

SSC CGL 2022 TIER-1

Q.1 (20,6,4), (24,7,5)

SSC CGL 01/12/2022

- (A) (65,9,4) (B)(22,5,2)
(C)(40,8,5) (D)(42,7,3)

Q.2 19 : 324 :: 25 : 576 :: 9 : ?

SSC CGL 01/12/2022

- (A)16 (B)64
(C)88 (D)72

Q.3 (240,55,65),(320,85,75)

SSC CGL 01/12/2022

- (A)(140,35,25) (B)(220,90,15)
(C)(160,35,45) (D)(200,5,105)

Q.4 35 : 21 :: ? : 36 :: 40 : 24

SSC CGL 01/12/2022 (2nd shift)

- (A) 65 (B) 50
(C)60 (D) 55

Q.5 (9,81,729), (14,196,2744)

SSC CGL 01/12/2022 (3rd shift)

- (A)(11,212,464) (B)(17,289,4913)
(C)(25,625,9375) (D)(15,375,1125)

Q.6 (23,14,9),(37,19,18)

SSC CGL 01/12/2022 (3rd shift)

- (A)(125,25,5) (B)(125,100,5)
(C)(125,25,100) (D)(125,5,25)

Q.7 (40,120,400),(18,20,78)

SSC CGL 01/12/2022 (3rd shift)

- (A)(29,23,98) (B)(56,14,108)
(C)(25,27,92) (D)(11,720,660)

Q.8 (16,7,37),(28,9,55)

SSC CGL 01/12/2022 (4th shift)

- (A)(19,6,36) (B)(13,4,25)
(C)(20,7,45) (D)(23,8,48)

Q.9 (4,13,5),(3,12,6)

SSC CGL 02/12/2022 (1st shift)

- (A)(4,10,3) (B)(7,16,3)
(C)(5,17,6) (D)(5,17,7)

Q.10 (4,25,6),(8,25,3)

SSC CGL 02/12/2022 (1st shift)

- (A)(3,81,6) (B)(7,22,3)
(C)(12,96,8) (D)(14,55,4)

Q.11. 10 : 45 :: 6 : 25 :: 9 : ?

SSC CGL 02/12/2022 (1st shift)

- (A) 38 (B)36
(C)42 (D)40

Q.12. (11,13,143),(17,11,187)

SSC CGL 02/12/2022 (2nd shift)

- (A)(3,4,7) (B)(3,4,13)
(C)(3,4,12) (D)(3,4,1)

Q.13 (15,9,4),(7,2,3)

SSC CGL 02/12/2022 (2nd shift)

(A)(21,12,6) (B)(19,13,4)

(C)(24,9,11) (D)(18,7,7)

Q.14 (3,2,35),(1,4,65)

SSC CGL 02/12/2022 (4th shift)

(A)(7,2,351) (B)(3,2,31)

(C)(5,4,41) (D)(6,8,224)

Q.15 (36,90,18),(15,35,8)

SSC CGL 03/12/2022 (1st shift)

(A)(14,45,5) (B)(4,42,7)

(C)(13,78,6) (D)(12,60,8)

Q.16 (452,50,63),(260,35,30)

SSC CGL 03/12/2022 (1st shift)

(A)(330,30,45) (B)(260,30,25)

(C)(260,50,15) (D)(230,15,45)

Q.17 (12,42,7),(13,52,8)

SSC CGL 03/12/2022 (1st shift)

(A)(8,7,43) (B)(7,12,6)

(C)(9,26,8) (D)(9,18,4)

Q.18 (26,120,34),(14,110,41)

SSC CGL 03/12/2022 (2nd shift)

(A)(36,106,17) (B)(72,240,16)

(C)(44,114,24) (D)(15,450,8)

Q.19 30 : 48 :: 60 : ? :: 45 : 72

SSC CGL 03/12/2022 (2nd shift)

(A) 96 (B) 92

(C) 90 (D) 88

Q.20 (8,12,6),(9,18,8)

SSC CGL 03/12/2022 (2nd shift)

(A)(4,12,6) (B)(12,24,8)

(C)(7,24,4) (D)(9,10,11)

Q.21 11 : 94 :: 23 ? :: 18 : 150

SSC CGL 03/12/2022 (3rd shift)

(A) 190 (B) 199

(C) 129 (D) 109

Q.22 (0.20,5,25),(0.083,12,144)

SSC CGL 03/12/2022 (3rd shift)

(A)(0.240,4,16) (B)(0.143,6,36)

(C)(0.056,18,289) (D)(0.063,16,256)

Q.23 (6,22,14),(8,30,19)

SSC CGL 03/12/2022 (4th shift)

(A)(12,46,27) (B)(4,18,11)

(C)(7,26,17) (D)(9,34,22)

Q.24 (22,9,198)

SSC CGL 03/12/2022 (4th shift)

(A)(19,7,133) (B)(26,5,130)

(C)(28,7,196) (D)(17,9,130)

Q.25 (70,14,56),(88,30,58)

SSC CGL 05/12/2022 (1st shift)

(A)(44,24,23) (B)(59,36,25)

(C)(52,19,33) (D)(38,16,24)

Q.26 8 : 128 :: 6 ; ? :: 11 : 242

SSC CGL 05/12/2022 (1st shift)

(A) 64 (B) 72

(C) 70 (D) 68

Q.27 $7 : 25 :: 4 : ?$

SSC CGL 05/12/2022 (1st shift)

(A)5 (B)4

(C)1 (D)7

Q.28 $(5 : 25 : 30), (16 : 256 : 272)$

SSC CGL 05/12/2022 (2nd shift)

(A)(15:225:230) (B)(9:81:109)

(C)(19:361:381) (D)(13:169:182)

Q.29 $729 : 90 :: ? : 56 : 512 : 72$

SSC CGL 05/12/2022 (2nd shift)

(A)323 (B)343

(C)352 (D)335

Q.30 $17 : 4607 :: 11 : ? :: 23 : 11615$

SSC CGL 05/12/2022 (3rd shift)

(A)1140 (B)1572

(C)1463 (D)1199

Q.31 $11 : 91 :: ? : 154 :: 15 : 127$

SSC CGL 05/12/2022 (3rd shift)

(A)16 (B)18

(C)14 (D)24

Q.32 $(23, 161, 207), (47, 329, 423)$

(A)(64,448,576) (B)(84,442,570)

(C)(29,112,782) (D)(33,97,297)

Q.33 $18 : 234 :: ? : 176 :: 14 : 126$

SSC CGL 05/12/2022 (3rd shift)

(A)14 (B)15

(C)20 (D)16

Q.34 $6 : 125 :: 2 : 1 :: 5 : ?$

SSC CGL 05/12/2022 (4th shift)

(A)81 (B)64

(C)68 (D)72

Q.35 $(5, 41, 4), (2, 68, 8)$

SSC CGL 05/12/2022 (4th shift)

(A)(6,100,8) (B)(5,18,4)

(C)(5,100,4) (D)(4,49,3)

