



In this topic, we are given a series of numbers. We have to identify the pattern.  
 इस विषय में, हमें संख्याओं की एक श्रृंखला दी जाती है। हमें पैटर्न की पहचान करनी होगी।

### Logics/तर्क

1. Squares and cubes/(वर्ग एवं घन)
2. ( $\times$  and  $+$ ) or ( $\times$  and  $-$ )
3. ( $\div$  and  $+$ ) or ( $\div$  and  $-$ )
4. Prime Number/(अभाज्य संख्याएं)
5. Difference/(अंतर)
6. Difference of Difference/(अंतर का अंतर)
7. Mixed series/(मिश्रित श्रृंखलाएं)
8. Miscellaneous/(विविध)

- \* Prime Number between 1 to 50® 15  
 1 से 50 के बीच अभाज्य संख्या® 15
- \* Prime Number between 51 to 100® 10  
 51 से 100 के बीच अभाज्य संख्या® 10
- \* Prime Number between 1 to 100® 25  
 1 से 100 के बीच अभाज्य संख्या® 25
- \* The Smallest Prime Number -2  
 सबसे छोटा अभाज्य संख्या 2

### Square of Numbers

|    |   |     |    |   |     |
|----|---|-----|----|---|-----|
| 11 | - | 121 | 21 | - | 441 |
| 12 | - | 144 | 22 | - | 484 |
| 13 | - | 169 | 23 | - | 529 |
| 14 | - | 196 | 24 | - | 576 |
| 15 | - | 225 | 25 | - | 625 |
| 16 | - | 256 | 26 | - | 676 |
| 17 | - | 289 | 27 | - | 729 |
| 18 | - | 324 | 28 | - | 784 |
| 19 | - | 361 | 29 | - | 841 |
| 20 | - | 400 | 30 | - | 900 |

### Cube of Numbers

|    |   |      |    |   |      |
|----|---|------|----|---|------|
| 1  | - | 1    | 11 | - | 1331 |
| 2  | - | 8    | 12 | - | 1728 |
| 3  | - | 27   | 13 | - | 2197 |
| 4  | - | 64   | 14 | - | 2744 |
| 5  | - | 125  | 15 | - | 3375 |
| 6  | - | 216  | 16 | - | 4096 |
| 7  | - | 343  | 17 | - | 4913 |
| 8  | - | 512  | 18 | - | 5832 |
| 9  | - | 729  | 19 | - | 6859 |
| 10 | - | 1000 | 20 | - | 8000 |

## EXERCISE QUESTION/अभ्यास प्रश्न

### TYPE - 1

Based on Addition/जोड़ के आधार पर

1. 45, 47, 51, 57, 65, 75, ?  
(a) 85 (b) 89  
(c) 87 (d) 84
2. 35, 38, 43, 50, 59, 70, ?  
(a) 80 (b) 83  
(c) 84 (d) 85
3. 7, 14, 25, 38, 55, 74, ?  
(a) 95 (b) 97  
(c) 107 (d) 113
4. 4, 14, 26, 40, 55, 71, ?  
(a) 89 (b) 88  
(c) 87 (d) 85
5. 65, 75, 89, 105, 125, 147, 172, ?  
(a) 196 (b) 198  
(c) 199 (d) 204
6. 55, 66, 83, 106, 137, 178, ?  
(a) 219 (b) 225  
(c) 299 (d) 208
7. 156, 172, 197, 233, 282, 346, ?  
(a) 392 (b) 429  
(c) 427 (d) 389
8. 2, 18, 54, 118, 218, ?  
(a) 339 (b) 292  
(c) 362 (d) 387
9. 121, 130, 155, 204, 285, 406, ?  
(a) 507 (b) 619  
(c) 497 (d) 575
10. 8, 12, 48, 148, 344, ?  
(a) 324 (b) 668  
(c) 524 (d) 598
11. 49, 50, 75, 156, 325, ?  
(a) 389 (b) 414  
(c) 614 (d) 628
12. 45, 53, 80, 144, 269, 485, ?  
(a) 828 (b) 512  
(c) 729 (d) 628
13. 36, 44, 108, 324, 836, ?  
(a) 1565 (b) 1836  
(c) 1936 (d) 2249
14. 25, 33, 249, 1249, ?  
(a) 2936 (b) 3993  
(c) 2236 (d) 4093
15. 27, 54, 397, 1728, ?  
(a) 5103 (b) 5175  
(c) 7725 (d) 6565
16. 58, 85, 210, 553, 1282, ?  
(a) 2621 (b) 2613  
(c) 1721 (d) 1913
17. 112, 114, 126, 162, 242, ?  
(a) 292 (b) 392  
(c) 345 (d) 484
18. 2, 11, 84, 325, 886, ?  
(a) 1867 (b) 2197  
(c) 1967 (d) 1841
19. 5, 10, 29, 70, 141, ?  
(a) 198 (b) 205  
(c) 250 (d) 188
20. 17, 20, 33, 64, 121, ?  
(a) 218 (b) 212  
(c) 224 (d) 252
21. 66, 70, 102, 194, ?  
(a) 219 (b) 274  
(c) 378 (d) 399
22. 110, 120, 174, 304, 542, ?  
(a) 724 (b) 821  
(c) 920 (d) 1011
23. 169, 197, 565, 1977, ?  
(a) 3536 (b) 5521  
(c) 7797 (d) 9272
24. 12, 20, 64, 176, 388, ?  
(a) 735 (b) 732  
(c) 789 (d) 841

25. 22, 40, 110, 264, ?  
 (a) 534 (b) 568  
 (c) 645 (d) 724
26. 70, 90, 190, 434, ?  
 (a) 765 (b) 766  
 (c) 886 (d) 968
27. 62, 130, 678, 2506, ?  
 (a) 5789 (b) 7895  
 (c) 9687 (d) 6798
28. 7, 10, 41, 172, 523, 1262, ?  
 (a) 2510 (b) 2605  
 (c) 2775 (d) 3524
29. 1, 10, 77, 298, 817, ?  
 (a) 1426 (b) 1223  
 (c) 1826 (d) 1575
30. 20, 30, 104, 306, 700, ?  
 (a) 1250 (b) 1150  
 (c) 1350 (d) 1100
31. 20, 48, 516, 2576, ?  
 (a) 5572 (b) 8148  
 (c) 5325 (d) 7215
32. 25, 26, 36, 37, 49, 50, ?  
 (a) 51 (b) 64  
 (c) 65 (d) 55
33. 66, 127, 218, 345, 514, ?  
 (a) 729 (b) 731  
 (c) 727 (d) 734
34. 126, 346, 734, 1338, ?  
 (a) 2206 (b) 2197  
 (c) 1728 (d) 1736
35. 218, 516, 1006, 1736, ?  
 (a) 2654 (b) 2744  
 (c) 2754 (d) 2829
36. 8, 12, 39, 55, 180, 216, 559, ?  
 (a) 512 (b) 623  
 (c) 841 (d) 729
37. 52, 60, 69, 133, 158, ?  
 (a) 216 (b) 343  
 (c) 374 (d) 491
38. 10, 11, 38, 63, 406, 487, ?  
 (a) 1529 (b) 1818  
 (c) 729 (d) 1728

39. 12, 21, 146, 195, ?  
 (a) 1529 (b) 1818  
 (c) 729 (d) 924
40. 5, 10, 38, 55, 181, ?  
 (a) 216 (b) 218  
 (c) 237 (d) 217

### TYPE - 2

#### Subtraction / घटना

1. 222, 220, 216, 210, 202, ?  
 (a) 196 (b) 198  
 (c) 192 (d) 200
2. 121, 110, 101, 94, 89, ?  
 (a) 86 (b) 83  
 (c) 72 (d) 79
3. 1136, 1100, 1075, 1059, ?  
 (a) 1050 (b) 1051  
 (c) 1020 (d) 1009
4. 2025, 2017, 1990, 1926, 1801, ?  
 (a) 1726 (b) 1585  
 (c) 1685 (d) 1405
5. 342, 510, 726, 996, ?  
 (a) 1331 (b) 1326  
 (c) 1131 (d) 1278
6. 24, 60, 120, 210, 336, ?  
 (a) 512 (b) 496  
 (c) 504 (d) 500
7. 101, 100, ?, 87, 71, 46  
 (a) 92 (b) 88  
 (c) 89 (d) 96
8. 2, 6, 12, 20, 30, ?  
 (a) 49 (b) 42  
 (c) 38 (d) 35
9. 225, 221, 194, 178, 53, ?  
 (a) 36 (b) -2  
 (c) 17 (d) 4
10. 1995, 1987, 1978, 1914, 1889, ?  
 (a) 1673 (b) 1590  
 (c) 1650 (d) 1773

