly,
 $9 \times 1 + 1^2 = 9 + 1 = 10$ (a)
 $11 \times 2 + 2^2 = 22 + 4 = 26$ (b)
 $26 \times 3 + 3^2 = 78 + 9 = 87$ (c)
 $87 \times 4 + 4^2 = 348 + 16 = \mathbf{364}$ (d)
59. (3) The pattern of the given series is :
 $7 \times 1 - 2 = 7 - 2 = 5$
 $5 \times 3 - 4 = 15 - 4 = 11$
 $11 \times 5 - 6 = 55 - 6 = 49$
 $49 \times 7 - 8 = 343 - 8 = 335$
 $335 \times 9 - 10 = 3015 - 10 = 3005$
 Similarly,

60. $13 \times 1 - 2 = 13 - 2 = 11$ (a)
 $11 \times 3 - 4 = 33 - 4 = 29$ (b)
 (4) The pattern of the given series is :
 $12 \times 3 + 11 = 36 + 11 = 47$
 $47 \times 3 + 11 = 141 + 11 = 152$
 $152 \times 3 + 11 = 456 + 11 = 467$
 $467 \times 3 + 11 = 1401 + 11 = 1412$
 $1412 \times 3 + 11 = 4236 + 11 = 4247$
 Similarly,
 $33 \times 3 + 11 = 99 + 11 = 110$ (a)
 $110 \times 3 + 11 = 330 + 11 = 341$ (b)
 $341 \times 3 + 11 = 1023 + 11 = 1034$ (c)
 $1034 \times 3 + 11 = 3102 + 11$
 $= 3113$ (d)

61. (5) The pattern of the given series is :
 $68 \times 1 - 8 = 60$
 $60 \times 1.5 + 14 = 90 + 14 = 104$
 $104 \times 2 - 20 = 208 - 20 = 188$
 $188 \times 2.5 + 26 = 470 + 26 = 496$
 $496 \times 3 - 32 = 1488 - 32 = 1456$
 Similarly,
 $42 \times 1 - 8 = 42 - 8 = 34$ (a)
 $34 \times 1.5 + 14 = 51 + 14 = 65$ (b)
 $65 \times 2 - 20 = 130 - 20 = 110$ (c)
 $110 \times 2.5 + 26 = 275 + 26 = 301$ (d)

RBI GRADE-B OFFICER EXAMS

1. (4) The given series is based on the following pattern:
2. (5) The given series is based on the following pattern:
3. (3) The given series is based on the following pattern:
4. (2) 30 (According to question)
5. (1) The given series is based on the following pattern:
6. (5) The given series is based on the following pattern:

7. (3) The given series is based on the following pattern :

Hence, 62.72 will come in place of the question mark.

8. (4) The given series is based on the following pattern :

Hence, 2211 will come in place of the question mark.

9. (1) The given series is based on the following pattern:

Numbers are cubes of consecutive prime numbers. i.e.

$$11^3 = 1331$$

$$13^3 = 2197$$

$$17^3 = 4913$$

$$19^3 = 6859$$

$$23^3 = 12167$$

$$29^3 = 24389$$

Hence, 12167 will come in place of the question mark.

10. (2) The given series is based on the following pattern

Hence, 7.4 will come in place of the question mark.

11. (3) The given number series is based on the following pattern :

$$13 \times 1 + 1 = 14$$

$$14 \times 2 + 2 = 30$$

$$30 \times 3 + 3 = 93$$

$$93 \times 4 + 4 = 376$$

$$376 \times 5 + 5 = 1885$$

$$\therefore ? = 1885 \times 6 + 6 = 11316$$

Hence, number 11316 will replace the question mark.

12. (2)

13. (4)

14. (1)

15. (5)

$$705 + 1 \times 23 = 728$$

$$728 + 2 \times 23 = 774$$

$$774 + 3 \times 23 = 843$$

$$843 + 4 \times 23 = 935$$

$$935 + 5 \times 23 = 1050$$

$$\therefore ? = 1050 + 6 \times 23 = 1050 + 138 = 1188$$

16. (4) The pattern of the given series is :

$$5 \times 1.5 + 1.5 = 7.5 + 1.5 = 9$$

$$9 \times 2.5 + 2.5 = 22.5 + 2.5 = 25$$

$$25 \times 3.5 + 3.5 = 87.5 + 3.5 = 91$$

$$91 \times 4.5 + 4.5 = 409.5 + 4.5 = 414$$

Similarly,

$$(a) \Rightarrow 3 \times 1.5 + 1.5 = 4.5 + 1.5 = 6$$

$$(b) \Rightarrow 6 \times 2.5 + 2.5 = 15 + 2.5 = 17.5$$

$$(c) \Rightarrow 17.5 \times 3.5 + 3.5 = 61.25 + 3.5 = \mathbf{64.75}$$

17. (2) The pattern of the given series is :

$$15 \times 1 - 1 \times 6 = 15 - 6 = 9$$

$$9 \times 2 - 2 \times 5 = 18 - 10 = 8$$

$$8 \times 3 - 3 \times 4 = 24 - 12 = 12$$

$$12 \times 4 - 4 \times 3 = 48 - 12 = 36$$

$$36 \times 5 - 5 \times 2 = 180 - 10 = 170$$

Similarly,

$$(a) \Rightarrow 19 \times 1 - 1 \times 6 = 19 - 6 = 13$$

$$(b) \Rightarrow 13 \times 2 - 2 \times 5 = 26 - 10 = \mathbf{16}$$

18. (1) The pattern of the given series is :

$$7 \times 1 - 1 = 6$$

$$6 \times 2 - 2 = 10$$

$$10 \times 3 - 3 = 27$$

$$27 \times 4 - 4 = 104$$

$$104 \times 5 - 5 = 515$$

Similarly,

$$(a) \Rightarrow 9 \times 1 - 1 = 8$$

$$(b) \Rightarrow 8 \times 2 - 2 = 14$$

$$(c) \Rightarrow 14 \times 3 - 3 = 39$$

$$(d) \Rightarrow 39 \times 4 - 4 = \mathbf{152}$$

19. (5) The pattern of the given series is :

$$6 \times 2 + 2^2 = 12 + 4 = 16$$

$$16 \times 3 + 3^2 = 48 + 9 = 57$$

$$57 \times 4 + 4^2 = 228 + 16 = 244$$

Similarly,

$$(a) \Rightarrow 4 \times 2 + 2^2 = 8 + 4 = 12$$

$$(b) \Rightarrow 12 \times 3 + 3^2 = 36 + 9 = 45$$

$$(c) \Rightarrow 45 \times 4 + 4^2 = 180 + 16 = 196$$

$$(d) \Rightarrow 196 \times 5 + 5^2 = 980 + 25 = \mathbf{1005}$$

20. (3) The pattern of the given series is :

$$8 \times 1 + 1 = 9$$

$$9 \times 2 + 2 = 20$$

$$20 \times 3 + 3 = 63$$

$$63 \times 4 + 4 = 256$$

Similarly,

$$(a) \Rightarrow 5 \times 1 + 1 = 6$$

$$(b) \Rightarrow 6 \times 2 + 2 = 14$$

$$(c) \Rightarrow 14 \times 3 + 3 = 45$$

$$(d) \Rightarrow 45 \times 4 + 4 = 184$$

$$(e) \Rightarrow 184 \times 5 + 5 = \mathbf{925}$$

21. (3) The pattern of the number series is :

$$4 \times 0.5 + 1 = 2 + 1 = 3$$

$$3 \times 1 + 1.5 = 3 + 1.5 = 4.5$$

$$4.5 \times 1.5 + 2 = 6.75 + 2$$

$$= 8.75 \neq \mathbf{8.5}$$

$$8.75 \times 2 + 2.5 = 17.5 + 2.5 = 20$$

$$20 \times 2.5 + 3 = 50 + 3 = 53$$

22. (2) The pattern of the number series is :

$$12000 \div 5 - 5 = 2400 - 5 = 2395$$

$$2395 \div 5 - 5 = 479 - 5$$

$$= 474 \neq \mathbf{472}$$

$$474 \div 5 - 5 = 94.8 - 5 = 89.8$$

$$89.8 \div 5 - 5 = 17.96 - 5 = 12.96$$

23. (5) The pattern of the number series is :

$$1 \times 1 + 7 \times 1 = 1 + 7 = 8$$

$$8 \times 2 + 6 \times 2 = 16 + 12 = 28$$

$$28 \times 3 + 5 \times 3 = 84 + 15 = 99$$

$$99 \times 4 + 4 \times 4 = 396 + 16 = 412$$

$$412 \times 5 + 3 \times 5 = 2060 + 15 = 2075$$

$$2075 \times 6 + 2 \times 6 = 12450 + 12$$

$$= 12462 \neq \mathbf{12460}$$

24. (1) The pattern of the number series is :

$$144 \times 1.5 = 216 \neq \mathbf{215}$$

$$216 \times 2.5 = 540$$

$$540 \times 3.5 = 1890$$

$$1890 \times 4.5 = 8505$$

$$8505 \times 5.5 = 46777.5$$

25. (5) The pattern of the number series is :

$$2222 - 7^3 = 2222 - 343 = 1879$$

$$1879 - 6^3 = 1879 - 216 = 1663$$

$$1663 - 5^3 = 1663 - 125 = 1538$$

$$1538 - 4^3 = 1538 - 64 = 1474$$

$$1474 - 3^3 = 1474 - 27 = 1447$$

$$1447 - 2^3 = 1447 - 8$$

$$= 1439 \neq 440$$

26. (4) The pattern is :

$$2^3 + 1^2 = 9$$

$$3^3 + 2^2 = 31$$

$$4^3 + 3^2 = 73$$

$$5^3 + 4^2 = 141$$

$$6^3 + 5^2 = \mathbf{241}$$

27. (4) The pattern is :

$$\begin{aligned}
 35 + 221 &= 256 \\
 256 + (221 - 26) &= 451 \\
 451 + 169 (=195 - 26) &= 620 \\
 620 + 143 (=169 - 26) &= 763 \\
 763 + 117 &= \mathbf{880}
 \end{aligned}$$

28. (3) The pattern is :

$$\begin{aligned}
 130 + 3^2 &= 139 \\
 139 + 4^2 &= 155 \\
 155 + 5^2 &= 180 \\
 180 + 6^2 &= 216 \\
 216 + 7^2 &= \mathbf{265}
 \end{aligned}$$

29. (2) The pattern is :

$$\begin{aligned}
 658 + 72 &= 730 \\
 730 + 144 &= 874 \\
 874 + 288 &= 1162 \\
 1162 + 576 &= \mathbf{1738}
 \end{aligned}$$

30. (2) The pattern is :

$$\begin{aligned}
 14 + 990 &= 1004 \\
 1004 + \frac{990}{5} &= 1202 \\
 1202 + \frac{1202}{4} &= 1251.5 \\
 1251.5 + 16.5 \left(\frac{49.5}{3} \right) &= 1268
 \end{aligned}$$

31. 1268 + 8.25 = **1276.25**

(3) The pattern is :

$$\begin{aligned}
 576 - 224 &= 352 \\
 752 - 576 &= 176 \\
 840 - 752 &= 88 \\
 884 - 840 &= 44 \\
 \therefore ? &= 884 + 22 = \mathbf{906}
 \end{aligned}$$

32. (4) The pattern is :

$$\begin{aligned}
 55 + 11.15 &= 66.15 \\
 66.15 + 2 \times 11.15 &= 88.45 \\
 88.45 + 3 \times 11.15 &= 121.9 \\
 121.9 + 4 \times 11.15 &= 166.5 \\
 166.5 + 5 \times 11.15 &= 166.5 + 55.75 = \mathbf{222.25}
 \end{aligned}$$

33. (5) The pattern is

$$\begin{aligned}
 36 + 13 &= 49 \\
 49 + 2 \times 13 &= 75 \\
 75 + 13 &= 88 \\
 88 + 2 \times 13 &= 114 \\
 114 + 13 &= \mathbf{127}
 \end{aligned}$$

INSURANCE EXAMS

1. (2) The series is based on following pattern :

$$\begin{aligned}
 3 + 4 \times (2)^0 &= 7 \\
 7 + 11 &= 18 \\
 18 + 4 \times (2)^1 &= 26 \\
 26 + 11 &= \mathbf{37} \\
 37 + 4 \times (2)^2 &= 53 \\
 53 + 11 &= 64
 \end{aligned}$$

$$64 + 4 \times (2)^3 = 96$$

Therefore, the number 37 will come in place of question mark (?) in the series.

2. (3) The series is based on following pattern :

$$\begin{aligned}
 1.7 + 1.5 &= 3.2 \\
 3.2 - 0.5 &= 2.7 \\
 2.7 + 1.5 &= 4.2 \\
 4.2 - 0.5 &= 3.7 \\
 3.7 + 1.5 &= \mathbf{5.2} \\
 5.2 - 0.5 &= 4.7 \\
 4.7 + 1.5 &= 6.2
 \end{aligned}$$

Therefore, the number 5.2 will come in place of question mark (?) in the series.

3. (3) The original series is based on following pattern:

$$\begin{aligned}
 1 \\
 8 \times \frac{1}{2} &= 4 \\
 4 \times \frac{1}{1} &= 4 \\
 4 \times 1.5 &= 6 \\
 6 \times 2 &= 12 \\
 12 \times 2.5 &= 30 \\
 30 \times 3 &= 90
 \end{aligned}$$

Therefore, the number 28 is wrong. Hence, the new series is as follows:

$$\begin{aligned}
 1 \\
 28 \times \frac{1}{2} &= 14 \quad \dots 2^{\text{nd}} \text{ term} \\
 14 \times \frac{1}{1} &= 14 \quad \dots 3^{\text{rd}} \text{ term} \\
 14 \times 1.5 &= \mathbf{21 - 4^{\text{th}} \text{ term}} \\
 21 \times 2 &= 42
 \end{aligned}$$

Therefore, the fourth term of new series is 21.

4. (2) The original series is based on following pattern:

$$\begin{aligned}
 17 + 0.25 \times (1)^2 &= 17.25 \\
 17.25 + 0.25 \times (2)^2 &= 18.25 \\
 18.25 + 0.25 \times (3)^2 &= \mathbf{20.50}
 \end{aligned}$$

$$\begin{aligned}
 20.50 + 0.25 \times (4)^2 &= 24.50 \\
 24.50 + 0.25 \times (5)^2 &= 30.75
 \end{aligned}$$

Therefore, the number 20.75 is wrong.

Hence, the new series is as follows:

$$\begin{aligned}
 20.75 + 0.25 \times 1^2 &= 21.00 \quad \dots 2^{\text{nd}} \text{ term} \\
 21.00 + 0.25 \times (2)^2 &= 22.00 \quad \dots 3^{\text{rd}} \text{ term} \\
 22.00 + 0.25 \times (3)^2 &= 24.25 \quad \dots 4^{\text{th}} \text{ term}
 \end{aligned}$$

Therefore, the fourth term of the new series is 24.25.

5. (1) The original series is based on following pattern:

$$\begin{aligned}
 438 + (7)^2 &= 487 \\
 487 - (6)^2 &= \mathbf{451} \\
 451 + (5)^2 &= 476 \\
 476 + (4)^2 &= 460 \\
 460 + (3)^2 &= 469
 \end{aligned}$$

Therefore, the number 447 is wrong. Hence the new series is as follows:

$$447 + (7)^2 = 496 \text{2}^{\text{nd}} \text{ term}$$

$$496 - (6)^2 = 460 \text{3}^{\text{rd}} \text{ term}$$

$$460 + (5)^2 = \mathbf{485 - 4}^{\text{th}} \text{ term}$$

$$485 - (4)^2 = 469$$

Therefore, the fourth term of the new series is 485.

6. (5) The original series is based on following pattern:

$$2 \times 2 + 3 = 7$$

$$7 \times 2 + 5 = \mathbf{19}$$

$$19 \times 2 + 7 = 45$$

$$45 \times 2 + 9 = 99$$

$$99 \times 2 + 11 = 209$$

$$209 \times 2 + 13 = 431$$

Therefore, the number 18 is wrong.

