

BOOKS



Visit: publications.adda247.com & store.adda247.com
 For any information, mail us at publications@adda247.com

Solutions

Solutions (1-5):

D lives just above B. Two persons live between D and A. Six persons live between A and G.

Case 1	Case 2	Case 3	Case 4
D	A	G	G
B			
A	D		
	B	D	
		B	
	G	A	A
G			D
			B

The number of floors between G and E is same as in between E and F, who lives on the bottom most floor. Either sixteen or seventeen floors are there in the building. E and F live below A. This will eliminate Case 3 and Case 4. Not more than three floors are above D.

Case 1	Case 2
D	A
B	
A	D
	B
	G
G	
	E
E	
	F
F	

Not more than one person lives between C and E. The number of floors between C and H is thrice the number of floors between G and C. This will eliminate case 1. E lives above H but below C. So, the final arrangement is:

EPFO SSA 2019

PRIME

65+ TOTAL TESTS

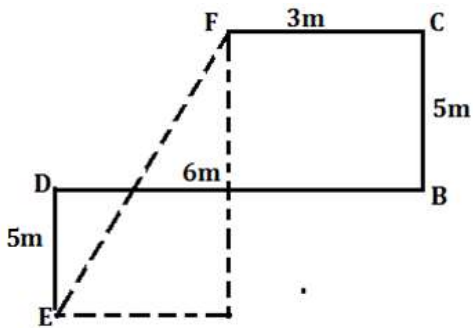
- ✓ 15 Full Length Mocks
- ✓ 30 Section Wise Sets
- ✓ 20 Topic Wise Sets
- ✓ eBook

BILINGUAL

A
D
B
G
C
E
H
F

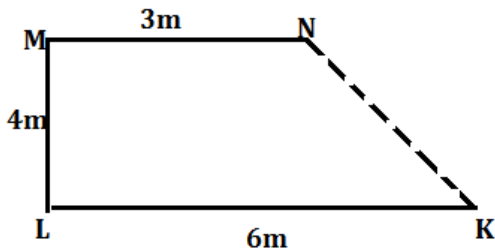
- S1. Ans.(d)
 S2. Ans.(c)
 S3. Ans.(c)
 S4. Ans.(e)
 S5. Ans.(e)

S6. Ans.(d)
 Sol.



$$EF = \sqrt{3^2 + 10^2} = \sqrt{109} \text{ m}$$

S7. Ans.(b)
 Sol.

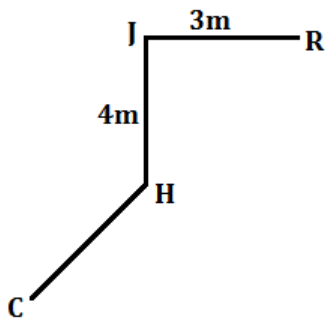


$$NK = \sqrt{3^2 + 4^2} = 5 \text{ m}$$



S8. Ans.(a)

Sol.

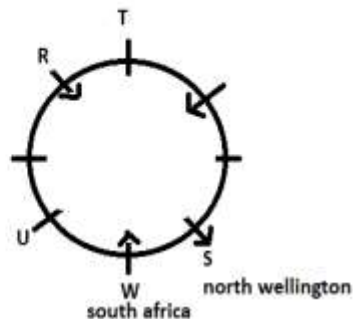
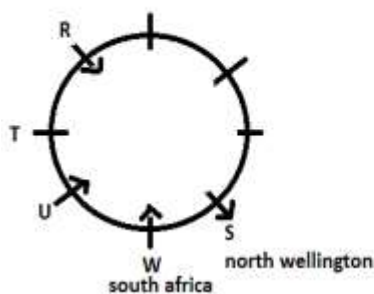


Solutions (9-13):

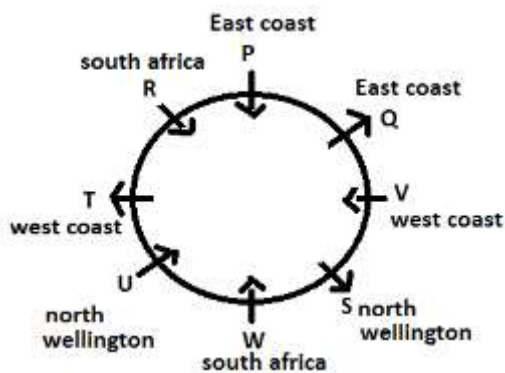
R sits third to the left of W, who belongs to South Africa and both are facing the same Solutions. R is an immediate neighbour of T. U sits second to the right of R. S is not facing the centre and belongs to North Wellington. The immediate neighbours of T are facing the centre. S and U are immediate neighbours of W.