**TYPE - 3****Multiplication / गुणा**

1. 8, 16, 48, 192, 960, ?  
(a) 2155 (b) 3750  
(c) 1820 (d) 5760
2. 4, 8, 32, 192, 1536, ?  
(a) 12240 (b) 15360  
(c) 11226 (d) 25048
3. 3, 9, 45, 315, 2835, ?  
(a) 19845 (b) 25515  
(c) 31185 (d) 22680
4. 4, 8, 32, 256, 4096, ?  
(a) 131072 (b) 230137  
(c) 107231 (d) 312017
5. 1, 4, 36, 576, ?  
(a) 14400 (b) 11224  
(c) 13264 (d) 10624
6. 1, 3, 18, 180, ?  
(a) 2750 (b) 2550  
(c) 2700 (d) 2705
7. 2, 4, 24, 240, ?  
(a) 3360 (b) 2640  
(c) 2400 (d) 2870
8. 20, 24, 28, 32, 36, ?  
(a) 40 (b) 44  
(c) 42 (d) 38
9. 1, 2, 12, 120, 1680, ?  
(a) 34560 (b) 32640  
(c) 30240 (d) 40320
10. 1, 10, 20, 2000, 6000, ?  
(a) 60, 00, 000 (b) 60000  
(c) 600000000 (d) 60000000
11. 110, 156, 210, 272, ?  
(a) 342 (b) 306  
(c) 380 (d) 288

12. 15, 35, 63, 99, 143, ?  
(a) 185 (b) 165  
(c) 195 (d) 205

**TYPE - 4****Prime Number / अभाज्य संख्या**

1. 5, 7, 11, 13, 17, 19, 23, ?  
(a) 25 (b) 27  
(c) 29 (d) 26
2. 31, 37, 41, 43, 47, ?  
(a) 49 (b) 51  
(c) 53 (d) 50
3. 2, 5, 11, 17, 23, 31, ?  
(a) 33 (b) 35  
(c) 39 (d) 41
4. 179, 181, 191, 193, 197, 199, ?  
(a) 201 (b) 207  
(c) 211 (d) 213
5. 907, 919, 937, 947, ?  
(a) 967 (b) 957  
(c) 971 (d) 977
6. 4, 9, 25, 49, 121, 169, ?  
(a) 144 (b) 289  
(c) 256 (d) 361
7. 8, 27, 125, 343, 1331, ?  
(a) 1728 (b) 1444  
(c) 2197 (d) 2278
8. 1151, 1153, 1163, 1171, 1181, ?  
(a) 1193 (b) 1184  
(c) 1187 (d) 1183
9. 2, 11, 23, 41, ?  
(a) 51 (b) 47  
(c) 59 (d) 53
10. 2, 7, 17, 29, 41, ?  
(a) 53 (b) 55  
(c) 57 (d) 51

**TYPE - 5****Difference of Difference/अन्तर का अन्तर**

1. 2, 2, 5, 13, 28, ?  
(a) 49 (b) 50  
(c) 51 (d) 52
2. 8, 29, 113, 449, ?  
(a) 1793 (b) 1344  
(c) 1544 (d) 1223
3. 3, 5, 8, 13, 22, ?  
(a) 39 (b) 72  
(c) 45 (d) 33
4. 5, 24, 61, 122, 213, ?  
(a) 340 (b) 509  
(c) 369 (d) 327
5. 2, 10, 30, 68, ?  
(a) 92 (b) 130  
(c) 142 (d) 108
6. 125, 106, 89, 76, 65, ?  
(a) 58 (b) 53  
(c) 45 (d) 50
7. 8, 29, 113, 449, ?  
(a) 1344 (b) 1593  
(c) 936 (d) 1793
8. 14, 19, 29, 49, ?  
(a) 92 (b) 102  
(c) 98 (d) 89
9. 5, 24, 61, 122, 213, ?  
(a) 396 (b) 296  
(c) 340 (d) 509
10. 10, 15, 26, 35, 50, ?  
(a) 82 (b) 59  
(c) 63 (d) 52

**TYPE -6****Miscellaneous /विविध**

1. 7, 12, 19, 28, 39 ?  
(a) 92 (b) 52  
(c) 53 (d) 50

2. 2, 10, 37, 101, 226, ?  
(a) 441 (b) 443  
(c) 442 (d) 484
3. 10, 40, 80, 320, 640, ?  
(a) 1280 (b) 2560  
(c) 1590 (d) 2430
4. 3, 8, 15, ?, 35  
(a) 21 (b) 24  
(c) 25 (d) 18
5. 2, 2, 3, 6, 15, 45, ?  
(a) 128 (b) 97.5  
(c) 115.5 (d) 157.5
6. 7, 18, 40, 73, 117, ?  
(a) 162 (b) 172  
(c) 171 (d) 175
7. 4, 10, 23, 50, 105, ?  
(a) 216 (b) 218  
(c) 210 (d) 220
8. 16, 196, 25, 169, 36, ?  
(a) 49 (b) 121  
(c) 144 (d) 100
9. 3.5, 3.7, 4.1, 4.9, ?  
(a) 6.5 (b) 6.4  
(c) 8.8 (d) 6.7
10. 7, 11, 18, 29, 47, ?  
(a) 68 (b) 69  
(c) 76 (d) 79
11. 16, 25, 40, 61, ?  
(a) 68 (b) 78  
(c) 88 (d) 98
12. 9, 16, 30, 58, 114, ?  
(a) 228 (b) 226  
(c) 230 (d) 232
13. 6, 3, 4.5, 11.25, ?  
(a) 38.725 (b) 37.735  
(c) 39.375 (d) 40.725

14. 15, 8, 9, 15, 32, 82.5, ?  
 (a) 174 (b) 215  
 (c) 249.5 (d) 250.5
15. 2, 2.4, 3.3, 4.9, ?, 11  
 (a) 5.4 (b) 7.4  
 (c) 6.4 (d) 8.4
16. 15, 30, 10, 40, 8, ?  
 (a) 40 (b) 48  
 (c) 56 (d) 64
17. 2, 8, 33, 148, ?  
 (a) 765 (b) 865  
 (c) 775 (d) 875
18. 2048, 512, 64, 4,  $\frac{1}{8}$ , ?  
 (a)  $\frac{1}{128}$  (b)  $\frac{1}{256}$   
 (c)  $\frac{1}{512}$  (d)  $\frac{1}{640}$
19. 20, 12, 10, 13, 22.5, ?  
 (a) 42.75 (b) 43.25  
 (c) 43.75 (d) 44
20. 5824, 5242, 4718, 4247, ?  
 (a) 4132 (b) 4039  
 (c) 3823 (d) 3783
21. 194, 185, 169, 144, 108, ?  
 (a) 49 (b) 36  
 (c) 59 (d) 29
22. 3, 7, 23, 95, ?  
 (a) 428 (b) 469  
 (c) 479 (d) 498
23. 10, 40, 80, 320, 640, ?  
 (a) 1280 (b) 2560  
 (c) 1590 (d) 2430
24. 2, 10, 26, 50, ?  
 (a) 62 (b) 72  
 (c) 82 (d) 92
25. 380, 188, 92, 44, 20, ?  
 (a) 6 (b) 7  
 (c) 8 (d) 9
26. 15, 16, 20, 29, 45, ?  
 (a) 49 (b) 65  
 (c) 70 (d) 75
27. 26, 74, 218, 650, ?  
 (a) 1950 (b) 1946  
 (c) 1944 (d) 1948
28. 60, 120, 210, 336, ?  
 (a) 512 (b) 729  
 (c) 504 (d) 722
29. 5, 8, 15, 28, ?  
 (a) 46 (b) 47  
 (c) 49 (d) 50
30. 1, 5, 9, 17, 25, 37, ?  
 (a) 48 (b) 49  
 (c) 50 (d) 51
31. 2, 8, 20, 44, 92, ?  
 (a) 184 (b) 186  
 (c) 188 (d) 190
32. 7, 11, 19, ?, 67, 131  
 (a) 34 (b) 35  
 (c) 36 (d) 37
33. 3, 1.5, 1.5, 2.25, 4.5, ?  
 (a) 11.25 (b) 11.75  
 (c) 12 (d) 12.25
34. 36, 54, 18, 27, 9, ?  
 (a) 13.5 (b) 14.5  
 (c) 15.5 (d) 16.5
35. 8, 6, 9, 7, 10, 8, ?  
 (a) 9 (b) 10  
 (c) 11 (d) 12
36. 325, 259, 204, 160, 127, ?  
 (a) 100 (b) 103  
 (c) 105 (d) 107