Q.36 $(2, 8, 36), (4, 9, 25)$

SSC CGL 06/12/2022 (1st shift)

(A)(14,18,9) (B)(13,20,49)

(C)(21,15,35) (D)(12,14,26)

Q.37 $(7, 11, 72), (5, 8, 39)$

SSC CGL 06/12/2022 (1st shift)

(A)(4,7,33) (B)(2,3,1)

(C)(5,2,23) (D)(5,6,13)

Q.38 $(267, 128, 139)$

SSC CGL 06/12/2022 (1st shift)

(A)(267,132,135) (B)(325,112,215)

(C)(365,154,211) (D)(297,146,151)

Q.39 $(2, 125, 3), (1, 64, 3)$

SSC CGL 06/12/2022 (2nd shift)

(A)(2,100,8) (B)(5,512,3)

(C)(12,50,13) (D)(4,341,3)

Q.40 $47 : 9 :: ? : 14 :: 92 : 18$

SSC CGL 06/12/2022 (3rd shift)

(A)72 (B)73

(C)37 (D)27

Q.41 (16,7,112)
SSC CGL 06/12/2022 (3rd shift)
(A)(18,3,54) (B)(14,5,70)

(C)(22,7,154) (D)(26,5,132)

Q.42 $12 : 120 :: 20 : 3600 :: 3 : ?$
SSC CGL 06/12/2022 (3rd shift)
(A)15 (B)32

(C)7 (D)3

Q.43 $7 : 13 :: 16 : 31 :: 46 : ?$
SSC CGL 06/12/2022 (4th shift)
(A)81 (B)83

(C)91 (D)97

Q.44 (7,4,56),(8,3,48)
SSC CGL 06/12/2022 (4th shift)
(A)(90,3,400) (B)(87,4,128)

(C)(96,42,12) (D)(9,10,180)

Q.45 (9,16,5),(7,9,4)
SSC CGL 06/12/2022 (4th shift)

(A)(14,64,7) (B)(14,100,5)

(C)(11,36,5) (D)(12,66,4)

Q.46 (17,24,58),(26,37,89)
SSC CGL 07/12/2022 (1st shift)

(A)(15,17,47) (B)(41,39,125)

(C)(10,20,44) (D)(21,38,96)

Q.47 (13,39,6),(9,18,4)
SSC CGL 07/12/2022 (1st shift)
(A)(12,48,8) (B)(12,50,13)

(C)(15,45,3) (D)(20,28,8)

Q.48 (45,15,120),(27,8,76)
SSC CGL 07/12/2022 (1st shift)
(A)(72,58,84) (B)(30,12,80)

(C)(23,14,38) (D)(56,48,32)

Q.49 (12,112,9),(10,84,8)
SSC CGL 07/12/2022 (1st shift)
(A)(12,149,12) (B)(13,55,4)

(C)(11,99,9) (D)(18,94,5)

Q.50 $4 : 84 :: 11 : ? :: 13 : 2379$
SSC CGL 07/12/2022 (3rd shift)
(A)1221 (B)1463

(C)1440 (D)819

Q.51 (3,13,18),(29,39,44)
SSC CGL 07/12/2022 (3rd shift)
(A)(17,27,42) (B)(25,30,55)

(C)(26,30,47) (D)(16,26,31)

Q.52 $15 : 125 :: 27 : ? :: 36 : 1728$
SSC CGL 07/12/2022 (3rd shift)

(A)689 (B)749

(C)790 (D)729

Q.53 (42,18,3),(36,14,4)
SSC CGL 07/12/2022 (4th shift)

(A)(34,13,4) (B)(50,20,4)

(C)(46,18,4) (D)(42,15,5)

Q.54 $144 : 36 :: 81 : ? :: 196 : 42$
SSC CGL 07/12/2022 (4th shift)
(A)30 (B)23

(C)27 (D)29

Q.55 (4,50,6),(13,128,3)
SSC CGL 07/12/2022 (4th shift)
(A)(12,60,5) (B)(2,125,3)

(C)(2,62,6) (D)(15,162,3)

Q.56 11 : 31 :: ? : 25 :: 14 : 40
SSC CGL 08/12/2022 (1st shift)
(A)8 (B)10

(C)7 (D)9

Q.57 76 : 11 : 88 : ? :: 68 : 9
SSC CGL 08/12/2022 (1st shift)
(A)12 (B)14

(C)18 (D)15

Q.58 (60,5,6),(48,8,3)
SSC CGL 08/12/2022 (2nd shift)
(A)(17,3,4) (B)(24,4,6)

(C)(24,4,3) (D)(25,4,3)

Q.59 (114,9,3),(225,7,8)
SSC CGL 08/12/2022 (2nd shift)
(A)(168,5,8) (B)(64,5,3)

(C)(81,6,2) (D)(120,7,4)

Q.60 (34,23,12),(71,37,3)
SSC CGL 08/12/2022 (2nd shift)
(A)(75,50,20) (B)(20,65,50)

(C)(19,55,91) (D)(14,12,16)

Q.61 (2,4,18),(1,9,50)
SSC CGL 08/12/2022 (2nd shift)
(A)(3,5,32) (B)(2,5,49)

(C)(6,4,10) (D)(5,4,18)

Q.62 (5,35,7),(8,32,4)
SSC CGL 08/12/2022 (3rd shift)
(A)(11,56,5) (B)(3,27,9)

(C)(4,30,7) (D)(9,38,4)

Q.63 (99,199,1199),(15,115,1115)
SSC CGL 08/12/2022 (3rd shift)
(A)(11,111,1000) (B)(33,133,1133)

(C)(22,222,2222) (D)(77,717,7117)

Q.64 (12,51,5),(8,30,2)
SSC CGL 08/12/2022 (4th shift)
(A)(14,120,16) (B)(13,10,7)

(C)(19,44,3) (D)(11,51,6)

Q.65 (52,10,41),(46,18,50)
SSC CGL 08/12/2022 (4th shift)
(A)(68,26,73)(B)(19,33,69)
(C)(41,17,36)(D)(23,18,40)

Q.66 8 : 448 :: 9 : ? :: 11 : 847
SSC CGL 09/12/2022 (1st shift)
(A)576 (B)577

(C)567 (D)562

Q.67 (19,23,4),(13,27,14)
SSC CGL 09/12/2022 (1st shift)
(A)(25,26,2) (B)(25,27,4)

(C)(25,27,2) (D)(25,26,4)

Q.68 (182,170,97),(156,128,92)
SSC CGL 09/12/2022 (1st shift)
(A)(156,194,79) (B)(121,102,61)

(C)(98,74,54) (D)(138,130,73)