Hence, the new series is as follows:

$$18 \times 2 + 3 = 39 \text{ — 2nd term}$$

$$39 \times 2 + 5 = 83 \text{ — 3}^{\text{rd}} \text{ term}$$

$$83 \times 2 + 7 = \mathbf{173 - 4}^{\text{th}} \text{ term}$$

$$173 \times 2 + 9 = 355$$

Therefore, the fourth term of the new series is 173,

7. (4) The original series is based on following pattern:

$$6 \times 1 + 1 \times 2 = 8$$

$$8 \times 2 - 2 \times 3 = 10$$

$$10 \times 3 + 3 \times 4 = 42$$

$$42 \times 4 - 4 \times 5 = 148$$

$$148 \times 5 + 5 \times 6 = 770$$

$$770 \times 6 - 6 \times 7 = 4578$$

Therefore, the number 146 is wrong.

Hence, the new series is as follows:

$$146 \times 1 + 1 \times 2 = 148$$

$$= 2^{\text{nd}} \text{ term}$$

$$148 \times 2 - 2 \times 3$$

$$= 290 \text{ -- 3}^{\text{rd}} \text{ term}$$

$$290 \times 3 + 3 \times 4$$

$$= \mathbf{882 - 4}^{\text{th}} \text{ term}$$

Therefore, the fourth term of the new series is 882.

8. (1) The given number series is based on the following pattern

Hence the wrong number is 6.

9. (2) The given number series is based on the following pattern :

10.

Hence, the wrong number is 75.

(4) The given number series is based on the following pattern:

$$4 - 3 = 1^2$$

$$13 - 4 = 9 = 3^2$$

$$38 - 13 = 25 = 5^2$$

$$87 - 38 = 49 = 7^2$$

$$168 - 87 = 81 = 9^2$$

$$289 - 168 = 121 = 11^2$$

Obviously, 166 is the wrong number.

11.

(3) The number series follows the rule as mentioned below:

12.

Hence 29 is the wrong number.

(5) The followed pattern is :

13.

Hence the wrong number is 176.

(5) The pattern of the number series is :

$$3 + 7^2 = 3 + 49 = 52$$

$$52 + 6^2 = 52 + 36 = 88$$

$$88 + 5^2 = 88 + 25 = 113$$

$$113 + 4^2 = 113 + 16 = 129$$

$$129 + 3^2 = 129 + 9 = \mathbf{138}$$

14.

(3) The pattern of the number series is :

$$2 \times 1 + 1 = 3$$

$$3 \times 2 + 2 = 8$$

$$8 \times 3 + 3 = \mathbf{27}$$

$$27 \times 4 + 4 = 112$$

$$112 \times 5 + 5 = 565$$

15.

(1) The pattern of the number series is :

$$6 \times 0.5 + 1 = 4$$

$$4 \times 1.5 + 2 = 8$$

$$8 \times 2.5 + 3 = 23$$

$$23 \times 3.5 + 4 = \mathbf{84.5}$$

$$84.5 \times 4.5 + 5 = 385.25$$

16.

(4) The pattern of the number series is :

$$2^3 = 8;$$

$$4^3 = 64$$

$$6^3 = 216;$$

$$8^3 = 512$$

$$10^3 = \mathbf{1000};$$

$$12^3 = 1728$$

17.

(2) The pattern of the number series is :

$$5 \times 1 + 1 \times 6 = 11$$

$$11 \times 2 + 2 \times 5 = 32$$

$$32 \times 3 + 3 \times 4 = 108$$

$$108 \times 4 + 4 \times 3 = 444$$

$$444 \times 5 + 5 \times 2 = \mathbf{2230}$$

18.

(3) $S = (1^2 - 2^2) + (3^2 - 4^2) + (5^2 - 6^2) + \dots$ to 100 terms

$$= -3 - 7 - 11 - 15 - \dots \text{ to 100 terms}$$

$$= - (3 + 7 + 11 + 15 + \dots \text{ to 100 terms})$$

$$100$$

$$= \frac{1}{2} [2 \times 3 + (100 - 1)4]$$

$$\left[S_n = \frac{n}{2} [2a + (n-1)d] \right]$$

$$= -50 \times 402 = -20100$$

19. (3) Tricky approach

$$\frac{3+5}{4} + \frac{7}{4} + \dots + \frac{17}{9} + \frac{19}{16}$$

$$4 \left(\frac{36}{1} \right) \left(\frac{44}{1} \right) \left(\frac{5184}{1} \right) \left(\frac{8100}{1} \right) \dots + \left(\frac{1}{81} \right) \left(\frac{1}{100} \right)$$

$$= \left(1 - \frac{1}{4} \right) + \left(1 - \frac{1}{9} \right) + \left(1 - \frac{1}{16} \right) + \dots + \left(1 - \frac{1}{81} \right) + \left(1 - \frac{1}{100} \right)$$

$$= 1 - \frac{1}{100} = \frac{99}{100} = 0.99$$

20. (4) The pattern is :

$$8 + 6 = 14$$

$$14 + 18 (= 6 + 12) = 32$$

$$32 + 38 (= 18 + 20) = 70$$

$$70 + 66 (= 38 + 28) = 136$$

$$136 + 102 (= 66 + 36) = 238$$

21. (1) The pattern is :

$$25 + 1 \times 16 = 41$$

$$41 + 3 \times 16 = 41 + 48 = 89$$

$$89 + 5 \times 16 = 89 + 80 = 169$$

$$169 + 7 \times 16 = 169 + 112 = 281$$

$$281 + 9 \times 16 = 281 + 144 = 425$$

22. (2) The pattern is :

$$461 + 13 = 474$$

$$474 - 9 = 465$$

$$465 + 13 = 478$$

$$478 - 9 = 469$$

$$469 + 13 = 482$$

23. (5) The pattern is :

$$(980 \div 2) + 26 = 516$$

$$(516 \div 2) + 26 = 284$$

$$(284 \div 2) + 26 = 168$$

$$(168 \div 2) + 26 = 110$$

$$(110 \div 2) + 26 = 81$$

24. (5) The pattern is :

$$4 + 0 = 4$$

$$4 + 6 = 10$$

$$10 + 24 (= 6 + 18) = 34$$

$$34 + 60 (= 6 + 54) = 94$$

$$94 + 168 (= 6 + 162) = 262$$

25. (1) Expression =

$$(1 + 7 + 13 + 19 + \dots + 61) + (3 - 5 + 9 - 11 + \dots + 63 - 65)$$

$$= (1 + 7 + 13 + \dots + 61) - 2 \times 11$$

$$\text{First Part} = 1 + 7 + 13 + \dots + 61$$

$$t_n = a + (n-1)d$$

$$\Rightarrow 61 = 1 + (n-1)d$$

$$\Rightarrow 61 - 1 = (n-1)d$$

$$\Rightarrow (n-1)d = 60$$

$$\Rightarrow n-1 = 10$$

$$\Rightarrow n = 11$$

$$S_n = \frac{n}{2} [2a + (n-1)d]$$

$$= \frac{11}{2} (1 + 61) = 341$$

$$\therefore \text{Expression} = 341 - 22 = 319$$

26. (1) $x = \frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \dots + \frac{1}{n} + \frac{1}{n+1}$

$$= 1 - \frac{1}{2} + \frac{1}{2} - \frac{1}{3} + \frac{1}{3} - \frac{1}{4} + \dots + \frac{1}{n} - \frac{1}{n+1} + \frac{1}{n+1}$$

$$\frac{1}{8} + \frac{1}{7 \times 9}$$

$$= 1 - \frac{1}{8} + \frac{1}{63}$$

$$= \frac{504 - 63 + 8}{8 \times 63} = \frac{449}{504}$$

$$\frac{1}{504}$$

$$\therefore x = \frac{449}{504} \approx 1.1$$

27.

$$(4) \left(1 - \frac{1}{2^2} \right) \left(1 - \frac{1}{3^2} \right) \left(1 - \frac{1}{4^2} \right) \dots \left(1 - \frac{1}{2011^2} \right) =$$

$$\frac{x}{2 \times 2011}$$

$$\left(1 - \frac{1}{2} \right) \left(1 + \frac{1}{2} \right) \left(1 - \frac{1}{3} \right) \left(1 + \frac{1}{3} \right) \left(1 - \frac{1}{4} \right) \left(1 + \frac{1}{4} \right) \dots$$

$$\left(1 - \frac{1}{5} \right) \left(1 + \frac{1}{5} \right) \dots \left(1 - \frac{1}{2011} \right) \left(1 + \frac{1}{2011} \right)$$

$$= \frac{x}{2 \times 2011}$$

$$\Rightarrow 2 \times 2 \times 3 \times 4 \times 5 \times 6 \times \dots \times 2010 \times 2012 \times 2011 \times 2011 = 2 \times 2011$$

$$2011 \times 2011 = 2 \times 2011$$

$$\Rightarrow 2 \times 2011 = 2 \times 2011$$

$$\Rightarrow x = 2012$$

(2) The pattern is :

$$1050 - 30 = 510$$

$$2$$

- $$\frac{510 - 26}{2} = 242$$

$$\frac{242 - 22}{2} = 100 \neq \mathbf{106}$$

$$\frac{110 - 18}{2} = 46$$

$$\frac{46 - 14}{2} = 16.$$
29. (1) The pattern is
 $550 - 2^2 = 550 - 4 = 546$
 $546 - 3^2 = 546 - 9 = 537$
 $537 - 4^2 = 537 - 16 = 521$
 $521 - 5^2 = 521 - 25 = 496 \neq \mathbf{494}$
 $496 - 6^2 = 496 - 36 = 460$
30. (3) The pattern is ;
 $8 + 1 \times 13 = 21$
 $21 + 2 \times 13 = 21 + 26 = 47$
 $47 + 3 \times 13 = 47 + 39 = 86$
 $86 + 4 \times 13 = 86 + 52 = 138 \neq \mathbf{140}$
 $138 + 5 \times 13 = 138 + 65 = 203$
 $203 + 6 \times 13 = 203 + 78 = 281$
31. (2) The pattern is ;
 $4 \times 8 - 8 = 32 - 8 = 24$
 $24 \times 7 - 7 = 168 - 7 = 161$
 $161 \times 6 - 6 = 966 - 6 = 960 \neq \mathbf{965}$
 $960 \times 5 - 5 = 4800 - 5 = 4795$
32. (3) The pattern is :
 $1 \times 2 = 2$
 $2 \times 3 = 6 \neq \mathbf{8}$
 $6 \times 4 = 24$
 $24 \times 5 = 120$
 $120 \times 6 = 720$

33. (2) The given number series is based on the following pattern :
 $1548 \div 3 = 516$
 $516 \div 4 = 129$
 $129 \div 3 = 43$
 $43 \div 4 = \mathbf{10.75}$
 Hence, 10.75 will replace the question mark.
34. (4) The given number series is ' based on the following pattern :
 $949 \times 0.2 = 189.8$
 $189.8 \times 0.3 = \mathbf{56.94}$
 $56.94 \times 0.4 = 22.776$
 $22.776 \times 0.5 = 11.388$
 $11.388 \times 0.6 = 6.8328$
 Hence, 56.94 will replace the question mark.
35. (1) The given number series is based on the following pattern :
 $121 + 23 \times 1 = 144$
 $144 + 23 \times 2 = 190$
 $190 + 23 \times 3 = 259$
 $\therefore ? = 259 + 23 \times 4 = 259 + 92 = \mathbf{351}$
 Hence, 351 will replace the question mark.
36. (5) The given number series is based on the following pattern :
 $14 \times 3 + 1.5 = 43.5$
 $43.5 \times 6 + 1.5 \times 2 = 264$
 $264 \times 12 + 1.5 \times 4 = \mathbf{3174}$
 $3174 \times 24 + 1.5 \times 8 = 76188$
 Hence, 3174 will replace the question mark.
37. (3) The given number series is based on the following pattern :
 $41 \times 2^2 = 164$
 $164 \times 4^2 = 2624$
 $2624 \times 6^2 = \mathbf{94464}$
 $94464 \times 8^2 = 6045696$
 Hence 94464 will replace the question mark.
38. (1) The pattern is :
 $2 + 3 = 5$
 $5 + 4 = 9$
 $6 + 5 = \mathbf{14}$
 $14 + 6 = 20$
 $20 + 7 = 27$

MODEL EXERCISES

1. The interior angles of a polygon are in AP, the smallest angle is 120° and the common difference is 5. Then, the number of sides of the polygon are —
 (1) 16 (2) 9
 (3) 8 (4) 12
 (5) None of these
 2. A man arranges to pay off a debt of Rs 3600 in 40 annual instalments which form an AP. When 30 of the instalments are paid, he dies leaving one-third of the debt unpaid. Find the value of the first instalment.
 (1) 55 (2) 53
 (3) 51 (4) 49
 (5) None of these
 3. Find $1^3 + 2^3 + 3^3 + \dots + 15^3$
 (1) 11025 (2) 13400
 (3) 900 (4) 14400
 (5) None of these
 4. The value of $(1^3 + 2^3 + 3^3 + \dots + 15^3) - (1 + 2 + 3 + \dots + 15)$ is —
 (1) 14280 (2) 14400
 (3) 12280 (4) 13280
 (5) None of these
 5. What is the next number in the series given below ?
 53, 48, 50, 50, 47
 (1) 51 (2) 46
 (3) 53 (4) 52
 (5) None of these
 6. In a GP, the first term is 5 and the common ratio is 2. The eighth term is —
 (1) 640 (2) 1280
 (3) 256 (4) 160
 (5) None of these
 7. If the arithmetic mean of two numbers is 5 and geometric mean is 4, then the numbers are —
 (1) 4, 6 (2) 4, 7
 (3) 3, 8 (4) 2, 8
 (5) None of these
 8. What is the next number in the series given below ?
 2, 5, 9, 14, 20
 (1) 25 (2) 26
 (3) 27 (4) 28
 (5) None of these
 9. The sum of 40 terms of an AP whose first term is 4 and common difference is 4, will be —
 (1) 3200 (2) 1600
 (3) 200 (4) 2800
 (5) None of these
 10. Let S_n denote the sum of the first 'n' terms of an AP
 $S_{2n} = 3S_n$. Then, the ratio $\frac{S_{3n}}{S_n}$ is equal to
 (1) 4 (2) 6
 (3) 8 (4) 10
 (5) None of these
 11. The missing number in the series 8, 24, 12, 36, 18, 54 is —
 (1) 27 (2) 108
 (3) 68 (4) 72
 (5) None of these
 12. The sum of the 6th and 15th elements of an arithmetic progression is equal to the sum of 7th, 10th and 12th elements of the same progression. Which element of the series should necessarily be equal to zero ?
 (1) 10th (2) 8th
 (3) 1st (4) 9th
 (5) None of these
 13. If p, q, r, s are in harmonic progression and $p > s$, then —
 $\frac{1}{p} < \frac{1}{q}$ (1) $ps < qr$ (2) $q + r = p + s$
 $\frac{1}{q} < \frac{1}{p}$ (3) $q + p = r + s$ (4) None of these
- (MAT Exam. Sept. 2003)**
14. What is the eighth term of the sequence 1, 4, 9, 16, 25 ?
 (1) 8 (2) 64
 (3) 128 (4) 200
 (5) None of these
 15. In a geometric progression, the sum of the first and the last term is 66 and the product of the second and the last but one term is 128. Determine the first term of the series.
 (1) 64 (2) 64 or 2
 (3) 2 or 32 (4) 32
 (5) None of these
 16. A sequence is generated by the rule that the xth term is $x^2 + 1$ for each positive integer x. In this sequence, for any value $x > 1$, the value of (x + 1)th term less the value of xth term is —
 (1) $2x^2 + 1$ (2) $x^2 + 1$
 (3) $2x + 1$ (4) $x + 2$
 (5) None of these
 17. Four different integers form an increasing AP. If one of these numbers is equal to the sum of the squares of the other three numbers, then the numbers are —