37. 380, 188, 92, 44, ?  
 (a) 22 (b) 20  
 (c) 18 (d) 16
38. 1438, 1429, 1417, 1402, ?  
 (a) 1384 (b) 1382  
 (c) 1380 (d) 1378
39. 9, 13, 21, 37, 69, ?  
 (a) 131 (b) 132  
 (c) 133 (d) 134
40. 49, 56, 64, 72, 81, ?  
 (a) 89 (b) 90  
 (c) 99 (d) 100
41. 15, 32, 55, 86, 127, ?  
 (a) 153 (b) 180  
 (c) 192 (d) 204
42. 15, 17, 22, 32, 49, ?  
 (a) 74 (b) 75  
 (c) 76 (d) 77
43. 1440, 240, 48, 12, 4, ?  
 (a) 3 (b) 2  
 (c) 1 (d) -1
44. 80, 70, 55, 35, 10, ?  
 (a) 0 (b) -10  
 (c) -20 (d) -35
45. 5, 8, 15, 26, 41, ?  
 (a) 58 (b) 59  
 (c) 60 (d) 61
46. 10, 12, 24, 54, 110, 200, ?  
 (a) 232 (b) 264  
 (c) 332 (d) 364
47. 256, 384, 576, 864, ?  
 (a) 1296 (b) 1298  
 (c) 1302 (d) 1304
48. 3, 6, 18, 72, 360, ?  
 (a) 1440 (b) 2520  
 (c) 1800 (d) 2160
49. 16, 17, 21, 30, ?  
 (a) 45 (b) 46  
 (c) 47 (d) 48
50. 5, 21, 69, 213, ?  
 (a) 643 (b) 645  
 (c) 647 (d) 649
51. 0, 7, 26, 63, 124, ?  
 (a) 216 (b) 215  
 (c) 214 (d) 213
52. 2.1, 5.2, 8.4, 11.7, ?  
 (a) 15.1 (b) 15.2  
 (c) 15.3 (d) 15.4
53. 5, 8, 16, 19, 38, ?  
 (a) 39 (b) 40  
 (c) 41 (d) 42
54. 0.25, 5, 30, 186, ?  
 (a) 1308 (b) 1309  
 (c) 1310 (d) 1311
55. 33, 48, 65, 84, ?  
 (a) 105 (b) 110  
 (c) 128 (d) 132
56. 3, 28, 4, 65, 5, 126, ?  
 (a) 6 (b) 217  
 (c) 7 (d) 343
57. 100, 52, 28, 16, ?  
 (a) 7 (b) 8  
 (c) 9 (d) 10
58. 3, 20, 63, 144, 275, ?  
 (a) 368 (b) 468  
 (c) 568 (d) 668
59. 82, 86, 122, 126, ?  
 (a) 161 (b) 162  
 (c) 163 (d) 166
60.  $1.5, \frac{9}{4}, 3, \frac{15}{4}, \frac{9}{2}, ?$   
 (a)  $\frac{21}{4}$  (b) 3.2  
 (c) 9 (d) 7

61. 4, 7, 14, 24, 41, ?  
 (a) 52 (b) 58  
 (c) 68 (d) 72
62. 1, 3, 6, 11, 18, ?  
 (a) 23 (b) 29  
 (c) 33 (d) 37
63. 1065, 850, 726, 663, 637, ?  
 (a) 629 (b) 630  
 (c) 631 (d) 663
64. -200, 100, -50, 25, -12.5 ?  
 (a) -6.25 (b) -7.25  
 (c) 6.25 (d) 6
65. 1024, 520, 268, 142, ?  
 (a) 79 (b) 80  
 (c) 81 (d) 82
66. 4, 20, 29, 38, 47, ?  
 (a) 56 (b) 65  
 (c) 68 (d) 54
67. 8, 12, 18, 27, 40.5, ?  
 (a) 60.25 (b) 60.75  
 (c) 80.25 (d) 80.75
68. 5, 9, 18, 43, 92, ?  
 (a) 198 (b) 208  
 (c) 213 (d) 217
69. 256, 128, 192, 480, ?  
 (a) 890 (b) 1680  
 (c) 1780 (d) 1230
70. 9, 20, 36, 78, 148, ?  
 (a) 296 (b) 306  
 (c) 318 (d) 324
71. 2, 3, 11, 58, 410, ?  
 (a) 2165 (b) 3285  
 (c) 3695 (d) 3995
72. 2, 5, 23, 119, ?  
 (a) 658 (b) 659  
 (c) 660 (d) 661
73. 1, 9, 61, 497, ?  
 (a) 4979 (b) 4981  
 (c) 4983 (d) 4985
74. 15, 16, 31, 94, 375, ?  
 (a) 1575 (b) 1725  
 (c) 1876 (d) 1976
75. 27, 48, 83, 132, 195, ?  
 (a) 271 (b) 272  
 (c) 273 (d) 274
76. 15, 22, 40, 75, 133, ?  
 (a) 175 (b) 201  
 (c) 222 (d) 232
77. 2, 12, 36, 80, 150, ?  
 (a) 220 (b) 252  
 (c) 272 (d) 286
78. 1, 7, 21, 51, 113, ?  
 (a) 238 (b) 239  
 (c) 240 (d) 241
79. 3, 16, 45, 96, 175, ?  
 (a) 278 (b) 288  
 (c) 298 (d) 308
80. 5, 9, 16, 32, 75, ?  
 (a) 150 (b) 124  
 (c) 199 (d) 81
81. 100, 101, 102, 101, 96, ?  
 (a) 100 (b) 98  
 (c) 85 (d) 83

### TYPE - 1

#### Based on Addition

1. (c)  $45, 47, 51, 57, 65, 75, ? \rightarrow 87$   
 $+2 \quad +4 \quad +6 \quad +8 \quad +10 \quad +12$

2. (b)  $35, 38, 43, 50, 59, 70, ? \rightarrow 83$   
 $+3 \quad +5 \quad +7 \quad +9 \quad +11 \quad +13$

3. (b)  $7, 14, 25, 38, 55, 74, ? \rightarrow 97$   
 $+7 \quad +11 \quad +13 \quad +17 \quad +19 \quad +23$

(Add prime nos.)

4. (a)  $4, 14, 26, 40, 55, 71, ? \rightarrow 89$   
 $+10 \quad +12 \quad +14 \quad +15 \quad +16 \quad +18$

(Add Composite nos.)

5. (c)  $65, 75, 89, 105, 125, 147, 172, ? \rightarrow 199$   
 $+10 \quad +14 \quad +16 \quad +20 \quad +22 \quad +25 \quad +27$   
 (Add Alternate composite nos.)

6. (b)  $55, 66, 83, 106, 137, 178, ? \rightarrow 225$   
 $+11 \quad +17 \quad +23 \quad +31 \quad +41 \quad +47$

(Add alternate prime nos.)

7. (c)  $156, 172, 197, 233, 282, 346, ? \rightarrow 427$   
 $+16 \quad +25 \quad +36 \quad +49 \quad +64 \quad +81$   
 $\downarrow \quad \downarrow \quad \downarrow \quad \downarrow \quad \downarrow \quad \downarrow$   
 $(4)^2 \quad (5)^2 \quad (6)^2 \quad (7)^2 \quad (8)^2 \quad (9)^2$

8. (c)  $2, 18, 54, 118, 218, ? \rightarrow 362$   
 $+16 \quad +36 \quad +64 \quad +100 \quad +144$   
 $\downarrow \quad \downarrow \quad \downarrow \quad \downarrow \quad \downarrow$   
 $(4)^2 \quad (6)^2 \quad (8)^2 \quad (10)^2 \quad (12)^2$

9. (d)  $121, 130, 155, 204, 285, 406, ? \rightarrow 575$   
 $+9 \quad +25 \quad +49 \quad +81 \quad +121 \quad +169$   
 $\downarrow \quad \downarrow \quad \downarrow \quad \downarrow \quad \downarrow \quad \downarrow$   
 $(3)^2 \quad (5)^2 \quad (7)^2 \quad (9)^2 \quad (11)^2 \quad (13)^2$

10. (b)  $8, 12, 48, 148, 344, ? \rightarrow 668$   
 $+4 \quad +36 \quad +100 \quad +196 \quad +324$   
 $\downarrow \quad \downarrow \quad \downarrow \quad \downarrow \quad \downarrow$   
 $(2)^2 \quad (6)^2 \quad (10)^2 \quad (14)^2 \quad (18)^2$

11. (c)  $49, 50, 75, 156, 325, ? \rightarrow 614$   
 $+1 \quad +25 \quad +81 \quad +169 \quad +289$   
 $\downarrow \quad \downarrow \quad \downarrow \quad \downarrow \quad \downarrow$   
 $(1)^2 \quad (5)^2 \quad (9)^2 \quad (13)^2 \quad (17)^2$