- Q.69** (56,22,26),(34,20,18)
SSC CGL 09/12/2022 (2nd shift)
(A)(78,54,44) (B)(23,8,10)
(C)(58,16,21) (D)(45,12,33)
- Q.70** (21,225,9),(12,49,2)
SSC CGL 09/12/2022 (2nd shift)
(A)(14,64,2) (B)(11,18,7)
(C)(15,54,3) (D)(13,81,6)
- Q.71** (76,75,1),(90,87,9)
SSC CGL 09/12/2022 (2nd shift)
(A)(100,85,125) (B)(56,48,64)
(C)(16,4,57) (D)(87,56,900)
- Q.72** 7 : 330 :: ? : 203 :: 9 : 716
SSC CGL 09/12/2022 (3rd shift)
(A)14 (B)16
(C)6 (D)4
- Q.73** (56,6,103),(102,27,78)
SSC CGL 09/12/2022 (3rd shift)
(A)(79,51,103) (B)(76,34,72)
(C)(63,23,55) (D)(52,22,38)
- Q.74** 27 : 713 :: 32 : ? :: 35 : 1029
SSC CGL 09/12/2022 (3rd shift)
(A)1024 (B)1100
(C)1105 (D)1008
- Q.75** (21,33,31),(42,17,26)
SSC CGL 09/12/2022 (4th shift)
(A)(36,14,35) (B)(46,19,24)
(C)(35,27,29) (D)(32,39,20)

- Q.76** (4,21,33),(10,111,141)
SSC CGL 09/12/2022 (4th shift)
(A)(13,45,97) (B)(25,53,128)
(C)(65,60,244) (D)(24,52,158)
- Q.77** 12 : 132 :: 20 : 380 :: 2 : ?
SSC CGL 09/12/2022 (4th shift)
(A)8 (B)6
(C)12 (D)2
- Q.78** 4 : 61 :: 9 : 726 :: 6 : ?
SSC CGL 12/12/2022 (1st shift)
(A)356 (B)316
(C)242 (D)213
- Q.79** (5,98,9),(10,168,14)
SSC CGL 12/12/2022 (1st shift)
(A)(1,28,3) (B)(7,108,23)
(C)(15,248,19) (D)(3,88,17)
- Q.80** (168,122,290)
SSC CGL 12/12/2022 (2nd shift)
(A)(198,112,310) (B)(226,148,374)
(C)(236,118,356) (D)(126,132,258)
- Q.81** 14 : 400 :: 37 : ? :: 42 : 2304
SSC CGL 12/12/2022 (2nd shift)
(A)1333 (B)1764
(C)1849 (D)1521
- Q.82** (12,313,13),(11,185,8)
SSC CGL 12/12/2022 (3rd shift)
(A)(12,158,12) (B)(4,125,11)
(C)(9,90,3) (D)(15,150,10)

Q.83 (6,17,408),(13,27,1404)
SSC CGL 12/12/2022 (3rd shift)
(A)(9,27,245) (B)(17,28,952)

(C)(5,82,1200) (D)(4,26,416)

Q.84 8 : 96 :: ? : 54 :: 12 : 216
SSC CGL 12/12/2022 (3rd shift)
(A)8 (B)6

(C)10 (D)4

Q.85 16 : 20 :: 256 : ? :: 49 : 56
SSC CGL 12/12/2022 (4th shift)
(A)226 (B)264

(C)278 (D)272

Q.86 (2,4,20),(4,5,41)
SSC CGL 12/12/2022 (4th shift)

(A)(9,2,86) (B)(4,3,25)

(C)(5,3,32) (D)(7,3,59)

Q.87 (76,4,19),(98,2,49)
SSC CGL 12/12/2022 (4th shift)

(A)(84,12,4) (B)(72,4,18)

(C)(99,3,66) (D)(88,2,22)

Q.88 (16,7,81),(24,16,64)
SSC CGL 13/12/2022 (1st shift)

(A)(13,7,36) (B)(48,39,18)

(C)(37,25,100) (D)(21,19,8)

Q.89 68 : 19 :: 76 : 21 :: 164 : ?
SSC CGL 13/12/2022 (1st shift)

(A)45 (B)39

(C)43 (D)41

Q.90 (9,343,2),(12,729,3)
SSC CGL 13/12/2022 (2nd shift)
(A)(98,49,92) (B)(13,4,89)

(C)(12,66,20) (D)(12,125,7)

Q.91 (3,16,6),(4,22,6)
SSC CGL 13/12/2022 (2nd shift)
(A)(12,50,5) (B)(9,70,8)

(C)(7,43,6) (D)(9,10,11)

Q.92 (4,7,165),(14,26,600)
SSC CGL 13/12/2022 (2nd shift)
(A)(23,29,567) (B)(5,19,225)

(C)(3,6,135) (D)(17,6,325)

(5,2,23),(6,2,34)
SSC CGL 13/12/2022 (3rd shift)

(A)(3,3,3) (B)(3,2,9)

(C)(3,5,11) (D)(3,2,7)

Q.93 (60,17,13),(62,14,17)
SSC CGL 13/12/2022 (4th shift)

(A)(56,15,13) (B)(43,9,12)

(C)(55,18,9) (D)(57,15,14)

Q.95 (4,6,9),(25,10,4)
SSC CGL 13/12/2022 (4th shift)

(A)(23,3,32) (B)(45,20,19)

(C)(6,36,216) (D)(98,7,89)

Q.96 6 : 12 :: 9 : 21 :: 3 : ?
SSC CGL 13/12/2022 (4th shift)

(A)3 (B)7

(C)5 (D)8

ANSWER

1. (A)	12. (C)	23. (A)	34. (B)	45. (C)	56. (D)	67. (C)	78. (D)	89. (C)
2. (B)	13. (B)	24. (D)	35. (A)	46. (A)	57. (B)	68. (D)	79. (A)	90. (D)
3. (C)	14. (A)	25. (C)	36. (B)	47. (A)	58. (C)	69. (A)	80. (C)	91. (B)
4. (C)	15. (A)	26. (B)	37. (A)	48. (D)	59. (B)	70. (A)	81. (C)	92. (C)
5. (B)	16. (C)	27. (C)	38. (B)	49. (D)	60. (C)	71. (B)	82. (C)	93. (D)
6. (C)	17. (D)	28. (D)	39. (B)	50. (B)	61. (A)	72. (C)	83. (D)	94. (A)
7. (A)	18. (A)	29. (B)	40. (A)	51. (D)	62. (B)	73. (B)	84. (B)	95. (C)
8. (B)	19. (A)	30. (D)	41. (D)	52. (D)	63. (B)	74. (D)	85. (D)	96. (A)
9. (D)	20. (B)	31. (D)	42. (D)	53. (A)	64. (D)	75. (A)	86. (B)	
10. (B)	21. (A)	32. (A)	43. (C)	54. (C)	65. (A)	76. (B)	87. (B)	
11. (D)	22. (D)	33. (D)	44. (D)	55. (D)	66. (C)	77. (D)	88. (A)	