CASE1

CASE2



T sits fourth to the left of V and both are facing opposite Solutions but they are from same place. So, case2 gets eliminated. R and Q are not facing the same Solutions. The one who is on the immediate left of U is not facing the centre. The persons who belong to East Coast sit adjacent to each other, but face opposite Solutions. The persons who belong to West Coast sit opposite to each other. One of the person who belongs to South Africa is an immediate neighbour of the persons who belongs to North Wellington. V sits on the immediate right of Q, who belongs to East Coast.



S9. Ans.(b)

S10. Ans.(a)

S11. Ans.(e)

S12. Ans.(b)

S13. Ans.(e)

Solutions (14-17):

In this new pattern coding decoding each letter, except letters having place value(alphabetical series) as multiple of 5 , is assigned a number from 5-10 So,A-5 B-6, C-7, D-8, F-9, G-10, H-5,I-6, K-7, L-8, M-9, N-10, P-5, Q-6, R-7, S-8, U-9, V-10, W-5, X-6, Z-7.

Each alphabet with place value as multiple of 5 is assigned a different symbol as-E,β,∞,Ω,μ.

So, the symbols are – E- £, J- β,O -μ ,T -∞, Y -Ω.

S14. Ans.(c)

Sol. third - ∞5678 letter- 8£∞∞£7

S15. Ans.(a)

Sol. exam - *65* one - £10μ level- 8£10£8

S16. Ans.(d)

Sol. create - 77£5∞£ system-8Ω8∞£9

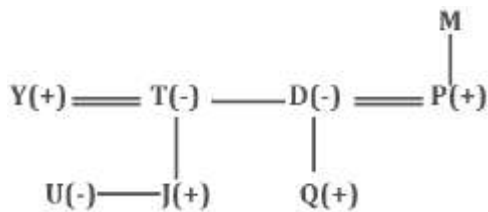
S17. Ans.(b)

Sol. journey- βμ9710£Ω about - *6μ9*

Solutions (18-20):

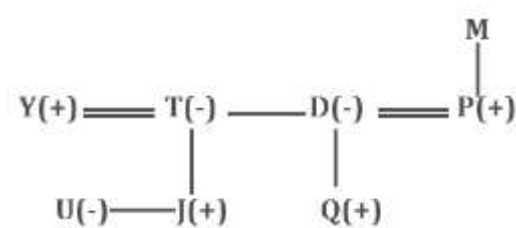
S18. Ans.(c)

Sol.



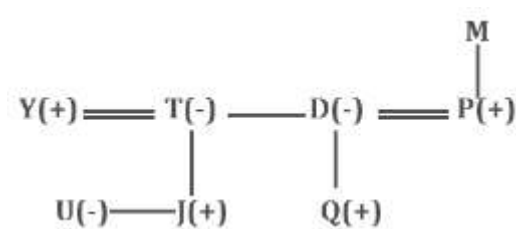
S19. Ans.(d)

Sol.



S20. Ans.(b)

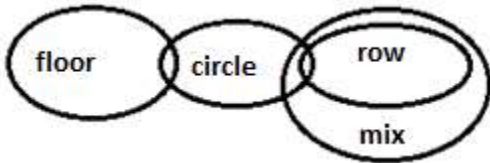
Sol.



FCI 2019
PHASE-II
ASSISTANT GRADE-III
(DEPOT)
10 Full Length Mocks
(Paper-I)
BILINGUAL

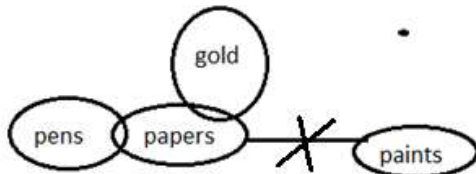
S21. Ans.(c)

Sol.



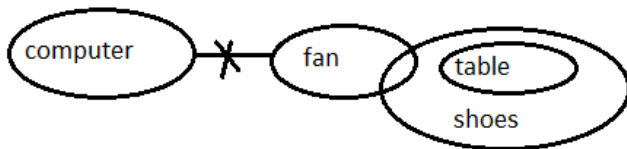
S22. Ans.(e)

Sol.