12. (a)  $45, 53, 80, 144, 269, 485, ? \rightarrow 828$   
 $+8 \quad +27 \quad +64 \quad +125 \quad +216 \quad +343$   
 $\downarrow \quad \downarrow \quad \downarrow \quad \downarrow \quad \downarrow \quad \downarrow$   
 $(2)^3 \quad (3)^3 \quad (4)^3 \quad (5)^3 \quad (6)^3 \quad (7)^3$

13. (b)  $36, 44, 108, 324, 836, ? \rightarrow 1836$   
 $+8 \quad +64 \quad +216 \quad +512 \quad +1000$   
 $\downarrow \quad \downarrow \quad \downarrow \quad \downarrow \quad \downarrow$   
 $(2)^3 \quad (4)^3 \quad (6)^3 \quad (8)^3 \quad (10)^3$

14. (b)  $25, 33, 249, 1249, ? \rightarrow 3993$   
 $+8 \quad +216 \quad +1000 \quad +2744$   
 $\downarrow \quad \downarrow \quad \downarrow \quad \downarrow$   
 $(2)^3 \quad (6)^3 \quad (10)^3 \quad (14)^3$

15. (a)  $27, 54, 397, 1728, ? \rightarrow 5103$   
 $+27 \quad +343 \quad +1331 \quad +3375$   
 $\downarrow \quad \downarrow \quad \downarrow \quad \downarrow$   
 $(3)^3 \quad (7)^3 \quad (11)^3 \quad (15)^3$

16. (b)  $58, 85, 210, 553, 1282, ? \rightarrow 2613$   
 $+27 \quad +125 \quad +343 \quad +729 \quad +1331$   
 $\downarrow \quad \downarrow \quad \downarrow \quad \downarrow \quad \downarrow$   
 $(3)^3 \quad (5)^3 \quad (7)^3 \quad (9)^3 \quad (11)^3$

17. (b)  $112, 114, 126, 162, 242, ? \rightarrow 392$   
 $+2 \quad +12 \quad +36 \quad +80 \quad +150$   
 $\downarrow \quad \downarrow \quad \downarrow \quad \downarrow \quad \downarrow$   
 $(1^2+1^3) \quad (2^2+2^3) \quad (3^2+3^3) \quad (4^2+4^3) \quad (5^2+5^3)$

18. (c)  $2, 11, 84, 325, 886, ? \rightarrow 1967$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +9 & +73 & +241 & +561 & +1081 & \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \\ (1^2+2^3) & (3^2+4^3) & (5^2+6^3) & (7^2+8^3) & (9^2+10^3) & \end{array}$$

19. (c)  $5, 10, 29, 70, 141, ? \rightarrow 250$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +5 & +19 & +41 & +71 & +109 & \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \\ (1+2^2) & (3+4^2) & (5+6^2) & (7+8^2) & (9+10^2) & \end{array}$$

20. (b)  $17, 20, 33, 64, 121, ? \rightarrow 212$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +3 & +13 & +31 & +57 & +91 & \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \\ (1^2+2) & (3^2+4) & (5^2+6) & (7^2+8) & (9^2+10) & \end{array}$$

21. (c)  $66, 70, 102, 194, ? \rightarrow 378$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +4 & +32 & +92 & +184 & & \\ \downarrow & \downarrow & \downarrow & \downarrow & & \\ (1^2+3) & (5^2+7) & (9^2+11) & (13^2+15) & & \end{array}$$

22. (c)  $110, 120, 174, 304, 542, ? \rightarrow 920$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +10 & +54 & +130 & +238 & +378 & \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \\ (1+3^3) & (5+7^3) & (9+11^3) & (13+15^3) & (17+19^3) & \end{array}$$

23. (b)  $169, 197, 565, 1977, ? \rightarrow 5521$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +28 & +368 & +1412 & +3544 & & \\ \downarrow & \downarrow & \downarrow & \downarrow & & \\ (1^2+3^3) & (5^2+7^3) & (9^2+11^3) & (13^2+15^3) & & \end{array}$$

24. (b)  $12, 20, 64, 176, 388, ? \rightarrow 732$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +8 & +44 & +112 & +212 & +344 & \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \\ (2^2+4) & (6^2+8) & (10^2+12) & (14^2+16) & (18^2+20) & \end{array}$$

25. (a)  $22, 40, 110, 264, ? \rightarrow 534$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +18 & +70 & +154 & +270 & & \\ \downarrow & \downarrow & \downarrow & \downarrow & & \\ (2+4^2) & (6+8^2) & (10+12^2) & (14+16^2) & & \end{array}$$

26. (c)  $70, 90, 190, 434, ? \rightarrow 886$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +20 & +100 & +244 & +452 & & \\ \downarrow & \downarrow & \downarrow & \downarrow & & \\ (2^2+4^2) & (6^2+8^2) & (10^2+12^2) & (14^2+16^2) & & \end{array}$$

27. (d)  $62, 130, 678, 2506, ? \rightarrow 6798$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +68 & +548 & +1828 & +4292 & & \\ \downarrow & \downarrow & \downarrow & \downarrow & & \\ (2^2+4^3) & (6^2+8^3) & (10^2+12^3) & (14^2+16^3) & & \end{array}$$

28. (b)  $7, 10, 41, 172, 523, 1262, ? \rightarrow 2605$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +3 & +31 & +131 & +351 & +739 & +1343 \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ (1^3+2) & (3^3+4) & (5^3+6) & (7^3+8) & (9^3+10) & (11^3+12) \end{array}$$

29. (c)  $1, 10, 77, 298, 817, ? \rightarrow 1826$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +9 & +67 & +221 & +519 & +1009 & \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \\ (1+2^3) & (3+4^3) & (5+6^3) & (7+8^3) & (9+10^3) & \end{array}$$

30. (c)  $20, 30, 104, 306, 700, ? \rightarrow 1350$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +10 & +74 & +202 & +394 & +650 & \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \\ (1^2+3^2) & (5^2+7^2) & (9^2+11^2) & (13^2+15^2) & (17^2+19^2) & \end{array}$$

31. (b)  $20, 48, 516, 2576, ? \rightarrow 8148$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +28 & +468 & +2060 & +5572 & & \\ \downarrow & \downarrow & \downarrow & \downarrow & & \\ (1^3+3^3) & (5^3+7^3) & (9^3+11^3) & (13^3+15^3) & & \end{array}$$

32. (b)  $25, 26, 36, 37, 49, 50, ? \rightarrow 64$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ (5^2+0) & (5^2+1) & (6^2+0) & (6^2+1) & (7^2+0) & (7^2+1) \end{array}$$

33. (b)  $66, 127, 218, 345, 514, ? \rightarrow 731$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ (4^3+2) & (5^3+2) & (6^3+2) & (7^3+2) & (8^3+2) & (9^3+2) \end{array}$$

34. (a)  $126, 346, 734, 1338, ? \rightarrow 2206$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ (5^3+1) & (7^3+3) & (9^3+5) & (11^3+7) & (13^3+9) & \end{array}$$

35. (c)  $218, 516, 1006, 1736, ? \rightarrow 2754$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ (6^3+2) & (8^3+4) & (10^3+6) & (12^3+8) & (14^3+10) & \end{array}$$

36. (b)  $8, 12, 39, 55, 180, 216, 559, ? \rightarrow 623$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +4 & +27 & +16 & +125 & +36 & +343 & +64 \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ (2^2) & (3^2) & (4^2) & (5^2) & (6^2) & (7^2) & (8^2) \end{array}$$

37. (c)  $52, 60, 69, 133, 158, ? \rightarrow 374$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +8 & +9 & +64 & +25 & +216 & \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ (2^3) & (3^3) & (4^3) & (5^3) & (6^3) & \end{array}$$

38. (b)  $10, 11, 38, 63, 406, 487, ? \rightarrow 1818$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +1 & +27 & +25 & +343 & +81 & +1331 \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ (1^3) & (3^3) & (5^3) & (7^3) & (9^3) & (11^3) \end{array}$$

39. (d)  $12, 21, 146, 195, ? \rightarrow 924$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +9 & +125 & +49 & +729 & & \\ \downarrow & \downarrow & \downarrow & \downarrow & & \\ (3^2) & (5^2) & (7^2) & (9^2) & & \end{array}$$

40. (b)  $5, 10, 38, 55, 181, ? \rightarrow 218$

$$\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +5 & +28 & +17 & +126 & +37 & \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ (2^2+1) & (3^3+1) & (4^2+1) & (5^3+1) & (6^2+1) & \end{array}$$