SOLUTION

SOL.NO.1.(A) Logic : 1st number = (2nd number)² - (3rd number)²

$$(20, 6, 4) \Rightarrow 20^2 = 6^2 - 4$$

$$(24, 7, 5) \Rightarrow 24^2 = 7^2 - 2$$

Simirary,

$$(65, 9, 4) \Rightarrow 65 = 9^2 - 4^2$$

SOL.NO.2.(B) Logic : {n:(n-1)³}

$$(19 : 324) \Rightarrow (19-1)^2 = 324$$

$$(25 : 576) \Rightarrow (25-1)^2 = 576$$

Similary,

$$(9 : ?) \Rightarrow (9-1)^2 = 64$$

SOL.NO.3.(C) (SECOND NUMBER + THIRD NUMBER) X 2
= First number i.e

$$(240, 55, 65) \Rightarrow (55+65) \times 2 = 240$$

$$(320, 85, 75) \Rightarrow (85+75) \times 2 = 320$$

Similarly,

$$(160, 35, 45) \Rightarrow (35 + 45) \times 2 = 160$$

SOL.NO.4. (C) Logic a:b => 5:3 i.e

$$\text{In } 35 : 21 \Rightarrow (35 / 7) : (21 / 7)$$

$$\text{In } 60 : 36 \Rightarrow (60 / 12) : (36 / 12) \Rightarrow 5:3$$

$$\text{In } 40 : 24 \Rightarrow (40/8):(24/8) \Rightarrow 5 : 3$$

SOL.NO.5. Logic : {n:n²:n }

$$(9, 81, 729) \Rightarrow (9, 9^2, 9^3)$$

$$(14, 196, 2744) \Rightarrow (14, 14^2, 14^3)$$

Similarly,

$$(17, 289, 4913) \Rightarrow (17, 17^2, 17^3)$$

SOL.NO.6.(C) Logic : 2nd number + 3rd number = 1st number

$$(23, 14, 9) \Rightarrow 14+9=23$$

$$(37, 19, 18) \Rightarrow 19 + 18 = 37$$

Similarly,

$$(125, 25, 100) \Rightarrow 25 + 100 = 125$$

SOL.NO.7.(a) Logic : (1st number + 3x2nd number)

$$(40, 120, 400) \Rightarrow 40+120 \times 3 = 400$$

$$(18, 20, 78) \Rightarrow 18+20 \times 3 = 78$$

Similarly,

$$(13, 4, 25) \Rightarrow 29 + 23 \times 3 = 98$$

SOL.NO.8.(b) Logic : (1st number + 2nd number x3 3rd number)

$$(16, 7, 37) \Rightarrow 16+7 \times 3 = 37$$

$$(28, 23, 98) \Rightarrow 28+9 \times 3 = 55$$

Similarly,

$$(13, 4, 25) \Rightarrow 13+4 \times 3 = 25$$

SOL.NO.9.(d) Logic : (2x first number + third number)=second number i.e

$$\text{In } (4, 13, 5) \Rightarrow (2 \times 4 + 5) = 13$$

$$\text{In } (3, 12, 6) \Rightarrow (2 \times 3 + 6) = 12$$

Similarly,

$$\text{In } (5, 17, 7) \Rightarrow (2 \times 5 + 7) = 17$$

SOL.NO.10.(b) Logic : (First number x Third number+1) = Second number i.e

$$\text{In } (4, 25, 6) \Rightarrow (4 \times 6 + 1) = 25$$

$$\text{In } (8, 25, 3) \Rightarrow (8 \times 3 + 1) = 25$$

$$\text{Similarly, In } (7, 22, 3) (7 \times 3 + 1) = 22$$

SOL.NO.11.(d) Logic: a: (5 x a- 5) i.e. 10:45 10:

$$(5 \times 10-5)= 45 \text{ 6:25 6: } (5 \times 6-5)= 25$$

$$\text{Similarly, } 9:40=9:(5 \times 9-5) = 40$$

SOL.NO.12.(c) Logic - [first number x second number = third number]

$$(11, 13, 143) \quad 11 \times 13 = 143$$

$$(17, 11, 187) \quad 17 \times 11 = 187$$

$$\text{Similarly, } (3, 4, 12) = 3 \times 4 = 12$$

Sol.13.(b) Logic:- [second number + third number + 2 = first number]

$$(15, 9, 4) = 9 + 4 + 2 = 15$$

$$(7, 2, 3) = 2 + 3 + 2 = 7$$

$$\text{Similarly, } (19, 13, 4) = 13 + 4 + 2 = 19$$

Sol.14.(a) Logic - (first number)³ + (second number)³ = third number

$$(3, 2, 35) \quad 3^3 + 2^3 = 35$$

$$(1, 4, 65) = 1^3 + 4^3 = 65$$

$$\text{Similarly, } (7, 2, 351) = 7^3 + 2^3 = 351$$

Sol.15.(a) Logic:- (first num - third num) x 5 = second num

$$(36, 90, 18) \Rightarrow (36 - 18) \times 5 = 90$$

$$(15, 35, 8) \Rightarrow (15 - 8) \times 5 = 35$$

$$\text{Similarly, } (14, 45, 5) \Rightarrow (14 - 5) \times 5 = 45$$

Sol.16.(c) . Logic:- [second num x 4 + third num x 4 = first num]

$$(452, 50, 63) \Rightarrow 50 \times 4 + 63 \times 4 = 452$$

$$(260, 35, 30) \Rightarrow 35 \times 4 + 30 \times 4 = 260$$

Similarly,

$$(260, 50, 15) \Rightarrow 50 \times 4 + 15 \times 4 = 260$$

Sol.17.(d) Logic:- $\frac{\text{first num} \times \text{third num}}{2} = \text{second num}$

$$(12, 42, 7) \Rightarrow \frac{12 \times 7}{2} = 42$$

$$(13, 52, 8) \Rightarrow \frac{13 \times 8}{2} = 52$$

$$(9, 18, 4) \Rightarrow \frac{9 \times 4}{2} = 18$$

Sol. 18.(a) Logic: (First number + Thing number) x 2 = Second number

$$(26 + 34) \times 2 = 120$$

$$(14 + 41) \times 2 = 110$$

Similarly,

$$(36 + 17) \times 2 = 106$$

Sol. 19.(a) Logic: a: b → Their simplest form must be 5:8

$$\text{In } 30:48 \rightarrow (30+6):(48+6)=5:8$$

$$\text{In } 60:96 \rightarrow (60+12):(96+12)=5:8$$

$$\text{In } 45:72 \rightarrow (45+9):(72-9)=5:8$$

Sol.20.(b) Logic: (First number x Third number) + 4 = Second number

$$\text{In } (8, 12, 6) : -(8 \times 6) + 4 = 12$$

$$\text{In } (9, 18, 8) : -(9 \times 8) + 4 = 18$$

$$\text{In } (12, 24, 8) : -(12 \times 8) + 4 = 24$$

Sol.21. (a) Logic: (n: nx8+6)