- (1) 18 (2) 21
(3) 24 (4) 27
(5) None of these

SHORT ANSWERS

- | | | | |
|-----|-----|-----|-----|
| 1. | (2) | 2. | (3) |
| 3. | (4) | 4. | (1) |
| 5. | (4) | 6. | (1) |
| 7. | (4) | 8. | (3) |
| 9. | (1) | 10. | (2) |
| 11. | (1) | 12. | (2) |
| 13. | (4) | 14. | (1) |
| 15. | (4) | 16. | (2) |
| 17. | (2) | 18. | (3) |
| 19. | (3) | | |
| 1. | (4) | 2. | (1) |
| 3. | (4) | 4. | (3) |
| 5. | (2) | 6. | (3) |
| 7. | (5) | 8. | (2) |
| 9. | (1) | 10. | (4) |
| 11. | (3) | 12. | (5) |
| 13. | (2) | 14. | (1) |
| 15. | (4) | 16. | (1) |
| 17. | (5) | 18. | (1) |
| 19. | (1) | | |

EXPLANATIONS

1. (2) Let the polygon has n sides.
Given, the smallest interior angle is 120° ,
hence the greatest exterior angle will be
 $(180^\circ - 120^\circ) = 60^\circ$
We know sum of exterior angles of a polygon
 $= 360^\circ$
 $60 + 55 + 50 + \dots = 360$
{Common difference = -5 }
- $$\therefore \sum_{n=1}^n [2a + (n-1)d] = 360$$
- $$\therefore \sum_{n=1}^n [120 + (n-1) \times -5] = 360$$
- $$\Rightarrow n^2 - 25n + 144 = 0$$
- $$\Rightarrow n = 9, 16$$
- Number of sides cannot be 16.
Hence, $n = 9$
2. (3) According to question,
Sum of 40 instalments S_{40}
 $= 3600 = 20(2a + 39d)$
 $\Rightarrow 2a + 39d = 180 \dots(i)$
Sum of 30 instalments
 $S_{30} = 2400 = 15(2a + 29d)$
 $\Rightarrow 2a + 29d = 160 \dots(ii)$
Solving Eqs. (i) and (ii), we get
 $a = 51$ and $d = 2$
 \therefore The value of first instalment
 $= \text{Rs } 51$
3. (4) According to question, we have,

$$1^3 + 2^3 + 3^3 + \dots + n^3 = \left[\frac{n \times (n+1)}{2} \right]^2$$

Here, n = number of terms = 15

$$\therefore \left[\frac{n(n+1)}{2} \right]^2 = \left[\frac{15 \times 16}{2} \right]^2$$

$$= (120)^2 = 14400$$

4. (1) According to question,
 $(1^3 + 2^3 + 3^3 + \dots + 15^3) -$
 $(1 + 2 + 3 + \dots + 15)$

$$\left[\frac{n(n+1)}{2} \right]^2 - \left[\frac{n(n+1)}{2} \right]$$

$$= \left[\frac{15 \times 16}{2} \right]^2 - \left[\frac{15 \times 16}{2} \right]$$

$$= (120)^2 - (120)$$

$$= 120 \times 119 = 14280$$

5. (4) According to question,
53, 48, 50, 50, 47....

The above series can be splitted into two
series one in ascending order and other
in descending order 53, 50, 47 and other
is 48, 50, 52.

Hence, 52 will be the next number.

6. (1) According to question,
 n th term of a GP = a^{n-1}
 \therefore 8th term = $5 \times (2)^{8-1} = 5 \times (2)^7$
 $= 5 \times 128 = 640$
7. (4) Let the two numbers be x and y .
Then, AM,

$$\frac{x+y}{2} = 5$$

$$\Rightarrow x + y = 10$$

and GM, = $\sqrt{xy} \dots(i)$

$$\Rightarrow xy = 16$$

$$\Rightarrow (x-y)^2 = (x+y)^2 - 4xy$$

$$100 - 64 = 36$$

$$x - y = 6 \dots(ii)$$

Or

Solving Eqs. (i) and (ii),

$$x = 8 \text{ and } y = 2$$

8. (3) According to question,
 $2 + 3 = 5; \quad 5 + 4 = 9;$
 $9 + 5 = 14; \quad 14 + 6 = 20;$
 $20 + 7 = 27$

Hence, the next number of the series will
be 27.

9. (1) According to question,

$$S_{40} = \sum_{n=1}^n [2a + (n-1)d]$$

$$= 20 [4 + 39 \times 4]$$

$$= 20 \times 160 = 3200$$

10. (2) Let a be the first term and d be the common difference.

$$\text{Then, } S_n = \frac{n}{2} [2a + (n-1)d]$$

$$S_2 = \frac{2n}{2} [2a + (2n-1)d]$$

$$\text{and } S_{3n} = \frac{3n}{2} [2a + (3n-1)d]$$

$$\text{Given, } S_{2n} = 3S_n$$

$$\therefore \frac{2n}{2} [2a + (2n-1)d] = \frac{n}{2} [2a + (n-1)d]$$

$$\Rightarrow 4a + (4n-2)d = 6a + (3n-3)d$$

$$\Rightarrow d(4n-2-3n+3) = 2a$$

$$\Rightarrow d = \frac{2a}{n+1}$$

$$\therefore S_n = \frac{2an^2}{n+1}$$

$$\text{and } S_{3n} = \frac{12an^2}{n+1}$$

$$\therefore \frac{S_n}{S_{3n}} = \frac{2an^2}{12an^2} = \frac{n+1}{n+1} = \frac{1}{6} = \frac{S_n}{S_{3n}} = 6$$

11. (1) According to question, 8, 24, 12, 36, 18, 54

Hence, 27 will come in the blank space.

12. (2) Let the first term and common term of the AP be a and d respectively.

$$\text{Then, } (a+5d) + (a+14d) = (a+6d) + (a+9d) + (a+11d)$$

$$\Rightarrow 2a + 19d = 3a + 26d$$

$$\Rightarrow a + 7d = 0$$

$$\therefore 8\text{th term is } 0.$$

13. (4) According to question, If p, q, r, s are in HP.

$$\Rightarrow \frac{1}{p}, \frac{1}{q}, \frac{1}{r}, \frac{1}{s} \text{ are in AP}$$

$$\Rightarrow \frac{1}{q} - \frac{1}{p} = \frac{1}{s} - \frac{1}{r}$$

$$\frac{1}{q} - \frac{1}{p} = \frac{1}{s} - \frac{1}{r}$$

14. Hence the none of these be answer (2) According to question,

$$1, 4, 9, 16, 25$$

$$(1)^2 (2)^2 (3)^2 (4)^2 (5)^2$$

Each term of the progression is the square of a natural number.

Hence, the eighth term of the sequence will be $(8)^2 = 64$

15. (2) Let the last term be n , then $a + ar^{n-1} = 66$

$$\text{and } ar. ar^{n-2} = 128$$

$$a^2 r^{n-1} = 128$$

From Eqs. (i) and (ii),

$$a(66 - a) = 128$$

$$\Rightarrow a^2 - 66a + 128 = 0$$

$$\Rightarrow a = 64, 2$$

16. (3) According to question,

$$(x+1)^{\text{th}} \text{ term} - x^{\text{th}} \text{ term}$$

$$= (x+1)^2 + 1 - (x^2 + 1)$$

$$= x^2 + 2x + 1 + 1 - x^2 - 1$$

$$= 2x + 1$$

17. (3) By hit and trial or common sense, we have,

$$2 = (-1)^2 + (0)^2 + (1)^2$$

Hence the numbers are -1, 0, 1, 2

18. (2) According to question,

$$T_5 = a + (n-1)d$$

$$2 = -14 + 4d$$

$$d = \frac{16}{4} = 4$$

$$\therefore S_n = \frac{n}{2} [2a + (n-1)d]$$

$$40 = \frac{n}{2} [-28 + (n-1) \times 4]$$

$$\Rightarrow 80 = -28n + 4n^2 - 4n$$

$$\Rightarrow 4n^2 - 32n - 80 = 0$$

$$n^2 - 8n - 20 = 0$$

$$\Rightarrow (n-10)(n+2) = 0$$

$$\therefore n = 10 (\because n \neq -2)$$

19. (3) According to question,

$$a = -3, d = 3$$

$$\therefore T_n = a + (n-1)d$$

$$T_{10} = -3 + 9 \times 3 = 24$$

NUMBER SERIES-264

Directions (Q. 1-5): In each of the following number series, a wrong number is given. Find out that number.

1. 1, 12, 31, 63, 101, 156, 227
 (1) 31 (2) 63 (3) 101 (4) 156 (5) 227
2. 4, 9, 28, 99, 415, 2105, 12660
 (1) 9 (2) 28 (3) 99 (4) 415 (5) 2105
3. 7, 26, 64, 124, 215, 342, 511
 (1) 26 (2) 64 (3) 124 (4) 215 (5) 342
4. 9, 28, 63, 120, 205, 323, 483
 (1) 28 (2) 63 (3) 120 (4) 205 (5) 323
5. 26, 57, 102, 164, 250, 366, 518
 (1) 57 (2) 102 (3) 164 (4) 250 (5) 366

Directions (Q. 6-10): In each of the following number series, a wrong number is given. Find out the wrong number.

6. 30, 210, 742, 1716, 3390, 5814
 (1) 210 (2) 742 (3) 1716 (4) 3390 (5) 5814
7. 1440, 1152, 930, 766, 651, 580, 542
 (1) 930 (2) 766 (3) 651 (4) 580 (5) 542
8. 18, 59, 187, 576, 1749, 5269
 (1) 59 (2) 187 (3) 576 (4) 1749 (5) 5269
9. 7, 22, 64, 216, 898, 4525, 27190
 (1) 64 (2) 216 (3) 898 (4) 4525 (5) 27190
10. 16, 9278, 15109, 18484, 20212, 20941, 21157
 (1) 9278 (2) 15109 (3) 18484 (4) 20212 (5) 20941

Directions (Q. Nos. 11-15) What will come in place of question mark (?) in the following number series?

11. 1 7 49 343 (?)
 (1) 16807 (2) 1227 (3) 2058 (4) 2401 (5) None of these
12. 13 20 39 78 145 (?)
 (1) 234 (2) 244 (3) 236 (4) 248 (5) None of these
13. 12 35 81 173 357 (?)
 (1) 725 (2) 715 (3) 726 (4) 736 (5) None of these
14. 3 100 297 594 991 (?)
 (1) 1489 (2) 1479 (3) 1478 (4) 1498 (5) None of these
15. 112 119 140 175 224 (?)
 (1) 277 (2) 276 (3) 287 (4) 266 (5) None of these

Directions (Q. 16 - 20): In each of the following number series, a wrong number is given. Find out that number.

16. 4, 5, 18, 80, 388, 2065, 12606
 (1) 5 (2) 18 (3) 80 (4) 388 (5) 2065
17. 22, 51, 88, 133, 186, 248, 316
 (1) 51 (2) 88 (3) 133 (4) 186 (5) 248
18. 7, 9, 21, 57, 137, 284, 539
 (1) 9 (2) 21 (3) 57 (4) 137 (5) 284

19. 3, 17, 83, 371, 1907, 11507, 80627
 (1) 17 (2) 83 (3) 371 (4) 1907 (5) 11507
20. 8, 9, 25, 105, 362, 987, 2283
 (1) 9 (2) 25 (3) 105 (4) 362 (5) 987

Directions (Q. 21-25): In each of the following number series, a wrong number is given. Find out the wrong number.

21. 6, 39, 213, 1090, 5496, 27525
 (1) 39 (2) 213 (3) 1090 (4) 5496 (5) 27525
22. 17, 141, 358, 701, 1213, 1942
 (1) 141 (2) 358 (3) 701 (4) 1213 (5) 1942
23. 6, 14, 51, 249, 1486, 10401
 (1) 14 (2) 51 (3) 249 (4) 1486 (5) 10401
24. 8, 24, 88, 232, 488, 887
 (1) 24 (2) 88 (3) 232 (4) 488 (5) 887
25. 8, 21, 85, 421, 2521, 17641
 (1) 21 (2) 85 (3) 421 (4) 2521 (5) 17641

Directions (Q. 26-30): In each of the following number series, a wrong number is given. Find out the wrong number.

26. 13, 16, 38, 124, 504, 2535
 (1) 16 (2) 38 (3) 124 (4) 504 (5) 2535
27. 6, 10, 32, 111, 464, 2345
 (1) 10 (2) 32 (3) 111 (4) 464 (5) 2345
28. 8, 18, 64, 272, 1395, 8424
 (1) 18 (2) 64 (3) 272 (4) 1395 (5) 8424
29. 80, 105, 195, 478, 1350, 3975
 (1) 105 (2) 195 (3) 478 (4) 1350 (5) 3975
30. 8, 18, 78, 420, 2424, 15270
 (1) 18 (2) 78 (3) 420 (4) 2424 (5) 15270

Directions (Q. 31-35): What should come in place of question mark (?) in the following number series?

31. 9480, 5384, 8759, 6015, 8212, ?
 (1) 6218 (2) 6484 (3) 6692 (4) 6816 (5) None of these
32. 12, 21, 78, 458, 3649, ?
 (1) 36039 (2) 36248 (3) 36469 (4) 36878 (5) None of these
33. 8, 71, 565, 3950, 23693, ?
 (1) 118456 (2) 118214 (3) 118684 (4) 118724 (5) None of these
34. 6, 7, 9, 36, 40, ?
 (1) 92 (2) 108 (3) 148 (4) 151 (5) 165
35. 14, 24, 32, 44, 108, 122, ?
 (1) 212 (2) 338 (3) 436 (4) 647 (5) 555

Directions (Q.36-40) What will come in place of question mark (?) in the following number series ?

36. 17 19 33 (?) 129 227
 (1) 64 (2) 73 (3) 67 (4) 72 (5) None of these
37. 35 256 451 620 763 (?)
 (1) 680 (2) 893 (3) 633 (4) 880 (5) None of these

38. 18 139 868 917 (?) 1051
 (1) 1042 (2) 1036 (3) 942 (4) 996 (5) None of these ‘
39. 2890 (?) 1162 874 730 658
 (1) 1684 (2) 1738 (3) 1784 (4) 1672 (5) None of these
40. 14 1004 1202 1251.5 1268 (?)
 (1) 1267.5 (2) 1276.25 (3) 1324.5 (4) 1367.25 (5) None of these

Directions (Q. 41-45): Which is the next number in the given number series.

41. 8, 14, 40, 138, 576, ?
 (1) 2910 (2) 2915 (3) 2920 (4) 2925 (5) 2930
42. 17, 98, 260, 829, 3352, ?
 (1) 16680 (2) 16785 (3) 16890 (4) 16995 (5) 17000
43. 600, 120, 144, 316.8, ?
 (1) 1011.84 (2) 1012.96 (3) 1013.76 (4) 1014.12 (5) 1015.25
44. 472, 1450, 3406, 6340, 10252, ?
 (1) 15142 (2) 15144 (3) 15146 (4) 15148 (5) 15150
45. 8, 18, 42, 108, 300, 870, ?
 (1) 2570 (2) 2572 (3) 2574 (4) 2576 (5) 2578

Directions (Q. 46-50): What is the next number in the given number series?

46. 27, 1358, 3086, 5283, 8027
 (1) 11401 (2) 11402 (3) 11403 (4) 11404 (5) 11405
47. 17, 68, 238, 867, 3672, ?
 (1) 18611 (2) 18612 (3) 18613 (4) 18614 (5) 18615
48. 64, 96, 288, 1296, 7776, ?
 (1) 58310 (2) 58320 (3) 58330 (4) 58340 (5) 58350
49. 42, 50, 132, 468, 2000, ?
 (1) 10200 (2) 10300 (3) 10400 (4) 10500 (5) 10600
50. 96, 128, 371, 1395, 4520, ?
 (1) 12292 (2) 12294 (3) 12296 (4) 12298 (5) 12300

Directions (Q. 51-55): Which is the next number in the following number series?

51. 112, 229, 286, 520, 634, 985, ?
 (1) 1152 (2) 1154 (3) 1156 (4) 1158 (5) 1160
52. 17, 38, 122, 500, 2516, ?
 (1) 15115 (2) 15116 (3) 15117 (4) 15118 (5) 15119
53. 48, 72, 144, 360, 1080, ?
 (1) 3780 (2) 3782 (3) 3784 (4) 3786 (5) 3790
54. 7, 71, 583, 2311, 6407, 14407, ?
 (1) 24231 (2) 25231 (3) 26231 (4) 27231 (5) 28231
55. 19874, 19858, 19777, 19521, 18896, ?
 (1) 17600 (2) 17500 (3) 17400 (4) 17300 (5) 17200

Directions (Q. 56-60): What will be the next number in the following number series?