## TYPE - 2

### Subtraction / घटना

1. (c)  $222, 220, 216, 210, 202, ? \rightarrow 192$   
 $\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ -2 & -4 & -6 & -8 & -10 \end{array}$
2. (a)  $121, 110, 101, 94, 89, ? \rightarrow 86$   
 $\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ -11 & -9 & -7 & -5 & -3 \end{array}$
3. (a)  $1136, 1100, 1075, 1059, ? \rightarrow 1050$   
 $\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ -36 & -25 & -16 & -9 & & \\ \downarrow & \downarrow & \downarrow & \downarrow & & \\ (6)^2 & (5)^2 & (4)^2 & (3)^2 & & \end{array}$
4. (b)  $2025, 2017, 1990, 1926, 1801, ? \rightarrow 1585$   
 $\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ -8 & -27 & -64 & -125 & -216 \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ (2)^3 & (3)^3 & (4)^3 & (5)^3 & (6)^3 \end{array}$
5. (b)  $342, 510, 726, 996, ? \rightarrow 1326$   
 $\begin{array}{cccccc} \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ (7^3-1) & (8^3-2) & (9^3-3) & (10^3-4) & (11^3-5) \end{array}$
6. (c)  $24, 60, 120, 210, 336, ? \rightarrow 504$   
 $\begin{array}{cccccc} \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ (3^3-3) & (4^3-4) & (5^3-5) & (6^3-6) & (7^3-7) & (8^3-8) \end{array}$
7. (d)  $101, 100, 96, 87, 71, 46 \rightarrow 96$   
 $\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ -1 & -4 & -9 & -16 & -25 \end{array}$
8. (b)  $2, 6, 12, 20, 30, ? \rightarrow 42$   
 $\begin{array}{cccccc} \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ (2^2-2) & (3^2-3) & (4^2-4) & (5^2-5) & (6^2-6) & (7^2-7) \end{array}$
9. (c)  $225, 221, 194, 178, 53, ? \rightarrow 17$   
 $\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ -4 & -27 & -16 & -125 & -36 \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ (2)^2 & (3)^3 & (4)^2 & (5)^3 & (6)^2 \end{array}$
10. (a)  $1995, 1987, 1978, 1914, 1889, ? \rightarrow 1673$   
 $\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ -8 & -9 & -64 & -25 & -216 \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ (2)^3 & (3)^2 & (4)^3 & (5)^2 & (6)^3 \end{array}$

## TYPE - 3

### Multiplication / गुणा

1. (d)  $8, 16, 48, 192, 960, ? \rightarrow 5760$   
 $\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ \times 2 & \times 3 & \times 4 & \times 5 & \times 6 \end{array}$
2. (b)  $4, 8, 32, 192, 1536, ? \rightarrow 15360$   
 $\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ \times 2 & \times 4 & \times 6 & \times 8 & \times 10 \end{array}$
3. (c)  $3, 9, 45, 315, 2835, ? \rightarrow 31185$   
 $\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ \times 3 & \times 5 & \times 7 & \times 9 & \times 11 \end{array}$

4. (a)  $4, 8, 32, 256, 4096, ? \rightarrow 131072$   
 $\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ \times 2 & \times 4 & \times 8 & \times 16 & \times 32 \end{array}$
5. (a)  $1, 4, 36, 576, ? \rightarrow 14400$   
 $\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ \times 4 & \times 9 & \times 16 & \times 25 & & \\ \downarrow & \downarrow & \downarrow & \downarrow & & \\ (2)^2 & (3)^2 & (4)^2 & (5)^2 & & \end{array}$
6. (c)  $1, 3, 18, 180, ? \rightarrow 2700$   
 $\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ \times 3 & \times 6 & \times 10 & \times 15 & & \end{array}$
7. (a)  $2, 4, 24, 240, ? \rightarrow 3360$   
 $\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ \times 2 & \times 6 & \times 10 & \times 14 & & \end{array}$
8. (a)  $20, 24, 28, 32, 36, ? \rightarrow 40$   
 $\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +4 & +4 & +4 & +4 & +4 \end{array}$
9. (c)  $1, 2, 12, 120, 1680, ? \rightarrow 30240$   
 $\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ \times 2 & \times 6 & \times 10 & \times 14 & \times 18 \end{array}$
10. (a)  $1, 10, 20, 2000, 6000, ? \rightarrow 6000000$   
 $\begin{array}{cccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ \times 10 & \times 2 & \times 100 & \times 3 & \times 1000 \end{array}$
11. (a)  $110, 156, 210, 272, ? \rightarrow 342$   
 $\begin{array}{cccccc} \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ (10 \times 11) & (12 \times 13) & (14 \times 15) & (16 \times 17) & (18 \times 19) \end{array}$
12. (c)  $15, 35, 63, 99, 143, ? \rightarrow 195$   
 $\begin{array}{cccccc} \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ (3 \times 5) & (5 \times 7) & (7 \times 9) & (9 \times 11) & (11 \times 13) & (13 \times 15) \end{array}$

## TYPE - 4

### Prime Number / अभाज्य संख्या

1. (c)  $5, 7, 11, 13, 17, 19, 23, ? \rightarrow 29$   
 (Next Prime no.)
2. (c)  $31, 37, 41, 43, 47, ? \rightarrow 53$   
 (Next Prime no.)
3. (d)  $2, 5, 11, 17, 23, 31, ? \rightarrow 41$   
 $\begin{array}{cccccc} \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ (3) & (7) & (13) & (19) & (29) & (37) \end{array}$   
 (Take Alternate prime nos.)
4. (c)  $179, 181, 191, 193, 197, 199, ? \rightarrow 211$   
 (Take alternate prime nos.)
5. (a)  $907, 919, 937, 947, ? \rightarrow 967$   
 (Take alternate prime nos.)

6. (b) 4, 9, 25, 49, 121, 169, ? → **289**  
 $\downarrow \quad \downarrow \quad \downarrow \quad \downarrow \quad \downarrow \quad \downarrow$   
 $(2)^2 (3)^2 (5)^2 (7)^2 (11)^2 (13)^2 (17)^2$

7. (c) 8, 27, 125, 343, 1331, ? → **2197**  
 $\downarrow \quad \downarrow \quad \downarrow \quad \downarrow \quad \downarrow$   
 $(2)^3 (3)^3 (5)^3 (7)^3 (11)^3 (13)^3$

8. (c) 1151, 1153, 1163, 1171, 1181, ?  
→ **1187**

9. (c) 2, 11, 23, 41, ? → **59**  
(Skip 3 prime nos.)

10. (a)  $2 \downarrow 7 \downarrow 17 \downarrow 29 \downarrow 41 \downarrow ? \rightarrow 53$   
 $(3)(5) (11)(13) (19)(23) (31)(37) (43)(47)$   
(Skip two prime nos.)

7. (d) 8, 29, 113, 449, ? → **1793**  
 $\begin{array}{ccccccc} & \nearrow & & \nearrow & & \nearrow & \\ +21 & +84 & +336 & +1344 & & & \\ & \searrow & & \searrow & & \searrow & \\ & \times 4 & & \times 4 & & \times 4 & \end{array}$

8. (d) 14, 19, 29, 49, ? → **89**  
 $\begin{array}{ccccccc} & \nearrow & & \nearrow & & \nearrow & \\ +5 & +10 & +20 & +40 & & & \\ & \searrow & & \searrow & & \searrow & \\ & \times 2 & & \times 2 & & \times 2 & \end{array}$

9. (c) 5, 24, 61, 122, 213, ? → **340**  
 $\begin{array}{ccccccc} & \nearrow & & \nearrow & & \nearrow & \\ +19 & +37 & +61 & +91 & +127 & & \\ & \searrow & & \searrow & & \searrow & \\ & (6 \times 3) & & (6 \times 4) & & (6 \times 5) & (6 \times 6) \end{array}$

10. (c) 10, 15, 26, 35, 50, ? → **63**  
 $\begin{array}{ccccccc} & \nearrow & & \nearrow & & \nearrow & \\ +5 & +11 & +9 & +15 & +13 & & \\ & \searrow & & \searrow & & \searrow & \\ & +6 & & -2 & & +6 & -2 \end{array}$

### TYPE - 5

#### Difference of Difference/अन्तर का अन्तर

1. (d) 2, 2, 5, 13, 28, ? → **52**  
 $\begin{array}{ccccccc} & \nearrow & & \nearrow & & \nearrow & \\ +0 & +3 & +8 & +15 & +24 & & \\ & \searrow & & \searrow & & \searrow & \\ & +3 & & +5 & & +7 & +9 \end{array}$

2. (a) 8, 29, 113, 449, ? → **1793**  
 $\begin{array}{ccccccc} & \nearrow & & \nearrow & & \nearrow & \\ +21 & +84 & +336 & +1344 & & & \\ & \searrow & & \searrow & & \searrow & \\ & \times 4 & & \times 4 & & \times 4 & \end{array}$