$$(11:94) \Rightarrow (11:11 \times 8 + 6)$$

$$(18:150) \Rightarrow (18:18 \times 8 + 6)$$

Similarly,

$$(23:190) \Rightarrow (23:23 \times 8 + 6)$$

Sol.22.(d) Logic : (2nd number + 3rd)=1st number
(0.20, 5, 25)=5÷25 = 0.20

$$(0.083, 12, 144)=12 \div 144 = 0.083$$

Similarly,

$$(0.063, 16, 256) = 16 \div 256 \Rightarrow 0.0625 \approx 0.063$$

Sol.23.(b) Logic:- third number x 2 = second number + first number

Similarly,

$$(6, 22, 14) \quad 14 \times 2 = 22 + 6$$

$$(8, 30, 19) \quad 19 \times 2 = 30 + 8$$

$$(4, 18, 11) = 11 \times 2 = 18 + 4$$

Sol. 24.(d) Logic:- first number x second number = third number

$$(22, 9, 198) \quad 22 \times 9 = 198$$

$$(19, 7, 133) \Rightarrow 19 \times 7 = 133$$

$$(26, 5, 130) \Rightarrow 26 \times 5 = 130$$

$$(17, 9, 157) \Rightarrow 17 \times 9 = 153 \text{ (not follows)}$$

$$(28, 7, 196) \Rightarrow 28 \times 7 = 196$$

Sol.25.(C) Logic :- [first number - third number = second number]

$$(70, 14, 56) \Rightarrow 70 - 56 = 14$$

$$(88, 30, 58) = 88 - 58 = 30$$

Similarly,

$$(52, 19, 33) \Rightarrow 52 - 33 = 19$$

Sol.26.(b) Logic:- $2 \times (\text{first number})^2 = \text{second number}$

$$(8:128) = 2 \times (8)^2 = 128$$

$$(11:242) = 2 \times (11)^2 = 242$$

Similarly,

$$(6:72) = 2 \times (6)^2 = 72$$

Sol.27.(C) Logic:- (first number - 2)² = second number

$$(7:25) \Rightarrow (7-2)^2 = 25$$

$$(4:4) \Rightarrow (4-2)^2 = 4$$

Similarly,

$$(3:?) \Rightarrow (3-2)^2 = 1$$

Sol.36.(a) Logic used:- (first num)² + (third num)² = second num

$$(5, 41, 4) \Rightarrow (5)^2 + (4)^2 = 41$$

$$(2, 68, 8) \Rightarrow (2)^2 + (8)^2 = 68$$

Similarly,

$$(6, 100, 8) \Rightarrow (6)^2 + (8)^2 = 100$$

Sol.37.(b) Logic: (First number $\sqrt{\text{Third number}}$) = Second number i.e.

$$\text{In } (2, 8, 36) \rightarrow (2 + \sqrt{36}) = 8$$

$$\text{In } (4, 9, 25) \rightarrow (4 + \sqrt{25}) = 9$$

Similarly,

$$(13, 20, 49) \rightarrow (13 + \sqrt{49}) = 20$$

Sol.38.(a) Logic: (First number)² + Third number = (Second number)²

$$\text{In } (7, 11, 72) :- (7)^2 + 72 = (11)^2$$

$$\text{In } (5, 8, 39) :- (5)^2 + 39 = (8)^2$$

Similarly,

$$\text{In } (4, 7, 33) :- (4)^2 + 33 = (7)^2$$

Sol.39.(b) Logic: (Second number + Third number) = First number

$$\text{In } (267, 128, 139) :- (128 + 139) = 267$$

$$\text{In } (267, 132, 135) :- (132 + 135) = 267$$

$$\text{In } (325, 112, 215) :- (112 + 215) = 325$$

$$\text{In } (365, 154, 211) :- (154 + 211) = 365$$

$$\text{In } (297, 146, 151) :- (146 + 151) = 297$$

Hence, we can clearly see that, (325, 112, 215) is not following the pattern.

Sol.40(b) Logic: (first number + third number)³ = Second number

$$(2, 125, 3) = (2 + 3)^3 = 125$$

$$(1, 64, 3) = (1 + 3)^3 = 64$$

Similarly,

$$(5, 512, 3) = (5 + 3)^3 = 512$$

Sol.41.(d) Pattern follows:- $\left[\begin{array}{l} \text{first num} \times \text{second num} = \\ \text{third num} \end{array} \right]$

$$(16, 7, 112) \Rightarrow 16 \times 7 = 112$$

$$(18, 3, 54) \Rightarrow 18 \times 3 = 54$$

$$(14, 5, 70) \Rightarrow 14 \times 5 = 70$$

$$(22, 7, 154) \Rightarrow 22 \times 7 = 154$$

$$(26, 5, 132) \Rightarrow 26 \times 5 = 130 \text{ (not follows)}$$

Sol.42.(d) Logic used:- { first num $\times$ (first num-2) = second num }

$$(12:120) = 12 \times (12-2) = 120$$

$$(20:360) = 20 \times (20-2) = 360$$

Similarly,

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

Sol.28.(d) Logic: (a: a²: a²+a)

$$\text{In } (5:25:30) \rightarrow 5: (5)^2 = 25: (5^2+5) = 30$$

$$\text{In } (16:256:272) \rightarrow 16: (16^2) = 256: (16^2+16) = 272$$

$$\text{In } (13:169:182) \rightarrow 13: (13^2) = 169: (13^2+13) = 182$$

Sol.29.(b) Logic: a: $\sqrt{a}x(\sqrt{a} + 1)$ i.e.

$$\text{In } 729 : 90 \rightarrow 729: \sqrt{729} \times (\sqrt{729} + 1) = 90$$

$$\text{In } 343:56-343: \sqrt{343} \times (\sqrt{343} + 1) = 56$$

$$\text{In } 512: 72 \rightarrow 512: \sqrt{512} \times (\sqrt{512} + 1) = 72$$

Sol.30.(d) Logic: a: ax (a²-a - 1) i.e.

$$\text{In } 17: 4607 \rightarrow 17: 17 \times (17^2-17-1) = 4607$$

$$\text{In } 11: 1199 \rightarrow 11: 11 \times (11^2-11-1) = 1199$$

$$\text{In } 23:11615 \rightarrow 23: 23 \times (23^2-23-1) = 11615$$

Sol.31.(b) Logic: (n: nx9-8)