56. 15, 115, 126, 270, 283, 479, ?
 (1) 536 (2) 554 (3) 584 (4) 592 (5) None of these
57. 23, 312, 673, 1114, 1643, ?
 (1) 2024 (2) 2160 (3) 2268 (4) 2304 (5) 2412
58. 6, 28, 110, 476, 2426, ?
 (1) 14612 (2) 14512 (3) 14412 (4) 14312 (5) 14212

59. 15, 57, 168, 417, 942, ?
 (1) 1816 (2) 1904 (3) 2019 (4) 2146 (5) 2251

60. 12, 24, 44, 74, 116, ?
 (1) 164 (2) 172 (3) 178 (4) 184 (5) 196

Directions (Q. 61-65): Find the next number in the following number series.

61. 215, 302, 517, 732, 947, 1162, ?
 (1) 1372 (2) 1375 (3) 1377 (4) 1379 (5) 1381

62. 192, 292, 400, 516, 640, ?
 (1) 770 (2) 772 (3) 774 (4) 776 (5) 778

63. 19, 29, 41, 55, 71, ?
 (1) 89 (2) 91 (3) 93 (4) 95 (5) 97

64. 768, 512, 320, 192, 112, ?
 (1) 56 (2) 64 (3) 72 (4) 96 (5) 84

65. 18, 42, 78, 132, 210, ?
 (1) 310 (2) 312 (3) 314 (4) 316 (5) 318

Directions (Q. 66-70) : Find the next number in the place of question mark (?) in the following number series.

66. 4, 13, 54, 273, 1642, ?
 (1) 10432 (2) 10968 (3) 11120 (4) 11499 (5) 11562

67. 3, 14, 66, 312, 1640, ?
 (1) 9950 (2) 9960 (3) 9970 (4) 9980 (5) 9990

68. 3, 8, 16, 15, 42, 29, 81, ?
 (1) 50 (2) 54 (3) 72 (4) 78 (5) 96

69. 6, 42, 114, 258, 546, ?
 (1) 1116 (2) 1118 (3) 1120 (4) 1122 (5) 1124

70. 484, 729, 1024, 1369, 1764, ?
 (1) 2204 (2) 2206 (3) 2209 (4) 2212 (5) 2215

Directions (Q. 71-75) : What will be the next number in the following number series?

71. 27 76 272 713 1497 ?
 (1) 2720 (2) 2721 (3) 2722 (4) 2723 (5) 2724

72. 68 216 444 752 1140 ?
 (1) 1600 (2) 1602 (3) 1604 (4) 1606 (5) 1608

73. 7 14 35 78 151 262 ?
 (1) 417 (2) 419 (3) 421 (4) 423 (5) 425

74. 3 35 99 195 323 483 ?
 (1) 645 (2) 655 (3) 665 (4) 675 (5) 685

75. 5 7 19 49 105 195 ?
 (1) 323 (2) 325 (3) 327 (4) 329 (5) 331

Directions (Q. 76-80): What number should come in place of question mark in the following number series?

76. 5, 21, 57, 121, 221, 365, ?
 (1) 536 (2) 561 (3) 584 (4) 604 (5) 628

77. 5, 49, 481, 3841, ?
 (1) 23041 (2) 22031 (3) 21021 (4) 20011 (5) 19001

78. 8, 19, 52, 151, 448, ?

- (1) 1120 (2) 1148 (3) 1236 (4) 1284 (5) 1339
79. 9801, 9604, 9409, 9216, 9025, ?
 (1) 8836 (2) 8792 (3) 8688 (4) 8542 (5) 8466
80. 339, 733, 1327, 2201, 3371, ?
 (1) 4677 (2) 4757 (3) 4837 (4) 4917 (5) 5007

Directions (Q. 81-85): What will be the next number in the following number series?

81. 3, 14, 83, 254, 627, ?
 (1) 1292 (2) 1294 (3) 1296 (4) 1298 (5) 1300
82. 18, 31, 83, 317, 1565, ?
 (1) 9365 (2) 9375 (3) 9385 (4) 9395 (5) 9405
83. 43, 145, 381, 841, 1639, ?
 (1) 2911 (2) 2913 (3) 2915 (4) 2917 (5) 2919
84. 27, 38, 64, 86, 125, ?
 (1) 152 (2) 154 (3) 156 (4) 158 (5) 160
85. 12, 39, 120, 363, 1092, ?
 (1) 3275 (2) 3279 (3) 3284 (4) 3287 (5) 3291

Directions (Q. 86-88) : What will come in place of question mark (?) in the following number series?

86. 5 15 35 75 155 (?)
 (1) 295 (2) 315 (3) 275 (4) 305 (5) None of these
87. 3 6 18 72 360 (?)
 (1) 2160 (2) 1800 (3) 2520 (4) 1440 (5) None of these
88. 688 472 347 283 256 (?)
 (1) 236 (2) 229 (3) 255 (4) 248 (5) None of these

Directions (Q. 89-93): Find out the next number in place of question mark (?) in the following number series.

89. 25, 42, 85, 174, 335, ?
 (1) 525 (2) 575 (3) 600 (4) 612 (5) 650
90. 365, 728, 2160, 8532, 42340, ?
 (1) 253275. (2) 253280 (3) 253285 (4) 253290 (5) 253295
91. 62, 177, 512, 1507, 4482, ?
 (1) 13396 (2) 13397 (3) 13398 (4) 13399 (5) 13400
92. 21, 12342, 22543, 30824, 37385, ?
 (1) 42422 (2) 42424 (3) 42426 (4) 42428 (5) 42430'
93. 800, 160, 48, 19.2, 9.6 ?
 (1) 6.48 (2) 5.76 (3) 5.12 (4) 4.84 (5) 4.56

Directions (Q. 94-98): Find the next number in place of question mark (?) in the following number series.

94. 57, 66, 101, 192, 381, ?
 (1) 722 (2) 724 (3) 726 (4) 728 (5) 730'
95. 7, 19, 55, 163, 487, ?
 (1) 1451 (2) 1453 (3) 1455 (4) 1457 (5) 1459
96. 12, 28, 92, 236, 492, 892, ?
 (1) 1458 (2) 1468 (3) 1478 (4) 1488 (5) 1498
97. 8400, 7376, 6592, 6016, 5616, ?
 (1) 5360 (2) 5370 (3) 5380 (4) 5390 (5) 5400
98. 7.8, 20.6, 51.2, 117.4, 254.8, ?

- (1) 530.6 (2) 532.6 (3) 534.6 (4) 536.6 (5) 538.6

Directions (Q. 99-103) : Find the next number in the following number series.

- | | | | | | | | | | |
|------|----------|------|----------|------|----------|---|----------|--|-------------------|
| 99. | 63 | 95 | 119 | 135 | 143 | ? | | | |
| | (1) 151 | | (2) 157 | | (3) 162 | | (4) 168 | | (5) None of these |
| 100. | 4 | 20 | 101 | 357 | 982 | ? | | | |
| | (1) 1632 | | (2) 1848 | | (3) 2040 | | (4) 2278 | | (5) 2412 |
| 101. | 14 | 50 | 166 | 522 | 1598 | ? | | | |
| | (1) 4832 | | (2) 4834 | | (3) 4836 | | (4) 4838 | | (5) 4840 |
| 102. | 4830 | 4556 | 4290 | 4032 | 3782 | ? | | | |
| | (1) 3510 | | (2) 3520 | | (3) 3530 | | (4) 3540 | | (5) 3550 |
| 103. | 1320 | 1313 | 1288 | 1227 | 1106 | ? | | | |
| | (1) 875 | | (2) 880 | | (3) 885 | | (4) 890 | | (5) 895 |

Directions (Q.104-108) In each of these questions a number series is given. In each series only one number is wrong. Find out the wrong number.

- | | | | | | | | | |
|------|----------|------|----------|------|----------|------|-----------|----------|
| 104. | 5531 | 5506 | 5425 | 5304 | 5135 | 4910 | 4621 | |
| | (1) 5531 | | (2) 5425 | | (3) 4621 | | (4) 5135 | (5) 5506 |
| 105. | 6 | 7 | 9 | 13 | 26 | 37 | 69 | |
| | (1) 7 | | (2) 26 | | (3) 69 | | (4) 37 | (5) 9 |
| 106. | 1 | 3 | 10 | 36 | 152 | 760 | 4632 | |
| | (1) 3 | | (2) 36 | | (3) 4632 | | (4) 760 | (5) 152 |
| 107. | 4 | 3 | 9 | 34 | 96 | 219 | 435 | |
| | (1) 4 | | (2) 9 | | (3) 34 | | (4) 435 | (5) 219 |
| 108. | 157.5 | 45 | 15 | 6 | 3 | 2 | 1 | |
| | (1) 1 | | (2) 2 | | (3) 6 | | (4) 157.5 | (5) 45 |

Directions (Q. 109-113) : Find out the next number in place of question mark (?) in the following number series.

- | | | | | | |
|------|----------------------|--------------------------|------------------------|------------|-------------------|
| 109. | 27, 50,
(1) 90080 | 192, 1140,
(2) 91020 | 9104, ?
(3) 92410 | (4) 92740 | (5) None of these |
| 110. | 16, 49,
(1) 56974 | 345, 3798,
(2) 56812 | ?
(3) 55784 | (4) 54312 | (5) None of these |
| 111. | 5, 47,
(1) 131642 | 417, 3327,
(2) 133712 | 23277, ?
(3) 135416 | (4) 139647 | (5) None of these |
| 112. | 3, 37,
(1) 34856 | 285, 1749,
(2) 35062 | 8797, ?
(3) 35253 | (4) 35416 | (5) 35622 |
| 113. | 7, 736,
(1) 1932 | 1248, 1591,
(2) 2008 | 1807, ?
(3) 2140 | (4) 2190 | (5) 2216 |

Directions (Q. 114-118) : What will come in place of question mark (?) in the following number series?

- | | | | | | | | | | |
|------|----------|------|------|----------|-------|----------|--|----------|----------|
| 114. | 161 | 199 | 241 | 287 | 337 | ? | | | |
| | (1) 391 | | | (2) 401 | | (3) 412 | | (4) 416 | (5) 421 |
| 115. | 141 | 2885 | 4613 | 5613 | 6125 | ? | | | |
| | (1) 6311 | | | (2) 6321 | | (3) 6331 | | (4) 6341 | (5) 6351 |
| 116. | 1664 | 4160 | 1040 | 2600 | ? | 1625 | | | |
| | (1) 630 | | | (2) 640 | | (3) 650 | | (4) 660 | (5) 675 |
| 117. | 43.5 | 57 | 70.5 | 84 | 97.5 | ? | | | |
| | (1) 109 | | | (2) 111 | | (3) 115 | | (4) 121 | (5) 124 |
| 118. | 5 | 87 | 601 | ? | 10785 | 26415 | | | |
| | (1) 2775 | | | (2) 2848 | | (3) 2915 | | (4) 3005 | (5) 3135 |

Directions (Q. 119-123): What will be the next number in the question mark (?) in the following number series?

119. 7922, 7746, 7572, 7400, 7230, ?
 (1) 7060 (2) 7062 (3) 7064 (4) 7066 (5) 7068

120. 54, 68, 84, 102, 122, 144, ?
 (1) 162 (2) 164 (3) 166 (4) 168 (5) 170
121. 18, 32, 74, 200, 578, 1712, ?
 (1) 5110 (2) 5112 (3) 5114 (4) 5116 (5) 5118
122. 7, 1338, 2067, 2410, 2535, 2562, ?
 (1) 2563 (2) 2572 (3) 2584 (4) 2590 (5) None of these
123. 36, 77, 241, 979, 4915, ?
 (1) 29505 (2) 29510 (3) 29515 (4) 29520 (5) 29525

Directions (Q. 124-128) : Find out the next number in place of question mark(?) in the following number series.

124. 1320 990 720 504 336 ?
 (1) 204 (2) 206 (3) 208 (4) 210 (5) 212
125. 8 73 587 4114 24691 ?
 (1) 123456 (2) 12346 (3) 123454 (4) 123446 (5) None of these
126. 81 512 2401 7776 ?
 (1) 12525 (2) 14275 (3) 15625 (4) 17525 (5) 18250
127. 5679 5560 5322 4965 4489 ?
 (1) 3890 (2) 3891 (3) 3892 (4) 3893 (5) 3894
128. 12 27 73 212 630 1885 ?
 (1) 5651 (2) 5652 (3) 5653 (4) 5654 (5) 5655

Directions (Q. 129-133) : Find out the next number in the following number series.

129. 840 1112 1322 1478 1588 ?
 (1) 1672 (2) 1668 (3) 1665 (4) 1662 (5) 1660
130. 76 588 2316 6412 14412 ?
 (1) 28216 (2) 28226 (3) 28236 (4) 28246 (5) 28256
131. 20 100 244 452 724 1060 ?
 (1) 1450 (2) 1460 (3) 1470 (4) 1480 (5) 1490
132. 4984 4408 3967 3643 3418 3274 ?
 (1) 3193 (2) 3183 (3) 3173 (4) 3163 (5) 3153
133. 1338 2328 3048 3552 3888 4098 ?
 (1) 4332 (2) 4223 (3) 4218 (4) 4232 (5) 4323

Directions (Q. 134-136) : What will come in place of question mark (?) in the following number series?

134. 987, 587 331 187 123 ?
 (1) 104 (2) 113 (3) 107 (4) 114 (5) None of these
135. 125 171 263 401 585 ?
 (1) 835 (2) 815 (3) 792 (4) 788 (5) None of these
136. 121 132 167 226 309 ?
 (1) 424 (2) 413 (3) 427 (4) 416 (5) None of these

Directions (Q. 137-138) : In the following number series, only one is wrong. Find out the wrong number.

137. 454 327 648 524 842 713 1036
 (1) 327 (2) 648 (3) 521 (4) 842 (5) 713
138. 72.5 86 113 168 275 491 923
 (1) 86 (2) 113 (3) 168 (4) 275 (5) 491

Directions (Q. 139 - 143) : Find out the number in place of question mark(?) in the following number series.

139. 112 121 146 195 276 ? 566
 (1) 381 (2) 392 (3) 397 (4) 403 (5) 411
140. 1365 2590 4190 6215 ? 11740
 (1) 8525 (2) 8715 (3) 8945 (4) 9175 (5) 9295

141. 5 153 2430 ? 350053 3150801
 (1) 29615 (2) 29832 (3) 30640 (4) 30998 (5) 31798
142. 240 163 108 75 64 ?
 (1) 55 (2) 52 (3) 51 (4) 45 (5) None of these
143. 12.8 11.52 10.16 8.82 7.5 ? 4.92
 (1) 6.20 (2) 6.14 (3) 5.84 (4) 5.44 (5) 5.12

Directions (Q. 144-148) : Find out the next number in place of question mark (?) in the following number series.

144. 1 8 21 42 73 116 ?
 (1) 173 (2) 177 (3) 181 (4) 184 (5) 187
145. 15 96 160 209 245 ?
 (1) 295 (2) 286 (3) 278 (4) 270 (5) 264
146. 5 16 25.8 37.8 52 68.4 ?
 (1) 82.8 (2) 84 (3) 85.4 (4) 87 (5) 89.2
147. 12 37 43 92 100 ?
 (1) 132 (2) 158 (3) 164 (4) 181 (5) 195
148. 1 28 92 217 433 776 ?
 (1) 924 (2) 1148 (3) 1288 (4) 1304 (5) 1321

Directions (Q. 149-153) : In each of these questions a number series is given. In each series only one number is wrong. Find out the wrong number.

149. 4 11 36 96 218 429
 (1) 11 (2) 36 (3) 96 (4) 218 (5) 429
150. 68 127 333 1232 5985 35640
 (1) 127 (2) 333 (3) 1232 (4) 5985 (5) 35640
151. 14 17 35 83 188 379
 (1) 17 (2) 35 (3) 83 (4) 188 (5) 379
152. 1248 1872 4680 16380 73712 405405
 (1) 1872 (2) 4680 (3) 16380 (4) 73712 (5) 405405
153. 36 20 44 28 64 40 96 62
 (1) 20 (2) 44 (3) 28 (4) 64 (5) 40

Directions (Q. 154-158) : What will come in place of question mark (?) in the following number series?