3. (a) 3, 5, 8, 13, 22, ? → **39**  
 $\begin{array}{ccccccc} & \nearrow & & \nearrow & & \nearrow & \\ +2 & +3 & +5 & +9 & +17 & & \\ & \searrow & & \searrow & & \searrow & \\ & +1 & & +2 & & +4 & +8 \end{array}$

4. (a) 5, 24, 61, 122, 213, ? → **340**  
 $\begin{array}{ccccccc} & \nearrow & & \nearrow & & \nearrow & \\ +19 & +37 & +61 & +91 & +127 & & \\ & \searrow & & \searrow & & \searrow & \\ & +18 & & +24 & & +30 & +36 \\ & \searrow & & \searrow & & \searrow & \\ & (6 \times 3) & & (6 \times 4) & & (6 \times 5) & (6 \times 6) \end{array}$

5. (b) 2, 10, 30, 68, ? → **130**  
 $\begin{array}{ccccccc} & \nearrow & & \nearrow & & \nearrow & \\ +8 & +20 & +38 & +62 & & & \\ & \searrow & & \searrow & & \searrow & \\ & +12 & & +18 & & +24 & \\ & \searrow & & \searrow & & \searrow & \\ & +6 & & +6 & & & \end{array}$

6. (a) 125, 106, 89, 76, 65, ? → **58**  
 $\begin{array}{ccccccc} & \nearrow & & \nearrow & & \nearrow & \\ -19 & -17 & -13 & -11 & -7 & & \end{array}$

### TYPE - 6

#### Miscellaneous/विविध

1. (b) 7, 12, 19, 28, 39, ? → **52**  
 $\begin{array}{ccccccc} & \nearrow & & \nearrow & & \nearrow & \\ +5 & +7 & +9 & +11 & +13 & & \end{array}$

2. (c) 2, 10, 37, 101, 226, ? → **442**  
 $\begin{array}{ccccccc} & \nearrow & & \nearrow & & \nearrow & \\ +8 & +27 & +64 & +125 & +216 & & \\ & \searrow & & \searrow & & \searrow & \\ & (2^3) & & (3^3) & & (4^3) & (5^3) & (6^3) \end{array}$

3. (b) 10, 40, 80, 320, 640, ? → **2560**  
 $\begin{array}{ccccccc} & \nearrow & & \nearrow & & \nearrow & \\ \times 4 & \times 2 & \times 4 & \times 2 & \times 4 & & \end{array}$

4. (b) 3, 8, 15, ?, 35 → **24**  
 $\begin{array}{ccccccc} & \nearrow & & \nearrow & & \nearrow & \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & & \\ (2^2-1) & (3^2-1) & (4^2-1) & (5^2-1) & (6^2-1) & & \end{array}$

5. (d) 2, 2, 3, 6, 15, 45, ? → **157.5**  
 $\begin{array}{ccccccc} & \nearrow & & \nearrow & & \nearrow & \\ \times 1 & \times 1.5 & \times 2 & \times 2.5 & \times 3 & \times 3.5 & \end{array}$

6. (b) 7, 18, 40, 73, 117, ? → **172**  
 $\begin{array}{ccccccc} & \nearrow & & \nearrow & & \nearrow & \\ +11 & +22 & +33 & +44 & +55 & & \end{array}$

7. (a) 4, 10, 23, 50, 105, ? → **216**  
 $\begin{array}{ccccccc} & \nearrow & & \nearrow & & \nearrow & \\ (\times 2+2) & (\times 2+3) & (\times 2+4) & (\times 2+5) & (\times 2+6) & & \end{array}$

$$8. (c) \quad 16, 196, 25, 169, 36, ? \rightarrow 144$$

$$\downarrow \quad \downarrow \quad \downarrow \quad \downarrow \quad \downarrow$$

$$(4)^2 \quad (14)^2 \quad (5)^2 \quad (13)^2 \quad (6)^2 \quad (12)^2$$

$$9. (a) \quad 3.5, 3.7, 4.1, 4.9, ? \rightarrow 6.5$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \\ +.2 & & +.4 & & +.8 & & +1.6 \end{array}$$

$$10. (c) \quad 7, 11, 18, 29, 47, ? \rightarrow 76$$

$$\downarrow \quad \downarrow \quad \downarrow \quad \downarrow$$

$$(7+11) \quad (18+11) \quad (29+18) \quad (47+29)$$

(Add last 2 nos)

$$11. (c) \quad 16, 25, 40, 61, ? \rightarrow 88$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \\ +9 & & +15 & & +21 & & +27 \\ & \nearrow & \nearrow & \nearrow & \nearrow & \\ +6 & & +6 & & +6 & \end{array}$$

$$12. (b) \quad 9, 16, 30, 58, 114, ? \rightarrow 226$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \\ (\times 2-2) & & (\times 2-2) & & (\times 2-2) & & (\times 2-2) \end{array}$$

$$13. (c) \quad 6, 3, 4.5, 11.25, ? \rightarrow 39.375$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \\ \times 0.5 & & \times 1.5 & & \times 2.5 & & \times 3.5 \end{array}$$

$$14. (d) \quad 15, 8, 9, 15, 32, 82.5, ? \rightarrow 250.5$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ \times 0.5+0.5 & & \times 1+1 & & \times 1.5+1.5 & & \times 2+2 \\ & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ \times 2.5+2.5 & & \times 3+3 & \end{array}$$

$$15. (b) \quad 2, 2.4, 3.3, 4.9, ?, 11 \rightarrow 7.4$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ +.4 & & +.9 & & +1.6 & & +2.5 \\ & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ +3.6 & \end{array}$$

$$16. (b) \quad 15, 30, 10, 40, 8, ? \rightarrow 48$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ \times 2 & & \times 3 & & \times 4 & & \times 5 \\ & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ \times 6 & \end{array}$$

$$17. (a) \quad 2, 8, 33, 148, ? \rightarrow 765$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ (\times 2+2^2) & & (\times 3+3^2) & & (\times 4+4^2) & & (\times 5+5^2) \end{array}$$

$$18. (c) \quad 2048, 512, 64, 4, 1/8, ? \rightarrow 1/512$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ \div 4 & & \div 8 & & \div 16 & & \div 32 \\ & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ \div 64 & \end{array}$$

$$19. (b) \quad 20, 12, 10, 13, 22.5, ? \rightarrow 43.25$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ (+2+2) & & (+2+4) & & (+2+8) & & (+2+16) \\ & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ (+2+32) & \end{array}$$

$$20. (c) \quad 5824, 5242, 4718, 4247, ? \rightarrow 3823$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ -582 & & -524 & & -471 & & -424 \\ 5824 & 5242 & 4718 & 4247 & & & \\ -582 & -524 & -471 & -424 & & & \\ \hline 5242 & 4718 & 4247 & 3823 & & & \end{array}$$

$$21. (c) \quad 194, 185, 169, 144, 108, ? \rightarrow 59$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ -9 & & -16 & & -25 & & -36 \\ & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ -49 & \end{array}$$

$$22. (c) \quad 3, 7, 23, 95, ? \rightarrow 479$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ (\times 2+1) & & (\times 3+2) & & (\times 4+3) & & (\times 5+4) \end{array}$$

$$23. (b) \quad 10, 40, 80, 320, 640, ? \rightarrow 2560$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ \times 4 & & \times 2 & & \times 4 & & \times 2 \\ & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ \times 4 & \end{array}$$

$$24. (c) \quad 2, 10, 26, 50, ? \rightarrow 82$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ 8 & & 16 & & 24 & & 32 \end{array}$$

$$25. (c) \quad 380, 188, 92, 44, 20, ? \rightarrow 8$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ (+2-2) & & (+2-2) & & (+2-2) & & (+2-2) \end{array}$$

$$26. (c) \quad 15, 16, 20, 29, 45, ? \rightarrow 70$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ +1 & & +4 & & +9 & & +16 \\ & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ +25 & \end{array}$$

$$27. (b) \quad 26, 74, 218, 650, ? \rightarrow 1946$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ (\times 3-4) & & (\times 3-4) & & (\times 3-4) & & (\times 3-4) \end{array}$$

$$28. (c) \quad 60, 120, 210, 336, ? \rightarrow 504$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ (4^2-4) & & (5^2-5) & & (6^2-6) & & (7^2-7) \end{array}$$

$$29. (b) \quad 5, 8, 15, 28, ? \rightarrow 47$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \\ +3 & & +7 & & +13 & & +19 \end{array}$$

(Add alternate prime no.)