S23. Ans.(e)

Sol.



S24. Ans.(c)

S25. Ans.(b)

Solutions (26–30):

P, who watches breaking bad, is neither a surfer nor a general manager, whereas Q is a Boxer and does not watch Simpsons or prison break. One of them is a Gymnast and watches Ninja warrior. The person who watches Simpsons is a renowned dentist. V does not watch Orphan black. Q watches Tom and jerry. T and U watch prison break and ninja warrior respectively. S and R watch Simpsons and the ultimate fighter respectively.

Persons	Profession	Tv shows
P	Surfer/general manager	Breaking bad
Q	Boxer	Tom and jerry
R		Ultimate fighter
S	Dentist	Simpson
T		Prison break
U	Gymnast	Ninja warrior
V		Orphan black
Z		

The person who is a cyclist always watches orphan black. One who watches Impractical jokers is an accountant. The one who watches the ultimate fighter is neither a surfer nor an Inspector.

Persons	Profession	Tv shows
P	Inspector	Breaking bad
Q	Boxer	Tom and jerry
R	General manager	Ultimate fighter
S	Dentist	Simpson
T	Surfer	Prison break
U	Gymnast	Ninja warrior
V	Accountant	Impractical jokers
Z	Cyclist	Orphan black

S26. Ans.(b)

S27. Ans.(c)

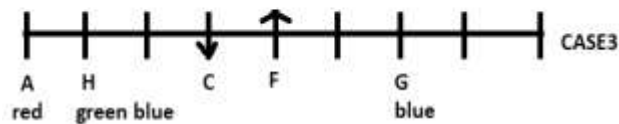
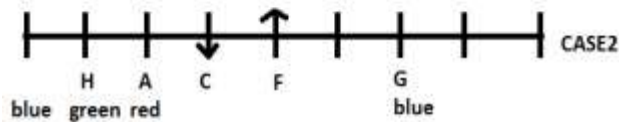
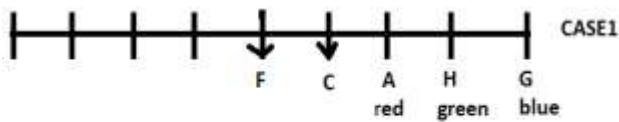
S28. Ans.(a)

S29. Ans.(b)

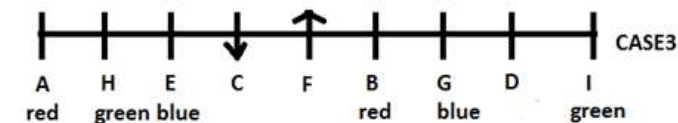
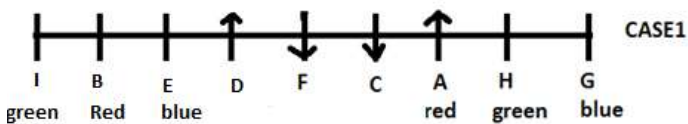
S30. Ans.(e)

Solutions (31-35):

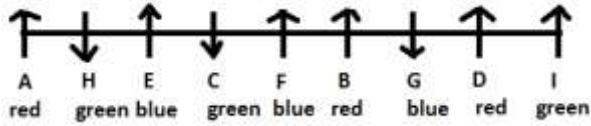
F sits exactly in middle of the row. H is 3rd to the left of F and likes green. One of the neighbor of H is A, who likes red. G is 3rd to the left of C and likes blue. B likes red. One person sit between H and C, who faces south.



The number of persons sitting between E and B is same as between B and I. I do not like blue or red. So, case2 gets eliminated. More than three persons sit between H and I. D is one of the persons and does not like same color as H. B likes red.