154. 123 277 459 669 907 ?
 (1) 1179 (2) 1173 (3) 1167 (4) 1169 (5) None of these
155. 456.5 407 368.5 341 324.5 ?
 (1) 321 (2) 319 (3) 317 (4) 323 (5) None of these
156. 23 42.2 80.6 157.4 311 ?
 (1) 618.2 (2) 623.6 (3) 624.2 (4) 616.6 (5) None of these
157. 36 154 232 278 300 ?
 (1) 304 (2) 313 (3) 308 (4) 307 (5) None of these
158. 24 536 487 703 678 ?
 (1) 768 (2) 748 (3) 764 (4) 742 (5) None of these

Directions (Q. 159-163) : Find out the number in place of question mark(?) in the following number series.

159. 232 360 530 748 1020 ?
 (1) 1350 (2) 1352 (3) 1354 (4) 1356 (5) 1358
160. 6 21 101 601 4201 ?
 (1) 33601 (2) 33602 (3) 33603 (4) 33604 (5) 33605
161. 117 365 861 1853 3837 ?
 (1) 7801 (2) 7802 (3) 7803 (4) 7804 (5) 7805
162. 15 66 321 1596 7971 ?
 (1) 39842 (2) 39844 (3) 39846 (4) 39848 (5) 39850

163. 27 370 1099 2430 4627 ?

- (1) 8002 (2) 8004 (3) 8006 (4) 8008 (5) 8010

Directions (Q. 164-168) : Find out the number in place of question mark(?) in the following number series.

164. 2 29 93 218 434 777 1289 ?

- (1) 2015 (2) 2016 (3) 2017 (4) 2018 (5) 2019

165. 3 10 46 284 2282 22832 ?

- (1) 273994 (2) 273996 (3) 273998 (4) 273992 (5) 273990

166. 13 39 73 115 165 223 ?

- (1) 289 (2) 287 (3) 285 (4) 283 (5) 281

167. 13 19 50 168 696 3510 ?

- (1) 21090 (2) 21092 (3) 21094 (4) 21096 (5) 21098

168. 11 31 55 83 115 151 ?

- (1) 190 (2) 191 (3) 192 (4) 193 (5) 194

Directions (Q. 169-173) : Find out the number in place of question mark(?) in the following number series.

169. 429 351 281 219 165 ?

- (1) 72 (2) 119 (3) 64 (4) 123 (5) 72

170. 900 810 448 392 180 ?

- (1) 48 (2) 150 (3) 90 (4) 45 (5) 78

171. 330 261 200 147 102 ?

- (1) 105 (2) 103 (3) 102 (4) 98 (5) 65

172. 66.5 93.5 112.5 123.5 126.5 ?

- (1) 121.5 (2) 108.5 (3) 138.9 (4) 136.9 (5) 135.9

173. 39 48 53 54 51 ?

- (1) 59 (2) 44 (3) 33 (4) 46 (5) 48

Directions (Q. 174-178) : Find out the next number in place of question mark (?) in the following number series.

174. 150 252 392 576 810 ?

- (1) 1100 (2) 1200 (3) 1300 (4) 1089 (5) 1144

175. 100 3700 10900 21700 36100 ?

- (1) 37528 (2) 44881 (3) 95964 (4) 78873 (5) 54100

176. 1482 1406 1332 ? 1190 1122

- (1) 1352 (2) 1781 (3) 1260 (4) 3192 (5) 1159

177. 2 12 30 56 ? 132

- (1) 78 (2) 88 (3) 90 (4) 84 (5) 81

178. 1023 1224 ? 1680 1935 2208

- (1) 1395 (2) 1482 (3) 1443 (4) 1485 (5) 1681

Directions (Q. 179-183): In each of these questions a number series is given. In each series only one number is wrong. Find out the wrong number.

179. 1716 1320 1000 720 504 336 210

- (1) 720 (2) 504 (3) 1000 (4) 210 (5) 336

180. 1217 1083 957 833 720 618 524

- (1) 720 (2) 833 (3) 618 (4) 524 (5) 957

181. 16 47 199 771 2283 4585 4581

- (1) 4581 (2) 199 (3) 4585 (4) 2283 (5) 771

182. 2769 2213 1737 1335 1000 810 576

- (1) 810 (2) 1335 (3) 2213 (4) 576 (5) 1000

183. 165 286 363 396 385 350 231

(1) 350

(2) 363

(3) 396

(4) 231

(5) 286

Directions (Q. 184-188) : In each of these questions a number series is given. In each series only one number is wrong. Find out the wrong number.

184. 6821 5868 4879 4130 3345 2272 2171

(1) 4879

(2) 4130

(3) 2171

(4) 3345

(5) 2272

185. 1095 1217 1379 1508 1686 1842 2034

(1) 1508

(2) 1686

(3) 1842

(4) 2034

(5) 1379

186. 31.5 47.5 59.5 67.5 71.5 79.5 67.5

(1) 71.5

(2) 79.5

(3) 31.5

(4) 59.5

(5) 47.5

187. 15 8 35 24 63 49 99

(1) 35

(2) 63

(3) 49

(4) 24

(5) 8

188. 132 200 253 288 308 312 300

(1) 132

(2) 253

(3) 288

(4) 312

(5) 308

Directions (Q. 189-191) : What will come in place of question mark (?) in the following number series.

189. 53 74 123 100 145 ?

(1) 196

(2) 172

(3) 136

(4) 96

(5) 78

190. 145 180 395 444 813 ?

(1) 900

(2) 948

(3) 975

(4) 1015

(5) 1125

191. 12 24 84 112 220 ?

(1) 248

(2) 264

(3) 278

(4) 284

(5) 296

Directions (Q. 192-194): What will come in place of question mark (?) in the following number series?

192. 180 364 528 648 700 ?

(1) 840

(2) 800

(3) 760

(4) 720

(5) 660

193. 1 33 161 513 1249 ?

(1) 2213

(2) 2353

(3) 2463

(4) 2593

(5) 2603

194. 28 126 378 860 1720 ?

(1) 3066

(2) 2066

(3) 3056

(4) 3266

(5) None of these

195. What will come in place of question mark (?) in the given number series

7, 15, 53, 239, 1259, ?

(1) 7246

(2) 7312

(3) 7468

(4) 7549

(5) 7679

Directions (Q. 196-200) : Find out the number in place of question mark (?) in the following number series.

196. 529 841 961 1369 1681 1849 ?

(1) 2809

(2) 3249

(3) 2208

(4) 6424

(5) 2209

197. 1108 1117 1142 1191 ? 1481

(1) 1312

(2) 1272

(3) 1300

(4) 1204

(5) None of these

198. 841 961 1089 1225 1369 1521 ?

(1) 1785

(2) 1581

(3) 1681

(4) 1881

(5) 1781

199. 12 14 32 102' 416 2090 ?

(1) 15522

(2) 12552

(3) 13525

(4) 17552

(5) None of these

200. 384 381 372 345 264 ?

(1) 25

(2) 27

(3) 44

(4) 49

(5) None of these

Directions (Q. 201-205) : Find the number in place of question mark (?) in the following number series.

201. 3 81 ? 1029 2187 3993
 (1) 375 (2) 648 (3) 192 (4) 575 (5) 243
202. 30 45 75 105 165 ?
 (1) 185 (2) 205 (3) 215 (4) 195 (5) 230
203. 8 24 12 36 18 54 ?
 (1) 64 (2) 79 (3) 34 (4) 37 (5) 27
204. 4320 720 144 ? 12 6 6
 (1) 56 (2) 60 (3) 26 (4) 36 (5) 16
205. 26 63 124 215 342 ?
 (1) 511 (2) 509 (3) 504 (4) 515 (5) 525

Directions (Q. 206-210): Find the number that will come in place of question mark (?) in the following number series.

206. 90 110 132 156 182 ?
 (1) 207 (2) 307 (3) 309 (4) 323 (5) 210
207. 2 18 95 384 1155 ?
 (1) 2212 (2) 2629 (3) 2735 (4) 2312 (5) 2412
208. 7 18 51 106 183 ?
 (1) 282 (2) 395 (3) 295 (4) 280 (5) None of these
209. 37 42 57 82 117 ?
 (1) 166 (2) 162 (3) 157 (4) 159 (5) None of these
210. 33 321 465 537 573 591 ?
 (1) 600 (2) 610 (3) 590 (4) 595 (5) None of these

Directions (Q. 211-215): In each of these questions a number series is given. In each series only one number is wrong. Find out the wrong number,

211. 17 20 46 147 599 3015 18108
 (1) 20 (2) 46 (3) 599 (4) 147 (5) 3015
212. 9 14 40 129 536 2705 16260
 (1) 14 (2) 40 (3) 536 (4) 9 (5) 129
213. 8 18 64 272 1395 8424 59045
 (1) 18 (2) 64 (3) 272 (4) 1395 (5) 8424
214. 90 135 286 750 2160 6405 19155
 (1) 90 (2) 750 (3) 6405 (4) 286 (5) 2160
215. 17 36 132 635 3500 21750 153762
 (1) 635 (2) 700 (3) 132 (4) 3500 (5) 36

Directions (Q. 216-220): In each of these questions a number series is given. In each series only one number is wrong. Find out the wrong number.

216. 3 14 40 84 155 258
 (1) 84 (2) 14 (3) 40 (4) 155 (5) 258
217. $\frac{3}{2}$ $\frac{2}{3}$ $\frac{5}{12}$ $\frac{3}{14}$ $\frac{7}{30}$ $\frac{4}{21}$ $\frac{9}{56}$
 (1) 2 (2) 14 (3) 12 (4) 30 (5) 56
218. 6 6 $\frac{20}{3}$ $\frac{15}{2}$ $\frac{42}{5}$ $\frac{28}{3}$ $\frac{72}{11}$
 (1) 6 (2) 3 (3) 2 (4) 3 (5) 11

219. 6 24 60 120 210 340 504

- (1) 24 (2) 60 (3) 340 (4) 210 (5) 504

220. 3 4 16 75 366 1945 11886

- (1) 16 (2) 366 (3) 75 (4) 1945 (5) 11886

Directions (Q. 221-225): In each of these questions a number series is given. In each series only one number is wrong. Find out that number.

221. 5 22 56 116 205 330 497

- (1) 5 (2) 56 (3) 116 (4) 330 (5) 497

222. 14 29 50 77 110 150 194

- (1) 14 (2) 29 (3) 77 (4) 150 (5) 194

223. 176 275 396 539 704 891 998

- (1) 176 (2) 275 (3) 539 (4) 704 (5) 998

224. 10 50 70 118 130

- 3 10 3 3 30 3 3

70

118

130

- (1) 10 (2) 3 (3) 30 (4) 3 (5) 3

225. 5625 5776 5929 6085 6241 6400 6561

- (1) 5625 (2) 5929 (3) 6085 (4) 6400 (5) 6561

Directions (Q. 226-230): What will come in place of question mark (?) in the following number series?

226. 2 123 223 ? 368 417

- (1) 392 (2) 304 (3) 287 (4) 225 (5) 227

267. 16 896 1336 ? 1666 1721

- (1) 1556 (2) 1566 (3) 1586 (4) 1436 (5) None of these

228. 19 46 110 235 ? 794

- (1) 351 (2) 551 (3) 451 (4) 345 (5) 349

229. 13 36 70 ? 179 258

- (1) 115 (2) 106 (3) 109 (4) 117 (5) 128

230. 679 1230 2332 3985 ? 8944

- (1) 6819 (2) 6198 (3) 6109 (4) 6289 (5) 6189

Directions (Q. 231-233): In the following number series, only one number is wrong. Find out that number.

231. 2 6 9 36 39 200 205

- (1) 6 (2) 36 (3) 205 (4) 200 (5) 39

232. 169 183 223 292 389 514 667

- (1) 183 (2) 223 (3) 389 (4) 667 (5) 292

233. 243 258 288 334 393 468 558

- (1) 558 (2) 258 (3) 334 (4) 393 (5) 468

Directions (Q. 234-238): In each of these questions a number series is given. In each series only one number is Wrong. Find out that number.

234. 32 75 144 244 567 800 1089

- 1) 32 (2) 75 (3) 244 (4) 800 (5) 1089

15 $\frac{35}{8}$ $\frac{105}{16}$ 693 $\frac{429}{40}$ 715 $\frac{1615}{96}$

235. 8

	15			105			693		715		<u>1615</u>
	(1) 8			(2) 16			(3) 80		(4) 56		(5) 96
236.	12 13 25			38 63 104			164 265				
	(1) 63			(2) 25			(3) 38		(4) 104		(5) 265
237.	287496 274625			262144 246078			238328 226981		216000		
	(1) 287496			(2) 274625			(3) 262144		(4) 246078		(5) 216000
238.	42 63 94.5			141.75 212.92			318.9375 478.40625				
	(1) 94.5			(2) 63			(3) 42		(4) 212.92		(5) 478.40625

239.	$\frac{25}{12}$	$\frac{41}{20}$	$\frac{61}{30}$	$\frac{85}{40}$	$\frac{113}{56}$	$\frac{145}{72}$	$\frac{181}{90}$			
	(1) 25				(2) 61		(3) 113		(4) 181	(5) 85
	12				30		56		90	40
240.	14	39	84	156	258	399	584			
	(1) 14				(2) 156		(3) 84		(4) 258	(5) 584
241.	421875	438976		456533		474551	493039	512000	531441	
	(1) 421875				(2) 493039		(3) 474551		(4) 531441	(5) 512000
242.	9	$\frac{35}{13}$	$\frac{94}{25}$	$\frac{189}{41}$	$\frac{341}{61}$	$\frac{559}{85}$	$\frac{855}{113}$			
	(1) 855				(2) 35		(3) 94		(4) 341	(5) $\frac{559}{85}$
	113				13		25		61	
243.	9		$\frac{35}{6}$	$\frac{59}{7}$	$\frac{77}{8}$	$\frac{104}{9}$	13.5			
	4	4								
	(1) 9				(2) 77		(3) 35		(4) 104	(5) 59
	4				8		6		9	7

244.	2	36	150	393	810	1452	2366			
	(1)	810		(2)	393		(3) 36	(4) 2		(5) 1452
245.	88	115	145	175	208	243	280			
	(1)	88		(2)	175		(3) 145	(4) 243		(5) 280
246.	448	294	180	100	48	19	4			
	(1)	4		(2)	180		(3) 294	(4) 100		(5) 19

247.	6	60	210	500	990	1716	2730	
	(1) 60		(2) 210		(3) 500		(4) 990	(5) 1716
248.	4	12	24	36	52	69	84	
	(1) 84		(2) 24		(3) 36		(4) 52	(5) 69
249.	8	12	18	27	40.5	60	91.125	
	(1) 60		(2) 18		(3) 40.5		(4) 91.125	(5) 27
250.	999	1331	1727	1098	2743	3375	4095	
	(1) 3374		(2) 1331		(3) 1098		(4) 3300	(5) 4095

251. 89 87 91 84 99 67 131

- (1) 131 (2) 91 (3) 87 (4) 84 (5) 67

Directions (Q. 252-256): What will come in place of question mark (?) in the following number series?

252. 17 45 172 ? 5088 35602

- (1) 712 (2) 784 (3) 804 (4) 850 (5) 904

253. 9 333 ? 785 929 1029

- (1) 572 (2) 589 (3) 596 (4) 602 (5) 616

254. 1328 1722 2188 2732 3360 ?

- (1) 4072 (2) 4075 (3) 4078 (4) 4081 (5) 4084

255. 13 ? 570 2846 11376 34116

- (1) 84 (2) 91 (3) 95 (4) 98 (5) 102

256. 34 47 41 44 55 38 76 ?

- (1) 29 (2) 27 (3) 25 (4) 22 (5) 18

Directions (Q. 257-259): What should come in place of question mark (?) in the following number series.

257. 10 22 8 24 6 ?

- (1) 16 (2) 18 (3) 12 (4) 26 (5) None of these

258. 60.5 72 84.5 98 112.5 ?

- (1) 125 (2) 122 (3) 126 (4) 127 (5) None of these

259. 96 107 129 162 206 ?

- (1) 258 (2) 261 (3) 256 (4) 260 (5) 252

Directions (Q. 260-264): In each of these questions a number series is given. In each series only one number is wrong. Find out that number.