$$30. (b) \quad 1, 5, 9, 17, 25, 37, ? \rightarrow 49$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ 1^2 & & (2^2+1) & & 3^2 & & (4^2+1) \\ & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ 5^2 & & (6^2+1) & & 7^2 & \end{array}$$

$$31. (c) \quad 2, 8, 20, 44, 92, ? \rightarrow 188$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ (\times 2+4) & & (\times 2+4) & & (\times 2+4) & & (\times 2+4) \end{array}$$

$$32. (b) \quad 7, 11, 19, ?, 67, 131 \rightarrow 35$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ (\times 2-3) & & (\times 2-3) & & (\times 2-3) & & (\times 2-3) \end{array}$$

$$33. (a) \quad 3, 1.5, 1.5, 2.25, 4.5, ? \rightarrow 11.25$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ (\times 0.5) & & (\times 1) & & (\times 1.5) & & (\times 2) \\ & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ (\times 2.5) & \end{array}$$

$$34. (a) \quad 36, 54, 18, 27, 9, ? \rightarrow 13.5$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ (\times 1.5) & & (\times 1.5) & & (\times 1.5) & & (\times 1.5) \end{array}$$

$$35. (c) \quad 8, 6, 9, 7, 10, 8, ? \rightarrow 11$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ -2 & & +3 & & -2 & & +3 \end{array}$$

$$36. (c) \quad 325, 259, 204, 160, 127, ? \rightarrow 105$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ -66 & & -55 & & -44 & & -33 \\ & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ -22 & \end{array}$$

$$37. (b) \quad 380, 188, 92, 44, ? \rightarrow 20$$

$$\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ -192 & & -96 & & -48 & & -24 \end{array}$$

38. (a)  $1438, 1429, 1417, 1402, ? \rightarrow 1384$   
 $\xrightarrow{-9} \xrightarrow{-12} \xrightarrow{-15} \xrightarrow{-18}$

39. (c)  $9, 13, 21, 37, 69, ? \rightarrow 133$   
 $\xrightarrow{+4} \xrightarrow{+8} \xrightarrow{+16} \xrightarrow{+32} \xrightarrow{+64}$

40. (b)  $49, 56, 64, 72, 81, ? \rightarrow 90$   
 $\downarrow \downarrow \downarrow \downarrow \downarrow$   
 $7^2 (7 \times 8) 8^2 (8 \times 9) 9^2 (9 \times 10)$

41. (b)  $15, 32, 55, 86, 127, ? \rightarrow 180$   
 $\xrightarrow{+17} \xrightarrow{+23} \xrightarrow{+31} \xrightarrow{+41} \xrightarrow{+53}$   
 $\xrightarrow{+6} \xrightarrow{+8} \xrightarrow{+10} \xrightarrow{+12}$

42. (b)  $15, 17, 22, 32, 49, ? \rightarrow 75$   
 $\xrightarrow{+2} \xrightarrow{+5} \xrightarrow{+10} \xrightarrow{+17} \xrightarrow{+26}$   
 $\downarrow \downarrow \downarrow \downarrow \downarrow$   
 $(1^2+1) (2^2+1) (3^2+1) (4^2+1) (5^2+1)$

43. (b)  $1440, 240, 48, 12, 4, ? \rightarrow 2$   
 $\xrightarrow{(\div 6)} \xrightarrow{(\div 5)} \xrightarrow{(\div 4)} \xrightarrow{(\div 3)} \xrightarrow{(\div 2)}$

44. (c)  $80, 70, 55, 35, 10, ? \rightarrow -20$   
 $\xrightarrow{(-10)} \xrightarrow{(-15)} \xrightarrow{(-20)} \xrightarrow{(-25)} \xrightarrow{(-30)}$

45. (c)  $5, 8, 15, 26, 41, ? \rightarrow 60$   
 $\xrightarrow{+3} \xrightarrow{+7} \xrightarrow{+11} \xrightarrow{+15} \xrightarrow{+19}$   
 $\xrightarrow{+4} \xrightarrow{+4} \xrightarrow{+4} \xrightarrow{+4}$

46. (c)  $10, 12, 24, 54, 110, 200, ? \rightarrow 332$   
 $\xrightarrow{+2} \xrightarrow{+12} \xrightarrow{+30} \xrightarrow{+56} \xrightarrow{+90} \xrightarrow{+132}$   
 $\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow$   
 $(1 \times 2) (3 \times 4) (5 \times 6) (7 \times 8) (9 \times 10) (11 \times 12)$

47. (a)  $256, 384, 576, 864, ? \rightarrow 1296$   
 $\xrightarrow{(\times 1.5)} \xrightarrow{(\times 1.5)} \xrightarrow{(\times 1.5)} \xrightarrow{(\times 1.5)}$

48. (d)  $3, 6, 18, 72, 360, ? \rightarrow 2160$   
 $\xrightarrow{\times 2} \xrightarrow{\times 3} \xrightarrow{\times 4} \xrightarrow{\times 5} \xrightarrow{\times 6}$

49. (b)  $16, 17, 21, 30, ? \rightarrow 46$   
 $\xrightarrow{+1} \xrightarrow{+4} \xrightarrow{+9} \xrightarrow{+16}$

50. (b)  $5, 21, 69, 213, ? \rightarrow 645$   
 $\xrightarrow{+16} \xrightarrow{+48} \xrightarrow{+144} \xrightarrow{+432}$   
 $\xrightarrow{(\times 3)} \xrightarrow{(\times 3)} \xrightarrow{(\times 3)}$

51. (b)  $0, 7, 26, 63, 124, ? \rightarrow 215$   
 $\downarrow \downarrow \downarrow \downarrow \downarrow$   
 $(1^3-1) (2^3-1) (3^3-1) (4^3-1) (5^3-1) (6^3-1)$

52. (a)  $2.1, 5.2, 8.4, 11.7, ? \rightarrow 15.1$   
 $\xrightarrow{+3.1} \xrightarrow{+3.2} \xrightarrow{+3.3} \xrightarrow{+3.4}$

53. (c)  $5, 8, 16, 19, 38, ? \rightarrow 41$   
 $\xrightarrow{+3} \xrightarrow{+3} \xrightarrow{+3}$

54. (b)  $0.25, 5, 30, 186, ? \rightarrow 1309$   
 $\xrightarrow{(\times 4+4)} \xrightarrow{(\times 5+5)} \xrightarrow{(\times 6+6)} \xrightarrow{(\times 7+7)}$

55. (a)  $33, 48, 65, 84, ? \rightarrow 105$   
 $\xrightarrow{+15} \xrightarrow{+17} \xrightarrow{+19} \xrightarrow{+21}$

56. (a)  $3, 28, 4, 65, 5, 126, ? \rightarrow 6$   
 $\xrightarrow{+1} \xrightarrow{+1} \xrightarrow{+1}$

57. (d)  $100, 52, 28, 16, ? \rightarrow 10$   
 $\xrightarrow{-48} \xrightarrow{-24} \xrightarrow{-12} \xrightarrow{-6}$

58. (b)  $3, 20, 63, 144, 275, ? \rightarrow 468$   
 $\xrightarrow{+17} \xrightarrow{+43} \xrightarrow{+81} \xrightarrow{+131} \xrightarrow{+193}$   
 $\xrightarrow{+26} \xrightarrow{+38} \xrightarrow{+50} \xrightarrow{+62}$   
 $\xrightarrow{+12} \xrightarrow{+12} \xrightarrow{+12}$

59. (b)  $82, 86, 122, 126, ? \rightarrow 162$   
 $\xrightarrow{+4} \xrightarrow{+36} \xrightarrow{+4} \xrightarrow{+36}$

60. (a)  $1.5, \frac{9}{4}, 3, \frac{15}{4}, \frac{9}{2}, ? \rightarrow 5.25 \text{ or } \frac{21}{4}$   
 $\xrightarrow{(+0.75)} \xrightarrow{(+0.75)} \xrightarrow{(+0.75)} \xrightarrow{(+0.75)} \xrightarrow{(+0.75)}$

61. (c)  $4, 7, 14, 24, 41, ? \rightarrow 68$   
 $\xrightarrow{+3} \xrightarrow{+7} \xrightarrow{+10} \xrightarrow{+17} \xrightarrow{+27}$   
 $\downarrow \downarrow \downarrow$   
 $(7+3) (7+10) (17+10)$

62. (b)  $1, 3, 6, 11, 18, ? \rightarrow 29$   
 $\xrightarrow{+2} \xrightarrow{+3} \xrightarrow{+5} \xrightarrow{+7} \xrightarrow{+11}$

63. (b)  $1065, 850, 726, 663, 637, ? \rightarrow 630$   
 $\xrightarrow{-215} \xrightarrow{-124} \xrightarrow{-63} \xrightarrow{-26} \xrightarrow{-7}$   
 $\downarrow \downarrow \downarrow \downarrow \downarrow$   
 $(6^3-1) (5^3-1) (4^3-1) (3^3-1) (2^3-1)$

