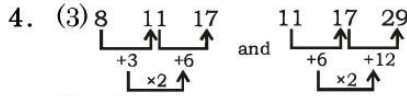
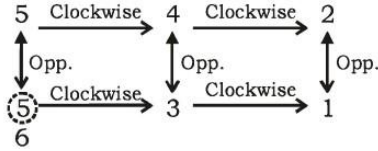


# ANSWER SET - 04

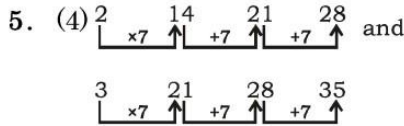
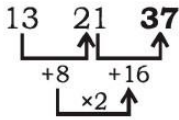
01. (3) 02. (3) 03. (1) 04. (3) 05. (4)  
 06. (4) 07. (4) 08. (1) 09. (1) 10. (2)  
 11. (1) 12. (3) 13. (3) 14. (3) 15. (1)  
 16. (4) 17. (3) 18. (4) 19. (4) 20. (3)  
 21. (2) 22. (1) 23. (4) 24. (3) 25. (1)  
 26. (3) 27. (3) 28. (2) 29. (2) 30. (3)  
 31. (1) 32. (3) 33. (2) 34. (2) 35. (1)  
 36. (3) 37. (1) 38. (3) 39. (2) 40. (3)  
 41. (1) 42. (1) 43. (3) 44. (2) 45. (1)  
 46. (2) 47. (3) 48. (2) 49. (3) 50. (2)  
 51. (4) 52. (1) 53. (1) 54. (2) 55. (1)  
 56. (2) 57. (4) 58. (2) 59. (3) 60. (3)  
 61. (2) 62. (1) 63. (1) 64. (1) 65. (1)  
 66. (3) 67. (1) 68. (2) 69. (3) 70. (4)  
 71. (1) 72. (4) 73. (2) 74. (3) 75. (3)  
 76. (2) 77. (3) 78. (4) 79. (3) 80. (2)  
 81. (1) 82. (4) 83. (2) 84. (3) 85. (3)  
 86. (1) 87. (4) 88. (4) 89. (2) 90. (2)  
 91. (4) 92. (4) 93. (1) 94. (2) 95. (4)  
 96. (2) 97. (4) 98. (3) 99. (2) 100. (4)

## EXPLANATION - 04

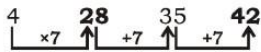
3. (1) According to dice (II) and (III),



Similarly,



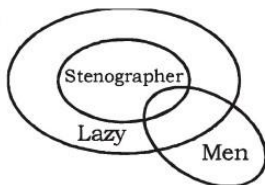
Similarly,



6. (4) (A)  $\begin{matrix} T & w & X & z \\ \uparrow +3 & \uparrow +1 & \uparrow +2 \end{matrix}$   
 (B)  $\begin{matrix} P & r & S & u \\ \uparrow +2 & \uparrow +1 & \uparrow +2 \end{matrix}$   
 (C)  $\begin{matrix} R & n & P & t \\ \uparrow -4 & \uparrow +2 & \uparrow +4 \end{matrix}$   
 (D)  $\begin{matrix} C & d & E & f \\ \uparrow +1 & \uparrow +1 & \uparrow +1 \end{matrix}$

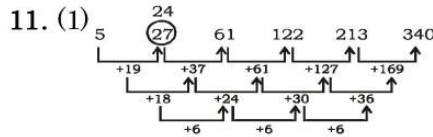
7. (4) Except option (4), the first digit is divided by the second digit.