260. 2 12 36 81 150 252

- (1) 2 (2) 81 (3) 36 (4) 150 (5) 252

261. 5 16 27 44 65 90

- (1) 16 (2) 5 (3) 44 (4) 65 (5) 90

262. 4 2 0 -5 -12 -21

- (1) 0 (2) 4 (3) 2 (4) -5 (5) -21

263. 101 123 149 179 218 251

- (1) 251 (2) 123 (3) 179 (4) 218 (5) 101

264. 9 21 45 101 211 433 879

- (1) 21 (2) 45 (3) 211 (4) 433 (5) 101

SHORT ANSWER

1. (2)	2. (4)	3. (2)	4. (5)	5. (1)	6. (2)	7. (3)	8. (4)
9. (2)	10. (1)	11. (4)	12. (4)	13. (1)	14. (5)	15. (3)	16. (3)
17. (5)	18. (5)	19. (1)	20. (3)	21. (3)	22. (1)	23. (4)	24. (5)
25. (1)	26. (3)	27. (1)	28. (2)	29. (3)	30. (4)	31. (2)	32. (3)
33. (1)	34. (5)	35. (2)	36. (3)	37. (4)	38. (1)	39. (2)	40. (2)
41. (1)	42. (2)	43. (3)	44. (1)	45. (3)	46. (2)	47. (5)	48. (2)
49. (1)	50. (3)	51. (3)	52. (2)	53. (1)	54. (5)	55. (1)	56. (5)
57. (3)	58. (1)	59. (3)	60. (2)	61. (3)	62. (2)	63. (1)	64. (2)
65. (5)	66. (4)	67. (2)	68. (1)	69. (4)	70. (3)	71. (3)	72. (5)
73. (2)	74. (4)	75. (3)	76. (2)	77. (1)	78. (5)	79. (1)	80. (4)
81. (2)	82. (1)	83. (2)	84. (4)	85. (2)	86. (2)	87. (1)	88. (4)
89. (3)	90. (4)	91. (2)	92. (3)	93. (2)	94. (1)	95. (5)	96. (2)
97. (1)	98. (3)	99. (5)	100. (4)	101. (2)	102. (4)	103. (5)	104. (1)
105. (2)	106. (4)	107. (4)	108. (1)	109. (2)	110. (1)	111. (4)	112. (3)
113. (1)	114. (1)	115. (4)	116. (3)	117. (2)	118. (4)	119. (2)	120. (4)
121. (3)	122. (1)	123. (3)	124. (4)	125. (2)	126. (3)	127. (5)	128. (1)
129. (5)	130. (3)	131. (2)	132. (1)	133. (3)	134. (3)	135. (2)	136. (4)
137. (5)	138. (3)	139. (3)	140. (2)	141. (5)	142. (5)	143. (1)	144. (1)
145. (4)	146. (4)	147. (4)	148. (3)	149. (3)	150. (1)	151. (2)	152. (4)
153. (5)	154. (2)	155. (2)	156. (1)	157. (5)	158. (4)	159. (2)	160. (1)
161. (5)	162. (3)	163. (1)	164. (4)	165. (3)	166. (1)	167. (4)	168. (2)
169. (2)	170. (2)	171. (3)	172. (1)	173. (2)	174. (1)	175. (5)	176. (3)
177. (3)	178. (3)	179. (3)	180. (2)	181. (4)	182. (5)	183. (1)	184. (2)
185. (1)	186. (1)	187. (4)	188. (2)	189. (5)	190. (1)	191. (2)	192. (5)
193. (4)	194. (1)	195. (5)	196. (5)	197. (1)	198. (3)	199. (2)	200. (5)
201. (1)	202. (4)	203. (5)	204. (4)	205. (1)	206. (5)	207. (4)	208. (1)
209. (2)	210. (1)	211. (3)	212. (2)	213. (2)	214. (4)	215. (1)	216. (3)
217. (2)	218. (5)	219. (3)	220. (2)	221. (2)	222. (4)	223. (5)	224. (4)
225. (3)	226. (2)	227. (1)	228. (3)	229. (4)	230. (5)	231. (5)	232. (1)
233. (3)	234. (3)	235. (5)	236. (4)	237. (4)	238. (4)	239. (5)	240. (2)
241. (4)	242. (3)	243. (5)	244. (2)	245. (3)	246. (5)	247. (3)	248. (5)
249. (1)	250. (2)	251. (4)	252. (4)	253. (2)	254. (3)	255. (3)	256. (1)
257. (4)	258. (5)	259. (2)	260. (2)	261. (1)	262. (3)	263. (4)	264. (2)

DETAIL - EXPLANATIONS

1. 2; The number should be 60.
 $+ 3^2 + 2, +4^2 + 3, + 5^2 + 4 \dots$
2. 4; The number should be 416.
 $\times 1 + 5, \times 2 + 10, \times 3 + 15, \times 4 + 20 \dots$
3. 2; The number should be 63.
 $(1 \times 2 \times 3) + 1, (2 \times 3 \times 4) + 2, (3 \times 4 \times 5) + 3 \dots$
4. 5; The number should be 324.
 $1 \times 2^2 + 5, 2 \times 3^2 + 10, 3 \times 4^2 + 15, 4 \times 5^2 + 20$
5. 1; The number should be 58.
 $1^3 + 25, 2^3 + 50, 3^3 + 75, 4^3 + 100 \dots$
6. 2; The number should be 738.
 $3^3 + 3, 6^3 - 6, 9^3 + 9, 12^3 - 12 \dots$
7. 3; The number should be 652.
 $1440, 1440 - (17)^2 + 1, 1440 - (15)^2 + 3, 1440 - (13)^2 + 5, 1440 - (11)^2 + 7$
8. 4; The number should be 174.
 $\times 3 + 5, \times 3 + 10, \times 3 + 15$
9. 2; The number should be 217.
 $\times 1 + 15, \times 2 + 20, \times 3 + 25, \times 4 + 30$
10. 1; The number should be 9277.
 $+(21)^3, +(18)^3, +(15)^3$
11. 4; $1 \times 7 = 7$
 $7 \times 7 = 49$
 $49 \times 7 = 343$
 $343 \times 7 = 2401$
12. 4; $13 + 2^2 + 3 = 20$
 $20 + 4^2 + 3 = 39$
 $39 + 6^2 + 3 = 78$
 $78 + 8^2 + 3 = 145$
 $145 + 10^2 + 3 = 248$
13. 1; $12 \times 2 + 11 = 35$
 $35 \times 2 + 11 = 81$
 $81 \times 2 + 11 = 173$
 $173 \times 2 + 11 = 357$
 $357 \times 2 + 11 = 725$
14. 5; $3 + 97 = 100$
 $100 + 197 = 297$
 $297 + 297 = 594$
 $597 + 397 = 991$
 $991 + 497 = 1488$
15. 3; $112 + 7 \times 1 = 119$
 $119 + 7 \times 3 = 140$
 $140 + 7 \times 5 = 175$
 $175 + 7 \times 7 = 224$
 $224 + 7 \times 9 = 287$
16. 3; The number should be 81.
The series is $+ 1^2 \times 1, + 2^2 \times 2, + 3^2 \times 3 \dots$
17. 5; The number should be 247.
The series is $21 + 1^2, 42 + 3^2, 63 + 5^2, 84 + 7^2 \dots$
18. 5; The number should be 287.
The series is $+ 1^2 + 1^3, + 2^2 + 2^3, + 3^2 + 3^3 \dots$
19. 1; The number should be 19.
The series is $\times 2 + 13, \times 3 + 26, \times 4 + 39 \dots$
20. 3; The number should be 106.
The series is $+ 1^4 + 2^4, + 3^4, + 4^4 \dots$
21. 3; The number should be 1092.
 $\times 5 + 9, \times 5 + 18, \times 5 + 27 \dots$
22. 1; The number should be 142.
 $+ 5^3, + 6^3, + 7^3, + 8^3 \dots$
23. 4; The number should be 1487.
 $\times 3 - 4, \times 4 - 5, \times 5 - 6 \dots$
24. 5; The number should be 888.
 $+ 4^2, + 8^2, + 12^2 \dots$
25. 1; The number should be 22.
 $\times 3 - 2, \times 4 - 3, \times 5 - 4 \dots$
26. 3; The number should be 123.
 $\times 1 + 3, \times 2 + 6, \times 3 + 9 \dots$
27. 1; The number should be 11.
 $\times 1 + 5, \times 2 + 10, \times 3 + 15 \dots$
28. 2; The number should be 63.
 $+ 1 \times 2, + 3 \times 3 + 5 \times 4 + 7 \times 5 \dots$
29. 3; The number should be 480.
 $- 45 \times 3, - 40 \times 3, - 35 \times 3 \dots$
30. 4; The number should be 2420.
 $+ 1^3 \times 2, + 2^3 \times 3, + 3^3 \times 4, + 4^3 \times 5 \dots$
31. 2; $-16_3, +15_3, -14_3, +13_3, -12_3$
32. 3; $\times 2 - 3, \times 4 - 6, \times 6 - 10,$
 $\times 8 - 15, \times 10 - 21$
33. 1; $\times 9 - 1, \times 8 - 3, \times 7 - 5, \times 6 - 7, \times 5 - 9$
34. 5; $+ 1^3, + 2, + 3^3, + 4, + 5^3$
35. 2; $+ 10, + 2^3, + 12, + 4^3, + 14, + 6^3$
36. 3; 17 19 33 67 129 227

 $+ 2^2 - 2 + 4^2 - 2 + 6^2 - 2 + 8^2 - 2 + 10^2 - 2$
37. 4; 35 256 451 620 763 880

221 195 169 143 117

- 26 - 26 - 26 - 26

38. 1
39. 2
40. 2
41. 1; Series is $\times 1 + 6; \times 2 + 12, \times 3 + 18 \dots$
42. 2; Series is $\times 1 + 9^2, \times 2 + 8^2, \times 3 + 7^2, \times 4 + 6^2 \dots$
43. 3; Series is $\times 0.2, \times 1.2, \times 2.2, \times 3.2 \dots$
44. 1; Series is $+ 978, + 1956, + 2934, + 3912 \dots$
45. 3; Series is $\times 3 - 6, \times 3 - 12, \times 3 - 18, \times 3 - 24 \dots$
46. 2; $+11^3, +12^3, +13^3, +14^3 \dots$
47. 5; $\times 1 + 51, \times 2 + 102, \times 3 + 153 \dots$
48. 2; $\times 1.5, \times 3, \times 4.5, \times 6 \dots$
49. 1; $+ 8 \times 1, + 16 \times 2, + 24 \times 3 \dots$
50. 3; $+ 2^5, + 3^5, + 4^5 \dots$
51. 3; This series is a combination of two series:
 $+117, +57, +234, +114, +351, +171$
52. 2; $\times 2 + 4, \times 3 + 8, \times 4 + 12 \dots$
53. 1; $\times 1.5, \times 2, \times 2.5, \times 3$
54. 5; $+4^3, +8^3, +12^3, +16^3$
55. 1; $-2^4, -3^4, -4^4, -5^4$
56. 5; The number is 494.
 $10^2, +11, +12^2, +13, +14^2, +15 \dots$
57. 3; The number is 2268.
 $+17^2, +19^2, +21^2, +23^2, +25^2 \dots$
58. 1; The number is 14612.
 $\times 2 + 16, \times 3 + 26, \times 4 + 36, \times 5 + 46, \times 6 + 56$
 \dots
59. 3; The number is $\times 2 + 27, \times 2 + 54, \times 2 + 81,$
 $\times 2 + 108, \times 2 + 135 \dots$
60. 2; The number is $+ (4 \times 3), + (5 \times 4), + (6 \times 5),$
 $+ (7 \times 6), + (8 \times 7) \dots$
61. 3; The number is 1377.
 $215 \times 1 + 87; 215 \times 2 + 87; 215 \times 3 + 87;$
 $215 \times 4 + 87; 215 \times 5 + 87; 215 \times 6 + 87 \dots$
62. 2; The number is 772.
 $192 + 100 = 292$
 $292 + 108 = 400$
 $400 + 116 = 516$
 $516 + 124 = 640$
 $640 + 132 = 772$
63. 1; The number is 89.
 $19; + 10; + 12; + 14; + 16, + 18 \dots$
64. 2; The series is:
 $3 \times 2^8 = 768$
 $4 \times 2^7 = 512$
 $5 \times 2^6 = 320$
 $6 \times 2^5 = 192$
 $7 \times 2^4 = 112$
 $8 \times 2^3 = 64$
65. 5; The series is:
 $1^3 + 17$
 $2^3 + 34$
 $3^3 + 51$
 $4^3 + 68$
66. 4; $\times 3 + 1, \times 4 + 2, \times 5 + 3 \dots$
67. 2; $+ 4 \times 2, + 8 \times 3, + 12 \times 4$
68. 1; The series is based on 'combination of two series. $S_1 = +13, +26, +39 \dots$ and $S_2 = +7, +14, +21 \dots$
69. 4; $+36, +72, +144, +288 \dots$
70. 3; $(22)^2, (27)^2, (32)^2, (37)^2 \dots$
71. 3; The series is $+ 7^2 + 14^2, + 21^2, + \dots$
72. 5; The series is $40 \times 1.7, 80 \times 2.7, 120 \times 3.7,$
 $160 \times 4.7 \dots$
73. 2; The series is $2^2 + 3, 4^2 + 5, 6^2 + 7, 8^2 + 9 \dots$
74. 4; The series is $1 \times 3, 5 \times 7, 9 \times 11, 13 \times 15 \dots$
75. 3; The series is $1^2 + 1, 3^2 + 3, 5^2 + 5, 7^2 + 7 \dots$
76. 2; $+4^2, +6^2, +8^2, +10^2, +12^2,$
77. 1; $\times 12 - 11, \times 10 - 9, \times 8 - 7, \times 6 - 5$
78. 5; $\times 3 - 5, \times 3 - 5, \times 3 - 5, \times 3 - 5$
79. 1; $99^2, 98^2, 97^2, 96^2, 95^2, 94^2$
80. 4; $7^3 - 4 = 339$
 $9^3 + 4 = 733$
 $11^3 - 4 = 1327$
 $13^3 + 4 = 2201$
 $15^3 - 4 = 3371$
 $17^3 + 4 = 4917$
81. 2; $(1)^4 + 2, (2)^4 - 2, (3)^4 + 2, (4)^4 - 2$
82. 1; $\times 2 - 5, \times 3 - 10, \times 4 - 15$
83. 2; $2^4 + 3^3, 3^4 + 4^3, 4^4 + 5^3, 5^4 + 6^3$
84. 4; $3^3, 3^3 + 11, 4^3, 4^3 + 22, 5^3 + 33$
85. 2; $12, 12 + (12 \times 2 + 3) = 12 + 27 = 39$
 $39 + (39 \times 2 + 3) = 39 + 81 = 120$
 $120 + (120 \times 2 + 3) = 120 + 243 = 363$
86. 2; 5 15 35 75 155 (?)
 $+10 +20 +40 +80 +160$
87. 1; 3 6 18 72 360 ?
 $\times 2 \times 3 \times 4 \times 5 \times 6$

88. 4; 88 472 347 283 256 (?)

$$\begin{array}{ccccc} -216 & -215 & -64 & -27 & -8 \\ (6)^3 & (5)^3 & (4)^3 & (3)^3 & (2)^3 \end{array}$$

89. 3; The series is $+1^3 + 2^2, +2^3 + 3^2, +3^3 + 4^2 \dots$

90. 4; The series is $-1^3 \times 2, -2^3 \times 3, -3^3 \times 4 \dots$

91. 2; The series is $\times 3 - 9, \times 3 - 19, \times 3 - 29 \dots$

92. 3; The series is $+(111)^2, +(101)^2, +(91)^2, +(81)^2 \dots$

93. 2; The series is $\times 0.2, \times 0.3, \times 0.4, \times 0.5 \dots$

94. 1; The series is $+(1^3 + 2^3), +(2^3 + 3^3), +(3^3 + 4^3) \dots$

95. 5; The series is $+(6 \times 2), +(18 \times 2), +(54 \times 2) \dots$

96. 2; The series is $+4^2, +8^2, +12^2, +16^2 \dots$

97. 1; The series is $-32^2, -28^2, -24^2, -20^2 \dots$

98. 3; The series is $\times 2 + 5, \times 2 + 10, \times 2 + 15 \dots$

99. 5; The series is $3 \times 24, 5 \times 19, 7 \times 17, 9 \times 15, 11 \times 13, 13 \times 11 \dots$