64. (c)  $-200, 100, -50, 25, -12.5, ? \rightarrow 6.25$   
 $\xrightarrow{(+300)} \xrightarrow{(-150)} \xrightarrow{(+75)} \xrightarrow{(-37.5)} \xrightarrow{(+18.75)}$

65. (a)  $1024, 520, 268, 142, ? \rightarrow 79$   
 $\xrightarrow{-504} \xrightarrow{-252} \xrightarrow{-126} \xrightarrow{-63}$

66. (a)  $4, 20, 29, 38, 47, ? \rightarrow 56$   
 $\xrightarrow{(4 \times 4 + 4)} \xrightarrow{(4 \times 6 + 5)} \xrightarrow{(4 \times 8 + 6)} \xrightarrow{(4 \times 10 + 7)} \xrightarrow{(4 \times 12 + 8)}$

67. (b)  $8, 12, 18, 27, 40.5, ? \rightarrow 60.75$   
 $(8 \times 1.5) (12 \times 1.5) (18 \times 1.5) (27 \times 1.5) (40.5 \times 1.5)$

68. (c)  $5, 9, 18, 43, 92, ? \rightarrow 213$   
 $\begin{array}{cccccc} & +4 & +9 & +25 & +49 & +121 \\ \downarrow & & \downarrow & & \downarrow & \\ (2^2) & (3^2) & (5^2) & (7^2) & (11^2) \end{array}$  Sq. of Prime nos.

69. (b)  $256, 128, 192, 480, ? \rightarrow 1680$   
 $(\times 0.5) (\times 1.5) (\times 2.5) (\times 3.5)$

70. (b)  $9, 20, 36, 78, 148, ? \rightarrow 306$   
 $(\times 2+2) (\times 2-4) (\times 2+6) (\times 2-8) (\times 2+10)$

71. (c)  $2, 3, 11, 58, 410, ? \rightarrow 3695$   
 $(\times 1+1) (\times 3+2) (\times 5+3) (\times 7+4) (\times 9+5)$

72. (b)  $2, 5, 23, 119, ? \rightarrow 659$   
 $2 \times 2 + 1^3, 5 \times 3 + 2^3, 23 \times 4 + 3^3, 119 \times 5 + 4^3$

73. (b)  $1, 9, 61, 497, ? \rightarrow 4981$   
 $(1 \times 4 + 5) (9 \times 6 + 7) (61 \times 8 + 9) (497 \times 10 + 11)$

74. (c)  $15, 16, 31, 94, 375, ? \rightarrow 1876$   
 $(\times 1+1) (\times 2-1) (\times 3+1) (\times 4-1) (\times 5+1)$

75. (b)  $27, 48, 83, 132, 195, ? \rightarrow 272$   
 $\begin{array}{ccccc} +21 & +35 & +49 & +63 & +77 \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ (7 \times 3) & (7 \times 5) & (7 \times 7) & (7 \times 9) & (7 \times 11) \end{array}$

76. (c)  $15, 22, 40, 75, 133, ? \rightarrow 222$   
 $\begin{array}{cccc} +7 & +18 & +35 & +58 \\ +11 & +17 & +23 & +31 \end{array}$

Add alternate prime nos.

77. (b)  $2, 12, 36, 80, 150, ? \rightarrow 252$   
 $\begin{array}{cccc} +10 & +24 & +44 & +70 \\ +14 & +20 & +26 & +32 \\ +6 & +6 & +6 \end{array}$

78. (b)  $1, 7, 21, 51, 113, ? \rightarrow 239$   
 $\begin{array}{cccc} +6 & +14 & +30 & +62 \\ (6 \times 2+2) & (14 \times 2+2) & (30 \times 2+2) & (62 \times 2+2) \end{array}$

79. (b)  $3, 16, 45, 96, 175, ? \rightarrow 288$   
 $\begin{array}{cccc} +13 & +29 & +51 & +79 \\ +16 & +22 & +28 & +34 \\ +6 & +6 & +6 \end{array}$

80. (c)  $5, 9, 16, 32, 75, ? \rightarrow 199$   
 $\begin{array}{cccc} +4 & +7 & +16 & +43 \\ +3 & +9 & +27 & +81 \\ \times 3 & \times 3 & \times 3 \end{array}$

81. (c)  $100, 101, 102, 101, 96, ? \rightarrow 85$   
 $(-4+5) (-9+10) (-16+15) (-25+20) (-36+25)$

## Answer-Key

### TYPE - 1 BASED ON ADDITION

|         |         |         |         |         |         |         |         |
|---------|---------|---------|---------|---------|---------|---------|---------|
| 1. (c)  | 2. (b)  | 3. (b)  | 4. (a)  | 5. (c)  | 6. (b)  | 7. (c)  | 8. (c)  |
| 9. (d)  | 10. (b) | 11. (c) | 12. (a) | 13. (b) | 14. (b) | 15. (a) | 16. (b) |
| 17. (b) | 18. (c) | 19. (c) | 20. (b) | 21. (c) | 22. (c) | 23. (b) | 24. (b) |
| 25. (a) | 26. (c) | 27. (d) | 28. (b) | 29. (c) | 30. (c) | 31. (b) | 32. (b) |
| 33. (b) | 34. (a) | 35. (c) | 36. (b) | 37. (c) | 38. (b) | 39. (d) | 40. (b) |

### TYPE - 2 Subtraction / घटना

|        |         |        |        |        |        |        |        |
|--------|---------|--------|--------|--------|--------|--------|--------|
| 1. (c) | 2. (a)  | 3. (a) | 4. (b) | 5. (b) | 6. (c) | 7. (d) | 8. (b) |
| 9. (c) | 10. (a) |        |        |        |        |        |        |

### TYPE - 3 Multiplication / गुणा

|        |         |         |         |        |        |        |        |
|--------|---------|---------|---------|--------|--------|--------|--------|
| 1. (d) | 2. (b)  | 3. (c)  | 4. (a)  | 5. (a) | 6. (c) | 7. (a) | 8. (a) |
| 9. (c) | 10. (a) | 11. (a) | 12. (c) |        |        |        |        |

### TYPE - 4 Prime Number / अभाज्य संख्या

|        |         |        |        |        |        |        |        |
|--------|---------|--------|--------|--------|--------|--------|--------|
| 1. (c) | 2. (c)  | 3. (d) | 4. (c) | 5. (a) | 6. (b) | 7. (c) | 8. (c) |
| 9. (c) | 10. (a) |        |        |        |        |        |        |

### TYPE - 5 Difference of Difference / अन्तर का अन्तर

|        |         |        |        |        |        |        |        |
|--------|---------|--------|--------|--------|--------|--------|--------|
| 1. (d) | 2. (a)  | 3. (a) | 4. (a) | 5. (b) | 6. (a) | 7. (d) | 8. (d) |
| 9. (c) | 10. (c) |        |        |        |        |        |        |

### Type - 6 Miscellaneous / विविध

|         |         |         |         |         |         |         |         |
|---------|---------|---------|---------|---------|---------|---------|---------|
| 1. (b)  | 2. (c)  | 3. (b)  | 4. (b)  | 5. (d)  | 6. (b)  | 7. (a)  | 8. (c)  |
| 9. (a)  | 10. (c) | 11. (c) | 12. (b) | 13. (c) | 14. (d) | 15. (b) | 16. (b) |
| 17. (a) | 18. (c) | 19. (b) | 20. (c) | 21. (c) | 22. (c) | 23. (b) | 24. (c) |
| 25. (c) | 26. (c) | 27. (b) | 28. (c) | 29. (b) | 30. (b) | 31. (c) | 32. (b) |
| 33. (a) | 34. (a) | 35. (c) | 36. (c) | 37. (b) | 38. (a) | 39. (c) | 40. (b) |
| 41. (b) | 42. (b) | 43. (b) | 44. (c) | 45. (c) | 46. (c) | 47. (a) | 48. (d) |
| 49. (b) | 50. (b) | 51. (b) | 52. (a) | 53. (c) | 54. (b) | 55. (a) | 56. (a) |
| 57. (d) | 58. (b) | 59. (b) | 60. (a) | 61. (c) | 62. (b) | 63. (b) | 64. (c) |
| 65. (a) | 66. (a) | 67. (b) | 68. (c) | 69. (b) | 70. (b) | 71. (c) | 72. (b) |
| 73. (b) | 74. (c) | 75. (b) | 76. (c) | 77. (b) | 78. (b) | 79. (b) | 80. (c) |
| 81. (c) |         |         |         |         |         |         |         |