$$(11:91) \Rightarrow (11:11 \times 9-8)$$

$$(15:127) \Rightarrow (15:15 \times 9-8)$$

$$\text{Similarly, } (18:154) \Rightarrow (18:18 \times 9-8)$$

Sol.32.(a) Logic: {n: nx 7:n x 9}

$$(23, 161, 207) \Rightarrow (23: 23 \times 7: 23 \times 9)$$

$$(47, 329, 423) \Rightarrow (47: 47 \times 7: 47 \times 9)$$

Similarly,

$$(64, 448, 576) \Rightarrow (64: 64 \times 7: 64 \times 9)$$

Sol.33.(d) Logic: {(n: n(n - 5))}

$$(18:234) \Rightarrow (18:18 \times 13)$$

$$(14:126) \Rightarrow (14:14 \times 9)$$

Similarly,

$$(16:176) \Rightarrow (16:16 \times 11)$$

Sol.34.(d) Logic: {(n: n(n-5))}

$$(18:234) \Rightarrow (18:18 \times 13)$$

$$(14:126) \Rightarrow (14:14 \times 9)$$

Similarly,

$$(16:176) \Rightarrow (16:16 \times 11)$$

Sol.35.(b) Logic used:- (first number - 1)³ = second number

$$6 : 125 \Rightarrow (6 - 1)^3 = 125$$

$$2 : 1 \Rightarrow (2 - 1)^3 = 1$$

$$64 \Rightarrow (5 - 1)^3 = 64$$

Sol.43.(C) Logic: $(n: nx2-1)$

$$(7:13) \Rightarrow (7:7 \times 2 - 1)$$

$$(16:31) \Rightarrow (16:16 \times 2 - 1)$$

Similarly,

$$(46:91) \Rightarrow (46:46 \times 2 - 1)$$

Sol.44.(d) Logic: $(1st\ number \times 2nd\ number) \times 2$
= 3rd number

$$(7.4.56) \Rightarrow 7 \times 4 \times 2 = 56$$

$$(8,3,48) \Rightarrow 8 \times 3 \times 2 = 48$$

Similarly,

$$(9,10,180) \Rightarrow 9 \times 10 \times 2 = 180$$

Sol.45.(c) Logic: $(1st\ number - 3rd\ number)^2$
= 2nd number

$$(9,16,5) \Rightarrow (9 - 5)^2 = 16$$

$$(7,9,4) \Rightarrow (7 - 4)^2 = 9$$

Similarly,

$$(11,36,5) \Rightarrow (11 - 5)^2 = 36$$

Sol.46.(a) Logic: $(2 \times First\ number + Second\ number)$
= Third number

$$\text{In } (17, 24, 58) :- (2 \times 17 + 24) = 58$$

$$\text{In } (26, 37, 89) :- (2 \times 26 + 37) = 89$$

Similarly,

$$(15, 17, 47) :- (2 \times 15 + 17) = 47$$

Sol.47.(a) Logic: $(First\ number \times Third\ number) \div 2$
= Second number

$$\text{In } (13, 39, 6) :- (13 \times 6) \div 2 = 39$$

$$\text{In } (9, 18, 4) :- (9 \times 4) \div 2 = 18$$

$$\text{In } (12, 48, 8) :- (12 \times 8) \div 2 = 48$$

Sol.48.(d) Logic: $(First\ number - second\ number)$
 $\times 4 = Third\ number$

$$\text{In } (45, 15, 120) :- (45 - 15) \times 4 = 120$$

$$\text{In } (27, 8, 76) :- (27 - 8) \times 4 = 76$$

$$\text{In } (56, 48, 32) :- (56 - 48) \times 4 = 32$$

Sol.49.(d) Pattern follows:- $\{first\ num > third\ num\}$
 $+ 4 = second\ num$

$$(12, 112, 9) \Rightarrow \{12 \times 9\} + 4 = 112$$

$$(10, 84, 8) \Rightarrow \{10 \times 8\} + 4 = 84$$

Similarly,

$$(18, 94, 5) \Rightarrow \{18 \times 5\} + 4 = 94$$

Sol.50.(b) Logic-a: $a^3 + a^2 + a$

$$\text{In } (4:84) \rightarrow 4^3 + 4^2 + 4 = 84$$

$$\text{In } (11:1463) \rightarrow 11^3 + 11^2 + 11 = 1463$$

$$\text{In } (13:2379) \rightarrow 13^3 + 13^2 + 13 = 2379$$

Sol.51.(d) Logic: $(First\ number + 10 = Second\ number)$
and $(Second\ number + 5 = Third\ number)$

$$\text{In } (3, 13, 18) \Rightarrow +10=13 \text{ and } 13+5= 18$$

$$\text{In } (29, 39, 44) \Rightarrow 29+10=39 \text{ and } 39 +5= 44$$

$$\text{In } (16, 26, 31) \Rightarrow 16+10=26 \text{ and } 26 + 5= 31$$

Sol.52.(d) Logic:- a: $\frac{(a)^3}{3}$

$$\text{In } (15:125) \Rightarrow 15: \frac{(15)^3}{3} = 125$$

$$\text{In } (27:729) \Rightarrow 27: \frac{(27)^3}{3} = 729$$

$$\text{In } (36:1728) \Rightarrow 36: \frac{(36)^3}{3} = 1728$$

Sol.53.(a) Logic: $(Second\ number + Third\ number) \times 2$
= First number

$$\text{In } (42, 18, 3) :- (18 + 3) \times 2 = 42$$

$$\text{In } (36, 14, 4) :- (14 + 4) \times 2 = 36$$

Similarly,

$$\text{In } (34, 13, 4) :- (13 + 4) \times 2 = 34$$

Sol.54.(c) Logic: a: $\sqrt{a} \times 3$

$$\text{In } 144 : 36 :- 144 : \sqrt{144} \times 3 = 36$$

$$\text{In } 81 : 27 :- 81 : \sqrt{81} \times 3 = 27$$

$$\text{In } 196 : 42 :- 196 : \sqrt{196} \times 3 = 42$$

Sol.55.(d) Logic: $(First\ number + Third\ number) \times$

$$\frac{(First\ number + Third\ number)}{2}$$

= Second number

$$\text{In } (4, 50, 6) :- (4 + 6) \times \frac{(4 + 6)}{2} = 50$$

$$\text{In } (13, 128, 3) :- (13 + 3) \times \frac{(13 + 3)}{2} = 128$$

Similarly,

$$\text{In } (15, 162, 3) :- (15 + 3) \times \frac{(15 + 3)}{2} = 162$$

Sol.56.(d) Logic used:- $\{first\ num \times 3\} - 2 = second\ num.$

$$(11:31) \Rightarrow \{11 \times 3\} - 2 = 31$$

$$(14 : 40) \Rightarrow \{14 \times 3\} - 2 = 40$$

Similarly,

$$(9:25) \Rightarrow \{9 \times 3\} - 2 = 25$$

Sol.57.(b) Logic: $(n \times 4 : n - 8)$

$$(76:11) \Rightarrow (19 \times 4 : 19 - 8)$$

$$(68:9) \Rightarrow (17 \times 4 : 17 - 8)$$

Similarly,

$$(88:14) \Rightarrow (22 \times 4 : 22 - 8)$$

Sol.58.(c) Logic: (Second number $\times$ Third number)
= First number i.e.