100. 4; The series is $+2^4, +3^4, +4^4, +5^4 \dots$

101. 2; The series is $\times 3 + 8, \times 3 + 16, \times 3 + 24 \dots$

102. 4; The series is $69^2 + 69, 67^2 + 67, 65^2 + 65, 63^2 + 63 \dots$

103. 5; The series is $-2^3 + 1, -3^3 + 2, -4^3 + 3, -5^3 + 4 \dots$

104. 1; The number should be 5555 in place of 5531. $-7^2, -9^2, -11^2, -13^2, -15^2, -17^2 \dots$

105. 2; The number should be 21 in place of 426. $+1, +2, +4, +8, +16, +32$

106. 4; The number should be 770 in place of 760. $\times 1 + 2, \times 2 + 4, \times 3 + 6, \times 4 + 8, \times 5 + 10, \times 6 + 12, \dots$

107. 4; The series is $0^2 + 4, 1^2 + 2, 3^2 + 0, 6^2 - 2, 10^2 - 4, 15^2 - 6, 21^2 - 8 \dots$

Hence, 435 should be replaced with 433

108. 1; The number should be 2 in place of $1 \div 3.5, \div 3, \div 2.5, \div 2, \div 1.5, \div 1, \dots$

109. 2; The series is $\times 2 - 4, \times 4 - 8, \times 6 - 12, \times 8 - 16, \times 10 - 20 \dots$

110. 1; The series is $\times 3 + 1, \times 7 + 2, \times 11 + 3, \times 15 + 4 \dots$

111. 4; The series is $\times 10 - 3, \times 9 - 6, \times 8 - 9, \times 7 - 12, \times 6 - 15 \dots$

112. 3; The series is $\times 8 + 13, \times 7 + 26, \times 6 + 39, \times 5 + 52, \times 4 + 65$

113. 1; The series is $+9^3, +8^3, +7^3, +6^3, +5^3 \dots$

114. 1; The series is $2 \times 9^2 - 1, 2 \times 10^2 - 1, 2 \times 11^2 - 1, 2 \times 12^2 - 1, 2 \times 13^2 - 1, 2 \times 14^2 - 1, \dots$

115. 4; The series is $141, +(14)^3, +(12)^3, +(10)^3 \dots$

116. 3; The series is $\times 2.5, +4, \times 2.5, +4 \dots$

117. 2; $15 \times 2.9 = 43.5$

$$15 \times 3.8 = 57$$

$$15 \times 4.7 = 70.5$$

$$15 \times 5.6 = 84$$

$$15 \times 6.5 = 97.5$$

$$15 \times 7.4 = 111$$

118. 4; The series is $5, 5 + 9^2 + 1 = 87, 87 + 8^3 + 2 = 601, 601 + 7^4 + 3 = 3005, 3005 + 6^5 + 4 = 10785, 10785 + 5^6 + 5$

119. 2; The series is $89^2 + 1, 88^2 + 2, 87^2 + 3, \dots$

120. 4; The series is $7 + 7^2 - 2, 8 + 8^2 - 4, 9 + 9^2 - 6, 10 + 10^2 - 8 \dots$

121. 3; The series is $+14, +42, +126, +378 \dots$

122. 1; The series is $+11^3, +9^3, +7^3, +5^3 \dots$

123. 3; $36 \times 2 + 5 = 77,$

$$\therefore 77 \times 3 + 10 = 241,$$

$$\therefore 241 \times 4 + 15 = 979, \dots$$

124. 4; The series is $(11)^3 - 11, (10)^3 - 10, (9)^3 - 9 \dots$

125. 2; The series is $\times 9 + 1, \times 8 + 3, \times 7 + 5 \dots$

126. 3; The series is $9^2, 8^3, 7^4, 6^5, 5^6 \dots$

127. 5; The series is $-119, -238, -357, -476 \dots$

128. 1; The series is $\times 3 - 9, \times 3 - 8, \times 3 - 7, \times 3 - 6 \dots$

129. 5; The series is $+17^2 - 17, +15^2 - 15, +13^2 - 13 \dots$

130. 3; The series is $+8^3, +12^3, +16^3, +20^3, \dots$

131. 2; The series is $2^2 + 4^2, 6^2 + 8^2, 10^2 + 12^2, 14^2 + 16^2 \dots$

132. 1; The series is $-24^2, -21^2, -18^2, -15^2 \dots$

133. 3; The series is $+10^3 - 10, 9^3 - 9, +8^3 - 8 \dots$

134. 3; $-20^2, -16^2, -12^2, -8^2, -4^2$

135. 2; $+46, +92, +138, +184, +230$

136. 4; $+(11 \times 1 + 0), +(11 \times 3 + 2), +(11 \times 5 + 4), +(11 \times 7 + 6), +(11 \times 9 + 8), \dots$

137. 5; The given series is a combination of two series.

Pattern I: 454 648 842 1036

194 added in each subsequent term.

Pattern II: 327 521 715

194 added in each subsequent term.

Hence 713 should be replaced with 715.

138. 3; $+13.5, +27, +54, +108, +216, +432$

Hence, 168 should be replaced with 167.

139. 3; The series is $+3^2, +5^2, +7^2, +9^2, +11^2, +13^2, +15^2 \dots$

140. 2; The series is $+35^2, +40^2, +45^2, +50^2, +55^2 \dots$

141. 5; The series is $(+2^2) \times 17, (+3^2) \times 15, (+4^2) \times 13 \dots$

142. 5; The series is $240, (240 + 2^2) - 9^2 = 163,$

$$(163 + 3^2) - 8^2 = 108,$$

$$(108 + 4^2) - 7^2 = 75, (75 + 5^2) - 6^2 = 64, (64 + 6^2) - 5^2 = 75$$

143. 1; The series is $12.8 \times 0.9, 12.7 \times 0.8, 12.6 \times$

- 0.7, $12.5 \times 0.6 \dots$
144. 1; The series is $+(2^2 + 3), +(3^2 + 4), +(4^2 + 5), +(6^2 + 7) \dots$
145. 4; The series is $+9^2, +8^2, +7^2 \dots$
146. 4; The series is $5, 5 \times 3.2, 6 \times 4.3, 7 \times 5.4, 8 \times 6.5, 9 \times 7.6, 10 \times 8.7 \dots$
147. 4; The series is $+5^2, +6, +7^2, +8, +9^2, +10 \dots$
148. 3; $1 + 3^3 = 28; 28 + 4^3 = 92; 92 + 5^3 = 217; 217 + 6^3 = 443; 443 + 7^3 = 779; 779 + 8^3 = 1288$
149. 3; The series is $+2^3 - 1, +3^3 - 2, +4^3 - 3 \dots$
150. 1; The series is $(68 - 5) \times 2, (126 - 15) \times 13, (333 - 25) \times 4, \dots$
151. 2; The series is $(+2^3 - 5), (+3^3 - 10), (+4^3 - 15), \dots$
152. 4; The series is $\times 1.5, \times 2.5, \times 3.5, \times 4.5 \dots$
153. 5; The series is $\times 0.5 + 2, \times 2 + 4, \times 0.5 + 6, \times 2 + 8 \dots$
154. 2; The series is $+154, +182, +210, +238, +266 \dots$
155. 2; The series is $-49.5, -38.5, -27.5, -16.5, -5.5 \dots$
156. 1; The series is $+19.2, +38.4, +76.8, +153.6 \dots$
157. 5; The series is $+118, +78, +46, +22, +6 \dots$
The number should be $300 + 6 = 306$
158. 4; The series is $+8^3, -7^2, +6^3, -5^2, +4^3 \dots$ The number should be $678 + 64 = 742$
159. 2; The series is $6^3 + 16, 7^3 + 17, 8^3 + 18, 9^3 + 19 \dots$
160. 1; The series is $\times 4 - 3, \times 5 - 4, \times 6 - 5 \dots$
161. 5; The series is $+248, +496, +992, +1984$
162. 3; The series is $\times 5 - 9$
163. 1; The series is 27
 $27 + 7^3 = 370$
 $370 + 9^3 = 1099$
 $1099 + 11^3 = 2430$
 $2430 + 13^3 = 4627$
 $4627 + 15^3 = 8002$
164. 4; The series is $+3^3, +4^3, +5^3, +6^3 \dots$
165. 3; The series is $\times 2 + 4, \times 4 + 6, \times 6 + 8, \times 8 + 10 \dots$
166. 1; The series is $(2 \times 4) + 5 = 13$
 $(4 \times 6) + 15 = 39, (6 \times 8) + 25 = 73$
 $(8 \times 10) + 35 = 115, (10 \times 12) + 45 = 165 \dots$
167. 4; The series is $\times 1 + 6, \times 2 + 12, \times 3 + 18, \times 4 + 24 \dots$
168. 2; The series is $(5 \times 1.2) + 5 = 11, (15 \times 1.4) + 10 = 31, (25 \times 1.6) + 15 = 55, (35 \times 1.8) + 20 = 83$
 $(45 \times 2.0) + 25 = 115, (55 \times 2.2) + 30 = 151$
 $(65 \times 2.4) + 35 = 191$
169. 2; The series is $(21)^2 - 12, (19)^2 - 10, (17)^2 - 8, (15)^2 - 6, (13)^2 - 4, (11)^2 - 2, \dots$
170. 2; The series is $(10)^3 - (10)^2, (9)^3 + (9)^2, (8)^3 - (8)^2, (7)^3 + (7)^2, (6)^3 - (6)^2, (5)^3 + (5)^2 \dots$
171. 3; The series is $(17 \times 19 + 7), (15 \times 17 + 6), (13 \times 15 + 5), (11 \times 13 + 4), (9 \times 11 + 3), \dots$
172. 1; The series is $7 \times 9.5, 11 \times 8.5, 15 \times 7.5, 19 \times 6.5, 23 \times 5.5, 27 \times 4.5, \dots$
173. 2; The series is $(6 \times 9 - 15), (8 \times 8 - 16), (10 \times 7 - 17), (12 \times 6 - 18), (14 \times 5 - 19), (16 \times 4 - 20), (18 \times 3 - 21), \dots$
174. 1; The series is $5^3 + 5^2, 6^3 + 6^2, 7^3 + 7^2, 8^3 + 8^2, 9^3 + 9^2, 10^3 + 10^2 \dots$
There should be 1100 in place of (?) mark.
175. 5; The series is $+(3600 \times 1), +(3600 \times 2), +(3600 \times 3), +(3600 \times 4), +(3600 \times 5), \dots$
There should be 54100 in place of (?) mark.
176. 3; The series is $(39^2 - 39), (38^2 - 38), (37^2 - 37), (36^2 - 36), (35^2 - 35), (34^2 - 34)$
There should be 1260 in place of (?) mark.
177. 3; The series is $(1 \times 2), (3 \times 4), (5 \times 6), (7 \times 8), (9 \times 10), (11 \times 12), \dots$
There should be 90 in place of (?) mark.
178. 3; The series is $(31 \times 33), (34 \times 36), (37 \times 39), (40 \times 42), (43 \times 45), \dots$
There should be 1443 in place of (?) mark.
179. 3; The series is $(12^3 - 12), (11^3 - 11), (10^3 - 10), (9^3 - 9), (8^3 - 8), (7^3 - 7), (6^3 - 6), \dots$
There should be 990 in place of 1000.
180. 2; The series is $35^2 - (3 + 5), 33^2 - (3 + 3), 31^2 - (3 + 1), 29^2 - (2 + 9), 27^2 - (2 + 7), 25^2 - (2 + 5), 23^2 - (2 + 3) \dots$
There should be 830 in place of 833.
181. 4; The series is $16 \times 6 - 7^2, 47 \times 5 - 6^2, 199 \times 4 - 5^2, 771 \times 3 - 4^2, 2297 \times 2 - 3^2, 4585 \times 1 - 2^2$
There should be 2297 in place of 2283.
182. 5; The series is $14^3 + (1 + 4)^2, 13^2 + (1 + 3)^2, 12^3 + (1 + 2)^2, 11^3 + (1 + 1)^2, 10^3 + (1 + 0)^2, 9^3 + (9 + 0)^2, 8^3 + 8^2$
There should be 1001 in place of 10001.
183. 1; The series is $15 \times 11, 13 \times 22, 11 \times 33, 9 \times 44, 7 \times 55, 5 \times 66, 3 \times 77$
There should be 330 in place of 350.
184. 2; The series is $19^3 - 38, 18^3 + 36, 17^3 - 34, 16^3 + 32, 15^3 - 30, 14^3 + 28, 13^3 - 26 \dots$
There should be 4128 in place of 4130
185. 1; The series is $33^2 + (3 + 3), 35^2 - (3 + 5), 37^2 + (3 + 7), 39^2 - (3 + 9), 41^2 + (4 + 1), 43^2 - (4 + 3), 45^2 + (4 + 5) \dots$
There should be 1509 in place of 1508
186. 1; The series is $21 \times 1.5, 19 \times 2.5, 17 \times 3.5, 15 \times 4.5, 13 \times 5.5, 11 \times 6.5, 9 \times 7.5 \dots$
There should be 71.5 in place of 79.5
187. 4; The series is $3^2 + 6, 4^2 - 8, 5^2 + 10, 6^2 - 12, 7^2 + 14, 8^2 - 16, 9^2 + 18, \dots$
There should be 48 in place of 49.