10. (2)

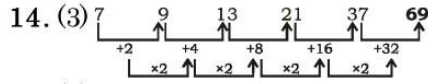
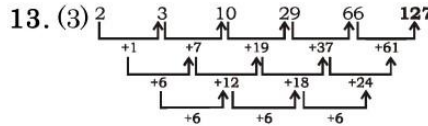


Conclusions : I - ×

II - ✓



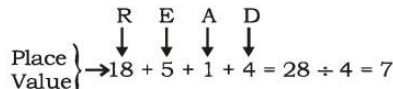
12. (3) Amar<sup>20M</sup> Chandan<sup>30M</sup> Esha<sup>20M</sup> Deepak<sup>20M</sup> Babita  
 Distance between Amar and Babita =  
 20M + 30M + 20M + 20M = 90 M



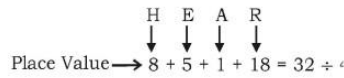
15. (1) Each group of letters given in the question starts with a vowel. As all the vowels have already appeared in the sequence and the only vowel left out is U, So, the answer is the group of letters starting with U i.e. (1) URN.

16. (4) c ab/ab c/c ab/a b c/c a b/abc

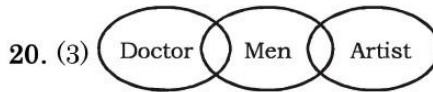
18. (4) D  $\xrightarrow{\text{Place Value}} 4 \div 1 = 4$



Similarly,



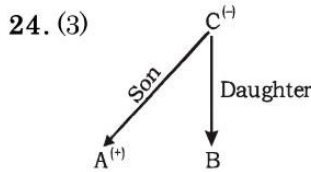
19. (4) ACTION



21. (2) 4 : 12 :: 5 : 20  
 $\begin{matrix} \uparrow 4^2 - 4 & \uparrow 5^2 - 5 \end{matrix}$

22. (1)  $\begin{matrix} +2 & +2 & +2 & +2 & +2 & +2 & +2 & +2 \\ L & N & P & R & T & V & X & Z & : & N & P & R & T & : & F & H & J & L \\ \uparrow +2 & \uparrow +2 & \uparrow +2 & \uparrow +2 & \uparrow +2 & \uparrow +2 & \uparrow +2 & \uparrow +2 \end{matrix}$

23. (4)



25. (1) 16 - 2 - 24 ÷ 3 = 6  
 16 - 2 - 8 = 6  
 6 = 6

26. (3)  $\frac{a^2 + b^2 + ab}{a^3 - b^3}$   
 $= \frac{a^2 + b^2 + ab}{(a - b)(a^2 + b^2 + ab)}$   
 $= \frac{1}{a - b} = \frac{1}{13 - 11} = \frac{1}{2}$

29. (2) Let capacity of the drum = l  
 ATQ,

$$\frac{2}{3}l - 35 = \frac{1}{6}l$$

$$\frac{2}{3}l - \frac{1}{6}l = 35$$

$$\frac{(4-1)l}{6} = 35$$

$$l = \frac{35 \times 6}{3} = 70 \text{ Litre}$$

31. (1) Marked price = ₹ 405  
 Discount = 15%

$$\text{Selling Price} = ₹ \left( 405 \times \frac{85}{100} \right)$$

Profit = 35%

$$\text{Cost Price} = ₹ \left( 405 \times \frac{85}{100} \times \frac{100}{135} \right)$$

$$= ₹ 255$$

32. (3) ATQ,

Distance covered by the bus in 5 minutes

$$= 40 \times \frac{5}{60} = \frac{10}{3} \text{ km}$$

If same distance is covered in 4 minutes, then relative speed

$$= \frac{10}{3} \times \frac{60}{4}$$

$$= 50 \text{ km/hr}$$

So, speed of man = 50 - 40 = 10 km/hr.

33. (2) ATQ,

If the interest is simple interest, then the required ratio of the amounts deposited in bank A and bank B = 4 : 5

34. (2) A 12  $\xrightarrow{\quad\quad\quad} 2$

B 24  $\xrightarrow{\quad\quad\quad} 1$

C 8  $\xrightarrow{\quad\quad\quad} \frac{3}{6} \text{ units}$

Let total units of work = 24 units  
 work done by B and C in 2 days = 4 × 2 = 8 units

Remaining work = 24 - 8 = 16 units

So, required time to finish the work by A

$$= \frac{16}{2} = 8 \text{ days}$$

35. (1) ATQ,

$$\text{Relative speed} = \frac{280}{14} \times \frac{18}{5}$$

$$= 72 \text{ km/hr.}$$

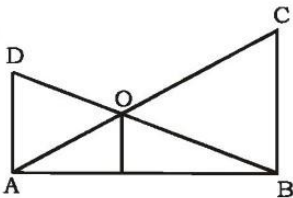
Speed of man = 4 km/hr.