$$\text{In } (60, 5, 6) :- (5 \times 6) \times 2 = 60$$

$$\text{In } (48, 8, 3) :- (8 \times 3) \times 2 = 48$$

Similarly,

$$\text{In } (24, 4, 3) :- (4 \times 3) \times 2 = 24$$

Sol.59.(b) Logic: (Second number Third number)²
= First number

$$\text{In } (144, 9, 3) :- (9 + 3)^2 = 144$$

$$\text{In } (225, 7, 8) :- (7 + 8)^2 = 225$$

Similarly,

$$\text{In } (64, 5, 3) :- (5 + 3)^2 = 64$$

Sol.60.(c) Logic: (First number + Third number)²
= Second number

$$\text{In } (71, 37, 3) (71 + 3) \div 2 = 37$$

$$\text{In } (34, 23, 12) (34 + 12) \div 2 = 23$$

Similarly,

$$\text{In } (19, 55, 91) / (19 + 91) \div 2 = 55$$

Sol.61.(a) Logic: (First number + 2 Second number)²
+ 2 = Third number

$$\text{In } (2, 4, 18) \Rightarrow (2 + 4)^2 \div 2 = 18$$

$$\text{In } (1, 9, 50) \Rightarrow (1 + 9)^2 \div 2 = 50$$

Similarly,

$$\text{In } (3, 5, 32) \Rightarrow (3 + 5)^2 \div 2 = 32$$

Sol.62.(b) Logic:- (First number $\times$ Third number)
= Second number

$$\text{In } (5, 35, 7) \Rightarrow 5 \times 7 = 35$$

$$\text{In } (8, 32, 4) \Rightarrow 8 \times 4 = 32$$

Similarly,

$$\text{In } (3, 27, 9) \Rightarrow 3 \times 9 = 27$$

Sol. 63.(b) Logic:- first number + 100
= second number, Second number + 1000
= third number

$$\text{In } (99, 199, 1199) \Rightarrow 99 + 100 = 199, 199 + 1000 = 1199$$

$$\text{In } (15, 115, 1115) \Rightarrow 15 + 100 = 115, 115 + 1000 = 1115$$

$$\text{Similarly, } (33, 133, 1133) \Rightarrow 33 + 100 = 133, 133 + 1000 = 1133$$

Sol.183.(d) Logic used:- (first num + third num) $\times$ 3
= second num

$$(12, 51, 5) \Rightarrow (12 + 5) \times 3 = 51$$

$$(8, 30, 2) \Rightarrow (8 + 2) \times 3 = 30$$

Similarly,

$$(11, 51, 6) \Rightarrow (11 + 6) \times 3 = 51$$

Sol.65.(a) Logic : $\frac{(1\text{st number} + 3 \times 2\text{nd number})}{2}$
= 3rd number

$$(52, 10, 41) \Rightarrow \frac{(52 + 3 \times 10)}{2} = 41$$

$$(46, 48, 50) \Rightarrow \frac{(46 + 3 \times 18)}{2} = 50$$

$$(68, 26, 73) \Rightarrow \frac{(68 + 3 \times 26)}{2} = 73$$

Sol.66.(C) Logic: $a : a \times (a \times 7)$

$$\text{In } (8:448) \rightarrow 8:8 \times (8 \times 7) = 448$$

$$\text{In } (9:567) \rightarrow 9:9 \times (9 \times 7) = 567$$

$$\text{In } (11:847) \rightarrow 11:11 \times (11 \times 7) = 847$$

Sol.67.(c) Logic: First number + Third number
= Second number

$$\text{In } (13, 27, 14) \Rightarrow 13 + 14 = 27$$

$$\text{In } (19, 23, 4) \Rightarrow 19 + 4 = 23$$

Similarly,

$$\text{In } (25, 27, 2) \Rightarrow 25 + 2 = 27$$

Sol.68.(d) Logic: (First number - Third number) $\times$ 2
= Second number

$$\text{In } (182, 170, 97) \Rightarrow (182 - 97) \times 2 = 170$$

$$\text{In } (156, 128, 92) \Rightarrow (156 - 92) \times 2 = 128$$

Similarly,

$$\text{In } (138, 130, 73) \Rightarrow (138 - 73) \times 2 = 130$$

Sol.191.(a) Logic - (Third number $\times$ 3 - Second number)
= First number

$$(56, 22, 26) \Rightarrow (26 \times 3 - 22) = 56$$

$$(34, 20, 18) \Rightarrow (18 \times 3 - 20) = 34$$

Similarly,

$$(78, 54, 44) \Rightarrow (44 \times 3 - 54) = 78$$

Sol.193.(a) Logic :- First number + third number²
= $\sqrt{\text{second number}}$

$$(21, 225, 9) \Rightarrow \frac{(21 + 9)}{2} = \sqrt{225}$$

$$(12, 49, 2) \Rightarrow \frac{(12 + 2)}{2} = \sqrt{49}$$

Similarly,

$$(14, 64, 2) \Rightarrow \frac{(14 + 2)}{2} = \sqrt{64}$$

Sol.71.(b) Logic: Second number $\sqrt{\text{third number}}$
= First number

$$(76, 75, 1) \Rightarrow 75 + \sqrt{1} = 76$$

$$(90, 87, 9) \Rightarrow 87 + \sqrt{9} = 90$$

Similarly,

$$(56, 48, 64) \Rightarrow 48 + \sqrt{64} = 56$$

Sol.72.(c) Logic:- $a : (a^3) - 13$

$$\text{In } 7 : 330 \rightarrow 7^3 - 13 = 330$$

$$\text{In } 6 : 203 \rightarrow 6^3 - 13 = 203$$

$$\text{In } 9 : 716 \rightarrow 9^3 - 13 = 716$$

Sol.73.(b) Logic: (Third number - Second number)
 $\times 2$ = First number

$$\text{In } (56, 6, 34) \Rightarrow (34 - 6) \times 2 = 56$$

$$\text{In } (102, 27, 78) \Rightarrow (78 \times 27) \times 2 = 102$$

Similarly,

$$\text{In } (76, 34, 72) \Rightarrow (72 - 34) \times 2 = 76$$

Sol.74.(d) Logic: $a : a^2 - 16$

$$\text{In } (27, 713) \Rightarrow 27^2 - 16 = 713$$

$$\text{In } (32, 1008) \Rightarrow 32^2 - 16 = 1008$$

$$\text{In } (35, 1209) \Rightarrow 35^2 - 16 = 1209$$

Sol.75.(a) Logic: sum of all given number = 85

$$(21, 33, 31) \Rightarrow 21 + 33 + 31 = 85$$

$$(42, 17, 26) \Rightarrow 42 + 17 + 26 = 85$$

Similarly,

$$(36, 14, 35) \Rightarrow 36 + 14 + 35 = 85$$

Sol.76.(b) Logic (1st number $\times 3$ + 2nd)
= 3rd number

$$(4, 21, 33) \Rightarrow (4 \times 3 + 21) = 33$$

$$(10, 111, 141) \Rightarrow (10 \times 3 + 111) = 141$$

Similarly,

$$(25, 53, 128) \Rightarrow (25 \times 3 + 53) = 128$$

Sol.77.(d) Logic - (first number) $\times$ (first number - 1)
= Second number.