188. 2; The series is $44 \times 3, 40 \times 5, 36 \times 7, 32 \times 9, 28 \times 11, 24 \times 13, 20 \times 15 \dots$
There should be 252 in place of 253.
189. 5; The series is $16 \times 3 + 5, 14 \times 6 - 10, 12 \times 9 + 15, 10 \times 12 - 20 \dots$
190. 1; The series is $5^3 + 5 + 15, 6^3 - 6 - 30, 7^3 + 7 + 45, 8^3 - 8 - 60, 9^3 + 9 + 75 \dots$
191. 2; The series is $16 \times 0.5 + 4, 32 \times 1.0 - 8, 48 \times 1.5 + 12, 64 \times 2 - 16 \dots$
192. 5; The series is $(12 \times 7.5) \times 2, (14 \times 6.5) \times 4, (16 \times 5.5) \times 6, (18 \times 4.5) \times 8 \dots$
193. 4; The series is $(1^4 \times 2) - 1, (2^4 \times 2) + 1, (3^4 \times 2) - 1, (4^4 \times 2) + 1 \dots$
194. 1; The series is $(3^3 \times 1) + 1, (4^3 \times 2) - 2, (5^3 \times 3) + 3, (6^3 \times 4) - 4$
195. 5; The series is $\times 2 + 1^3, \times 3 + 2^3, \times 4 + 3^3, \times 5 + 4^3 \dots$
196. 5; The series is $23^2, 29^2, 31^2, 37^2 \dots$
197. 1; The series is $+3^2, +5^2, +7^2, +11^2, +13^2, \dots$
198. 3; The series is $+120, +128, +136, +\dots +160, \dots$
199. 2; The series is $\times 1 + 2, \times 2 + 4, \times 3 + 6, \times 4 + 8, \times 5 + 10, \times 6 + 12 \dots$
200. 5; The series is $-3, -9, -27, -81, -243 \dots$
201. 1; The series is $1^3 \times 3, 3^3 \times 3, 5^3 \times 3, 7^3 \times 3, \dots$
202. 4; Each number is a prime number multiplied by 15.
Thus, the series is $15 \times 2, 15 \times 3, 15 \times 5, 15 \times 7, 15 \times 11, \dots$
203. 5; The series is $\times 3, \div 2, \times 3, \div 2, \dots$
204. 4; The series is $\div 6, \div 5, \div 4, \div 3 \dots$
205. 1; The series is $(3^3 - 1), (4^3 - 1), (5^3 - 1), (6^3 - 1), (7^3 - 1) \dots$
206. 5; The series is $+20, +22, +24, +26, +28 \dots$
207. 4; The series is $2 \times 6 + 6 = 18$
 $18 \times 5 + 5 = 95$
 $95 \times 4 + 4 = 384$
 $384 \times 3 + 3 = 1155$
 $1155 \times 2 + 2 = 2312$
208. 1; The series is $+(11 \times 1), +(11 \times 3), +(11 \times 5), +(11 \times 7) \dots$
209. 2; The series is $37 + (5 \times 1) = 42$
 $42 + (5 \times 3) = 57$
 $57 + (5 \times 5) = 82$
 $82 + (5 \times 7) = 117$
 $117 + (5 \times 9) = 162$
210. 1; The series is $+(9 \times 32), +(9 \times 16), +(9 \times 8), +(9 \times 4), (9 \times 2) \dots$
211. 3; The number should be 600 in place of 599.
- The series is $\times 1 + 3, \times 2 + 6, \times 3 + 9, \dots$
212. 2; The number should be 38 in place of 40.
The series is $\times 1 + 5, \times 2 + 10, \times 3 + 15 \dots$
213. 2; The number should be 63 in place of 64.
The series is $(8 + 1) \times 2, (18 + 3) \times 3, (63 + 5) \times 4, \dots$
214. 4; The number should be 285 in place of 286.
The series is $(90 - 45) \times 3, (135 - 40) \times 3, (285 - 35) \times 3, \dots$
215. 1; The number should be 636 in place of 635.
The series is $(17 + 1^3) \times 2, (36 + 2^3) \times 3, (132 + 3^3) \times 4, (636 + 4^3) \times 5, \dots$
216. 3; The series is $1 + 1^2 + 1^3, 2 + 2^2 + 2^3, 3 + 3^2 + 3^3, 4 + 4^2 + 4^3, 5 + 5^2 + 5^3, 6 + 6^2 + 6^3$.
There should be 39 in place of 40.
217. 2; The series is
$$\frac{3}{1 \times 2} = \frac{3}{2}, \frac{4}{2 \times 3} = \frac{2}{3}, \frac{5}{3 \times 4} = \frac{5}{12},$$
$$\frac{6}{4 \times 5} = \frac{6}{10}, \frac{7}{5 \times 6} = \frac{7}{30}, \frac{7}{6 \times 7} = \frac{1}{6}, \frac{8}{7 \times 8} = \frac{1}{7}, \frac{9}{7 \times 8} = \frac{9}{56}.$$
$$\frac{3}{3}, \frac{5}{3}, \frac{9}{3}, \frac{9}{56}.$$
- There should be 10 in place of 14.
218. 5; The series is
$$\frac{3 \times 2}{1} = 6, \frac{4 \times 3}{2} = 6, \frac{5 \times 4}{3} = \frac{20}{3},$$
$$\frac{6 \times 5}{4} = \frac{15}{2}, \frac{7 \times 6}{5} = \frac{42}{5}, \frac{8 \times 7}{6} = \frac{28}{3}, \frac{9 \times 8}{7} = \frac{72}{7}$$
$$\frac{72}{7}, \frac{72}{11}.$$
- There should be 7 in place of 11.
219. 3; The series is $2^3 - 2 = 6, 3^3 - 3 = 24, 4^3 - 4 = 60, 5^3 - 5 = 120, 6^3 - 6 = 210, 7^3 - 7 = 336, 8^3 - 8 = 504$
There should be 336 in place of 340.
220. 2; The series is $3 \times 1 + 1^3 = 4, 4 \times 2 + 2^3 = 16, 16 \times 3 + 3^3 = 75, 75 \times 4 + 4^3 = 364, 364 \times 5 + 5^3 = 1945, 1945 \times 6 + 6^3 = 11886$
There should be 364 in place of 366.
221. 2; The series is $3 \times 2 \times 1 - 1 = 5, 4 \times 3 \times 2 - 2 = 22, 5 \times 4 \times 3 - 3 = 57, 6 \times 5 \times 4 - 4 = 116, 7 \times 6 \times 5 - 5 = 205, 8 \times 7 \times 6 - 6 = 330, 9 \times 8 \times 7 - 7 = 497$. Hence, 56 should be replaced by 57.
222. 4; The series is $3^2 + 2^2 + 1^2 = 14, 4^2 + 3^2 + 2^2 = 29, 5^2 + 4^2 + 3^2 = 50, 6^2 + 5^2 + 4^2 = 77, 7^2 + 6^2 + 5^2 = 110, 8^2 + 7^2 + 6^2 = 149, 9^2 + 8^2 + 7^2 = 194$. Hence, 150 should be replaced by 149.
223. 5; The series is $44 \times 4 = 176, 55 \times 5 = 275, 66 \times 6 = 396, 77 \times 7 = 539, 88 \times 8 = 704, 99 \times 9 = 891, 110 \times 10 = 1100$.

Hence, 998 should be replaced by 1100.

224. 4; The series is $\frac{5 \times 2}{3} = \frac{10}{3}, \frac{15 \times 2}{3} = 10,$

$$\frac{25 \times 2}{3} = \frac{50}{3}, \frac{35 \times 2}{3} = \frac{70}{3}, \frac{45 \times 2}{3} = 30,$$

$$\frac{55 \times 2}{3} = \frac{110}{3}, \frac{65 \times 2}{3} = \frac{130}{3}$$

There should be $\frac{110}{3}$ in place of $\frac{118}{3}$.

225. 3; The series is $(75)^2 = 5625,$

$$(76)^2 = 5776, (77)^2 = 5929,$$

$$(78)^2 = 6084, (79)^2 = 6241,$$

$$(80)^2 = 6400, (81)^2 = 6561$$

There should be 6084 in place of 6085.

226. 2; The series is $+ 11^2, + 10^2, + 9^2, + 8^2, + 7^2 \dots$

Hence, there should be 304 in place of question mark.

227. 1; The series is $+ 880, + 440, + 220, + 110, + 55, \dots$

Hence, there should be 1556 in place of question mark.

228. 3; The series is $+ 3^3, + 4^3, + 5^3, + 6^3, + 7^3, \dots$

Hence, there should be 451 in place of question mark.

229. 4; The series is $+ (5^2 - 2), + (6^2 - 2), + (7^2 - 2), + (8^2 - 2), \dots$

Hence, there should be 117 in place of question mark.

230. 5; The series is $+ 551, + 1102, + 1653, + 2204, + 2755, \dots$

There should be 6189 in place of question mark.

231. 5; The series is $\times 3, + 3, \times 4, + 4, \times 5, + 5 \dots$

There should be 40 in place of 39.

232. 1; $+(13 \times 1 + 0), +(13 \times 3 + 2), +(13 \times 5 + 4), +(13 \times 7 + 6), \dots$

Hence, 183 should be replaced with 182.

233. 3; The series is $+ 15, + 30, + 45, + 60, + 75,$

Hence, 334 should be replaced with 333.

234. 3; The series is $1 + 2^2 + 3^3 = 32, 2 + 3^2 + 4^3 = 75, 3 + 4^2 + 5^3 = 144, 4 + 5^2 + 6^3 = 245, 6 + 7^2 + 8^3 = 567, 7 + 8^2 + 9^3 = 800, 8 + 9^2 + 10^3 = 1089.$

Hence, there should be 245 in place of 244.

235. 5; The series is

$$\frac{1 \times 3 \times 5}{2 \times 4}, \frac{3 \times 5 \times 7}{4 \times 6}, \frac{5 \times 7 \times 9}{6 \times 8}, \frac{7 \times 9 \times 11}{8 \times 10}$$

$$\frac{9 \times 11 \times 13}{10 \times 12}, \frac{11 \times 13 \times 15}{12 \times 14}, \frac{13 \times 15 \times 17}{14 \times 16}$$

$$= \frac{15}{8}, \frac{35}{8}, \frac{105}{16}, \frac{693}{80}, \frac{429}{40}, \frac{715}{56}, \frac{3315}{224}$$

Hence, there should be $\frac{3315}{224}$

in place of $\frac{1615}{96}$

236. 4; The series is 12, 13, $13 + 12 = 25$, $25 + 13 = 38$, $38 + 25 = 63$, $63 + 38 = 101$, $101 + 63 = 164$, $164 + 101 = 265$

Hence there should be 101 in place of 104.

237. 4; The series is $66^3 = 287496, 65^3 = 274625, 64^3 = 262144, 63^3 = 250047, 62^3 = 238328, 61^3 = 226981, 60^3 = 216000$

The re should be 250047 in place of 246078.

238. 4; The series is $42 \times 1.5 = 63,$

$$63 \times 1.5 = 94.5, 94.5 \times 1.5 = 141.75, 141.75 \times 1.5 = 212.625, 212.625 \times 1.5 = 318.9375,$$

$$318.9375 \times 1.5 = 478.40625$$

Hence, there should be 212.625 in place of 212.92.

239. 5; The series is

$$3^2 + 4^2, 4^2 + 5^2, 5^2 + 6^2$$

$$3 \times 4, 4 \times 5, 5 \times 6$$

$$6^2 + 7^2, 7^2 + 8^2, 8^2 + 9^2, 9^2 + 10^2$$

$$6 \times 7, 7 \times 8, 8 \times 9, 9 \times 10$$

$$\text{So, } \frac{25}{12}, \frac{41}{20}, \frac{61}{30}, \frac{85}{42}, \frac{113}{56}, \frac{145}{72}, \frac{181}{90}$$

$$\frac{85}{42}$$

\therefore Hence, there should be $\frac{85}{42}$ in place of

$$\frac{85}{40}$$

240. 2; The series is $2^3 + 2^2 + 2, 3^3 + 3^2 + 3, 4^3 + 4^2 + 4, 5^3 + 5^2 + 5, 6^3 + 6^2 + 6, 7^3 + 7^2 + 7, 8^3 + 8^2 + 8$ Thus, 14, 39, 84, 155, 258, 399, 584. Hence, there should be 155 in place of 156.

241. 4; The series is $(75)^3, (76)^3, (77)^3, (78)^3, (79)^3, (80)^3, (81)^3$

The re should be 474552 in place of 474551.

242. 3; The series is

$$\frac{1^3+2^3}{1^2+2^2}, \frac{2^3+3^3}{2^2+3^2}, \frac{3^3+4^3}{3^2+4^2}, \frac{4^3+5^3}{4^2+5^2},$$

$$\frac{5^3+6^3}{5^2+6^2}, \frac{6^3+7^3}{6^2+7^2}, \frac{7^3+8^3}{7^2+8^2}$$

The series is

9, 35, 91, 189, 341, 559, 855

5, 13, 25, 41, 61, 85, 113
91 in place of 94.

Hence, there should be 25 25

243. 5; The series is

$$\frac{(1+2) \times 3}{4}, \frac{(2+3) \times 4}{5}, \frac{(3+4) \times 5}{6},$$

$$\frac{(4+5) \times 6}{7}, \frac{(5+6) \times 7}{8}, \frac{(6+7) \times 8}{9}, \frac{(7+8) \times 9}{10}$$

$$= \frac{9}{4}, \frac{20}{5}, \frac{35}{6}, \frac{54}{7}, \frac{77}{8}, \frac{104}{9}, \frac{135}{10}$$

There should be $\frac{54}{7}$ in place of $\frac{59}{7}$.

244. 2; The series is $1^3 + 1^2 = 2$, $3^3 + 3^2 = 36$, $5^3 + 5^2 = 150$, $7^3 + 7^2 = 392$, $9^3 + 9^2 = 810$, $11^3 + 11^2 = 1452$, $13^3 + 13^2 = 2366$.

There should be 392 in place of 393.

245. 3; The series is $22 \times (2 + 2) = 88$, $23 \times (2 + 3) = 115$, $24 \times (2 + 4) = 144$, $25 \times (2 + 5) = 175$, $26 \times (2 + 6) = 208$, $27 \times (2 + 7) = 243$, $28 \times (2 + 8) = 280$.

There should be 144 in place of 145.

246. 5; The series is $8^3 - 8^2$, $7^3 - 7^2$, $6^3 - 6^2$, $5^3 - 5^2$, $4^3 - 4^2$, $3^3 - 3^2$, $2^3 - 2^2$.

There should be 18 in place of 19.

247. 3; The series is $1 \times 2 \times 3 = 6$, $3 \times 4 \times 5 = 60$, $5 \times 6 \times 7 = 210$, $7 \times 8 \times 9 = 504$, $9 \times 10 \times 11 = 990$, $11 \times 12 \times 13 = 1716$, $13 \times 14 \times 15 = 2730$. Hence, 500 should be replaced with 504.

248. 5; The series is $1 + 3 = 4$, $5 + 7 = 12$, $11 + 13 = 24$, $17 + 19 = 36$, $23 + 29 = 52$, $31 + 37 = 68$, $41 + 43 = 84$. Hence, 69 should be replaced with 68.

249. 1; The series is $8 \times 1.5 = 12$, $12 \times 1.5 = 18$, $18 \times 1.5 = 27$, $27 \times 1.5 = 40.5$, $40.5 \times 1.5 = 60.75$, $60.75 \times 1.5 = 91.125$. Hence, 60 should be replaced with 60.75.

250. 2; $10^3 - 1$, $11^3 - 1$, $12^3 - 1$, $13^3 - 1$, $14^3 - 1$, $15^3 - 1$, $16^3 - 1$.

Hence, 1331 should be replaced with 1330.

251. 4; $89 - 2 = 87$, $87 + 4 = 91$, $91 - 8 = 83$, $83 + 16 = 99$, $99 - 32 = 67$, $67 + 64 = 131$.

Hence, 84 should be replaced with 83.

252. 4; The series is $\times 3 - 6$, $\times 4 - 8$, $\times 5 - 10$, ...

253. 2; The series is $+18$, $+16$, $+14$, ...

254. 3; The series is $11^3 - 2 \cdot 3$, $12^3 - 6$, $13^3 - 9$...

255. 3; The series is $\times 7 + 4$, $\times 6 + 0$, $\times 5 - 4$, $\times 4 - 8$, ...

256. 1; The series is a combination of two series.

The first series is 34, $34 + 7 = 41$, $41 + 14 = 55$, $55 + 21 = 76$ and the second series is 47, $47 - 3 = 44$, $44 - 6 = 38$, $38 - 9 = 29$...

257. 4; The series follows the pattern as:

$$-2 \quad -2$$

$$10 \quad 22 \quad 8 \quad 24 \quad 6 \quad 26$$

258. 5; The series is $+2 \quad +2$

$$+11.5 + 12.5 + 13.5 + 14.5 + 15.5$$

$$60.5 \quad 72 \quad 84.5 \quad 98 \quad 112.5 \quad 128$$

259. 2; The series is

$$+11 \quad +22 \quad +33 \quad +44 \quad +55$$

$$96 \quad 107 \quad 129 \quad 162 \quad 206 \quad 261$$

260. 2; The series is $1^2 \times 2 = 2$, $2^2 \times 3 = 12$, $3^2 \times 4 = 36$, $4^2 \times 5 = 80$, $5^2 \times 6 = 150$, $6^2 \times 7 = 252$. Hence, 81 should be replaced by 80.

261. 1; The series is $1 \times (2 + 3) = 5$, $2 \times (3 + 4) = 14$, $3 \times (4 + 5) = 27$, $4 \times (5 + 6) = 44$, $5 \times (6 + 7) = 65$, $6 \times (7 + 8) = 90$.

Hence, 16 should be replaced by 14.

262. 3; The series is $3^2 - 2^2 - 1^2 = 4$, $4^2 - 3^2 - 2^2 = 3$, $5^2 - 4^2 - 3^2 = 0$, $6^2 - 5^2 - 4^2 = -5$, $7^2 - 6^2 - 5^2 = -12$, $8^2 - 7^2 - 6^2 = -21$. Hence, 2 should be replaced by 3.

263. 4; The series is $10^2 + 1^2 + 0^2 = 101$, $11^2 + 1^2 + 1^2 = 123$, $12^2 + 1^2 + 2^2 = 149$, $13^2 + 1^2 + 3^2 = 179$, $14^2 + 1^2 + 4^2 = 213$, $15^2 + 1^2 + 5^2 = 251$. Hence, 218 should be replaced by 213.

264. 2; The series is $\times 2 + 3$, $\times 2 + 5$, $\times 2 + 7$, $\times 2 + 9$, $\times 2 + 11$...

Hence, 45 should be replaced by 47.