Speed of train = 72 + 4 = 76 km/hr.

hr.

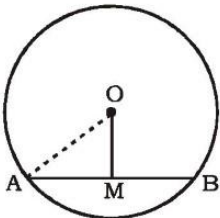
36. (3) The Average age of the Mother and the Father = 43 years  
 Average age of the Mother, Father and the son = 37 years  
 So, the age of the son =  $3 \times 37 - 2 \times 43$   
 $= 111 - 86 = 25$  years

39. (2)



OA = 2.4 cm  
 OC = 3.6 cm  
 BO = 3 cm  
 $DO = \frac{OA \times BO}{OC}$   
 $= \frac{2.4 \times 3}{3.6}$   
 $= 2$  cm

40. (3)



OA = 13 cm  
 OM = 5 cm  
 $AM = \sqrt{OA^2 - OM^2}$   
 $= \sqrt{13^2 - 5^2} = 12$  cm  
 AB =  $2 \times AM = 24$  cm

41. (1) ABCD is a cyclic quadrilateral.

$\angle A = 70^\circ$   
 $\angle C = 180^\circ - \angle A = 110^\circ$   
 $\angle B = 75^\circ$   
 $\angle D = 180^\circ - \angle B = 105^\circ$

43. (3) The Curved surface area of the cylinder =  $1320 \text{ cm}^2$   
 Base radius = 21 cm  
 So, the total surface area of the cylinder

$= 1320 + 2 \times \frac{22}{7} \times 21 \times 21$   
 $= 4092 \text{ cm}^2$

44. (2)  $3x - \frac{2}{x} = 5$

squaring both sides -

$9x^2 + \frac{4}{x^2} - 2 \times 3x \times \frac{2}{x} = 25$

$9x^2 + \frac{4}{x^2} - 12 = 25$

$9x^2 + \frac{4}{x^2} + 12 = 25 + 24 = 49$

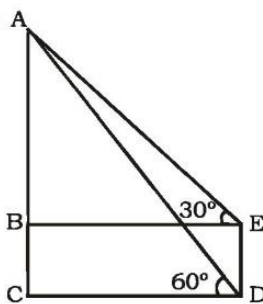
$3x + \frac{2}{x} = 7$

$\left(3x - \frac{2}{x}\right)\left(3x + \frac{2}{x}\right) = 5 \times 7$

$\Rightarrow 9x^2 - \frac{4}{x^2} = 35$

$= \frac{2000 - 1500}{1500} \times 100$   
 $= 33.33\%$

46. (2)



AC = 200 m

$\frac{AC}{CD} = \tan 60^\circ$

$CD = \frac{200}{\sqrt{3}}$  m

$\frac{AB}{BE} = \tan 30^\circ$

$AB = \frac{200}{\sqrt{3}} \times \frac{1}{\sqrt{3}} = \frac{200}{3}$  m

So,  $BC = ED = 200 - \frac{200}{3}$

$= \frac{400}{3}$  m

So, the Height of the tower

$= \frac{400}{3}$  m

47. (3)  $\sin \alpha \sec (30^\circ + \alpha) = 1$

$\sin \alpha = \cos (30^\circ + \alpha)$

$\sin \alpha = \sin (90^\circ - 30^\circ - \alpha)$

$\sin \alpha = \sin (60^\circ - \alpha)$

$\alpha = 60^\circ - \alpha$

$\alpha = 30^\circ$

So,  $\sin \alpha + \cos \alpha = \sin 30^\circ + \cos 60^\circ$

$= \frac{1}{2} + \frac{1}{2} = 1$

48. (2) Required difference =  $2500 - 1600$

$= 900$  crore

49. (3) Year 2014 - 15

50. (2) Required percentage