$$(12, 132) \Rightarrow (12) \times (12 - 1) = 132$$

$$(20, 380) \Rightarrow (20) \times (20 - 1) = 380$$

Similarly,

$$(2, 2) \Rightarrow (2) \times (2 - 1) = 2$$

Sol.78.(d), Logic used:- $\{(\text{first num})^3 - 3 = \text{second num}\}$

$$(4, 61) \Rightarrow (4)^3 - 3 = 61$$

$$(9, 726) \Rightarrow (9)^3 - 3 = 726$$

Similarly,

$$(6, 213) \Rightarrow (6)^3 - 3 = 213$$

Sol.79.(A) logic used:- $\{\text{first num} + \text{last num}\} \times 7$
= second num

$$(5, 98, 9) \Rightarrow \{9 + 5\} \times 7 = 98$$

$$(10, 168, 14) \Rightarrow \{10 + 14\} \times 7 = 168$$

Similarly,

$$(1, 28, 3) \Rightarrow \{3 + 1\} \times 7 = 28$$

Sol.80.(c) Logic: First number + Second number
= Third number

$$\text{In } (168, 122, 290) \Rightarrow 168 + 122 = 290$$

$$\text{In } (198, 112, 310) \Rightarrow 198 + 112 = 310$$

$$\text{In } (226, 148, 374) \Rightarrow 226 + 148 = 374$$

$$\text{In } (236, 118, 356) \Rightarrow 236 + 118 = 356$$

$$\text{In } (126, 132, 258) \Rightarrow 126 + 132 = 258$$

Hence, we can clearly see that, (236, 118, 356) is not following the pattern.

Sol.81.(C) Logic: $a : (a + 6)^2$

$$\text{In } (14, 400) \Rightarrow 14 : (14 + 6)^2 = 400$$

$$\text{In } (37, 1849) \Rightarrow 37 : (37 + 6)^2 = 1849$$

$$\text{In } (42, 2304) \Rightarrow 42 : (42 + 6)^2 = 2304$$

Sol.82.(C) Logic: (First number) 2 + (Third number) 2
= Second number

$$\text{In } (12, 313, 13) :- (12)^2 + (13)^2 = 313$$

$$\text{In } (11, 185, 8) :- (11)^2 + (8)^2 = 185$$

Similarly,

$$\text{In } (9, 90, 3) :- (9)^2 + (3)^2 = 90$$

Sol.83.(d) Logic: First number $\times$ Second number $\times 4$
= Third number

$$\text{In } (6, 17, 408) / - 6 \times 17 \times 4 = 408$$

$$\text{In } (13, 27, 1404) / - 13 \times 27 \times 4 = 1404$$

Similarly,

$$\text{In } (4, 26, 416) / - 4 \times 26 \times 4 = 416$$

Sol.84.(b) Logic: $a : a \times (a + \frac{a}{2})$

$$\text{In } 8 : 96 :- 8 \times (8 + \frac{8}{2}) = 96$$

$$\text{In } 6 : 54 :- 6 \times (6 + \frac{6}{2}) = 54$$

$$\text{In } 12 : 216 :- 12 \times (12 + \frac{12}{2}) = 216$$

Sol.85.(d) Logic used:- first num + $\sqrt{\text{first num}} = \text{second num}$

$$(16:20) \Rightarrow 16 + \sqrt{16} = 20$$

$$(49:56) \Rightarrow 49 + \sqrt{49} = 56$$

Similarly,

$$(256:272) \Rightarrow 256 + \sqrt{256} = 272$$

Sol.86.(b) Logic used:- $(\text{first num})^2 + (\text{second num})^2 = \text{third num}$

$$(2,4,20) \Rightarrow (2)^2 + (4)^2 = 20$$

$$(4,5,41) \Rightarrow (4)^2 + (5)^2 = 41$$

Similarly,

$$(4,3,25) \Rightarrow (4)^2 + (3)^2 = 25$$

Sol.87.(b) Logic used:-

{ first num second num x third num }

$$(76, 4, 19) \Rightarrow 76 = 4 \times 19$$

$$(98, 2, 49) \Rightarrow 98 = 2 \times 49$$

Similarly,

$$(72, 4, 18) \Rightarrow 72 = 4 \times 18$$

Sol.88.(a) Logic: $(\text{First number} - \text{Second number})^2 = \text{Third number}$

$$\text{In } (16, 7, 81) :- (16 - 7)^2 = 81$$

$$\text{In } (24, 16, 64) :- (24 - 16)^2 = 64$$

Similarly,

$$\text{In } (13, 7, 36) :- (13 - 7)^2 = 36$$

Sol.89.(c) Logic: $a : (a + 8) \div 4$

$$\text{In } 68:19 \Rightarrow 68 : (68 + 8) \div 4 = 19$$

$$\text{In } 76:21 \Rightarrow 76 : (76 + 8) \div 4 = 21$$

Similarly,

$$164:43 \Rightarrow 164 : (164 + 8) \div 4 = 43$$

Sol.90.(d) Logic used:- $(\text{First num} - \text{third num})^3 = \text{second num}$

$$(9,343,2) \Rightarrow (9 - 2)^3 = 343$$

$$(12,729,3) \Rightarrow (12 - 3)^3 = 729$$

Similarly,

$$(12,125,7) \Rightarrow (12 - 7)^3 = 125$$

Sol.91.(b) Logic used:- $(\text{first num} \times \text{third num}) - 2 = \text{second num}$

$$(3,16,6) \Rightarrow (3 \times 6) - 2 = 16$$

$$(4,22,6) \Rightarrow (4 \times 6) - 2 = 22$$

Similarly,

$$(9,70,8) \Rightarrow (9 \times 8) - 2 = 70$$

Sol.92.(c) Logic used:- $(\text{first num} + \text{second num}) \times 15 = \text{third num}$

$$(4,7,165) \Rightarrow (4 + 7) \times 15 = 165$$

$$(14,26,600) \Rightarrow (14 + 26) \times 15 = 600$$

Similarly,

$$(3,6,135) \Rightarrow (3 + 6) \times 15 = 135$$

Sol.93.(d) $(5, 2, 23) = 5^2 - 2 = 23$

$$(6, 2, 34) = 6^2 - 2 = 34$$

Similarly,

$$(3, 2, 7) = 3^2 - 2 = 7$$

Sol.94.(A) Logic - $(\text{Second number} + \text{third number}) \times 2 = \text{first number}$

$$(60,17, 13) = (13 + 17) \times 2 = 60$$

$$(62,14, 17) = (14 + 17) \times 2 = 62$$

Similarly, in option (a),

$$(56, 15, 13) = (15 + 13) \times 2 = 56$$

Sol.95.(C) $(4, 6, 9) = 9 \times 4 = 6^2$

$$(25, 10, 4) = 4 \times 25 = 10^2$$

Similarly,

$$(6, 36, 216) = 216 \times 6 = 36^2$$

Sol.96.(a) $6 \times 3 - 6 = 12$

$$9 \times 3 - 6 = 21$$

Similarly,

$$3 \times 3 - 6 = 3$$