All the persons who likes blue face north except the one sitting 2nd to the right of F. D cannot like blue and both F and C face south. This will eliminate case 1. Now, H and I face opposite Solutions. All the persons who likes red face north. So the final arrangement will be-



S31. Ans.(c)

S32. Ans.(e)

S33. Ans.(c)

S34. Ans.(d)

S35. Ans.(d)

S36. Ans.(d)

Sol.

$$\Rightarrow 35\% \text{ of } 180 + 18^2 = (27)^{\frac{5}{3}} + ?^2$$

$$\Rightarrow 63 + 324 = 243 + ?^2$$

$$\Rightarrow 387 - 243 = ?^2$$

$$\Rightarrow ?^2 = 144$$

$$\Rightarrow ? = 12$$

S37. Ans.(a)

Sol.

$$\frac{323}{357} \times 441 - 15 \times 21 = ?$$

$$\Rightarrow \frac{19 \times 17}{17 \times 21} \times 441 - 15 \times 21 = ?$$

$$\Rightarrow ? = 19 \times 21 - 15 \times 21 = 4 \times 21 = 84$$

S38. Ans.(c)

Sol.

$$7\frac{4}{5} - 3\frac{2}{3} + 4\frac{8}{15} = \frac{234}{?}$$

$$8 + \frac{12 - 10 + 8}{15} = \frac{234}{?}$$

$$8 + \frac{2}{3} = \frac{234}{?}$$

$$\frac{26}{3} = \frac{234}{?}$$

$$\Rightarrow ? = 27$$

EPFO PRIME ASSISTANT 2019

65 TOTAL TESTS

- 15 Full Length Mocks
- 30 Section wise Practice Sets
- 20 Topic wise Practice Sets
- eBooks

BILINGUAL



S39. Ans.(e)**Sol.**

$$?\frac{2}{3} = 64\% \text{ of } 150 + 7 \times 3 - 9^2$$

$$?\frac{2}{3} = 96 + 21 - 81$$

$$?\frac{2}{3} = 36$$

$$\Rightarrow ? = 36^{\frac{3}{2}} = 216$$

S40. Ans.(c)**Sol.**

$$? \times 4 - 40^2 = 14^2 - 36 \times 44$$

$$? \times 4 = 196 + 40^2 - (40 - 4) \times (40 + 4)$$

$$? \times 4 = 196 + 40^2 - 40^2 + 4^2 = 212$$

$$? = \frac{212}{4} = 53$$

S41. Ans.(d)**Sol.** Scale II officers in bank 'C'

$$= \frac{24}{100} \times 9000 - 900$$

$$= 2160 - 900$$

$$= 1260$$

Scale II officers in bank 'A'

$$= \frac{15}{100} \times 9000 - 450 = 900$$

$$\text{Required \%} = \frac{1260 - 900}{900} \times 100$$

$$= \frac{360}{900} \times 100 = 40\%$$

**S42. Ans.(c)****Sol.** Scale I officer in bank 'B' and 'E' together = 600 + 750 = 1350

Scale II officer in bank 'B'

$$= \frac{18}{100} \times 9000 - 600$$

$$= 1620 - 600 = 1020$$

$$\text{Required ratio} = \frac{1350}{1020} = \frac{45}{34}$$

S43. Ans.(b)**Sol.** Female scale II officer in bank 'D'

$$= \frac{55}{100} \left[\frac{16}{100} \times 9000 - 800 \right]$$

$$= \frac{55}{100} [1440 - 800]$$

$$= \frac{55}{100} [640]$$

$$= 352$$

S44. Ans.(e)

Sol. Total number of scale I officer in all bank together = $450 + 600 + 900 + 800 + 750 = 3500$

Total no. of scale II officer in all bank together

$$= 9000 - 3500 = 5500$$

$$\text{Required difference} = 5500 - 3500 = 2000$$

S45. Ans.(a)

Sol. Scale II officer in bank 'D' = $\frac{16}{100} \times 9000 - 800$

$$= 1440 - 800 = 640$$

$$\text{Required \%} = \frac{640-600}{640} \times 100$$

$$= \frac{40}{640} \times 100$$

$$= \frac{25}{4} \% = 6.25\%$$

S46. Ans.(c)

Sol. If distance is same, then Speed is inversely proportion to time taken

⇒ Ratio between Speed in upstream to downstream is 1 : 2

Let Speed of boat in upstream and downstream be x and $2x$ respectively.

$$\text{Speed of stream} = \frac{2x-x}{2} = 4$$

$$\Rightarrow x = 8$$

Upstream speed = 8 km/hr

$$\text{Required time} = \frac{48}{8} = 6 \text{ hours}$$

S47. Ans.(d)

Sol. If B invested Rs. 'x' then A invested Rs. $1.25x$

Ratio of profit share A and B according to their investment

$$1.25x : x \rightarrow 5 : 4$$

If total profit = 100y

$$\text{A's profit} = 15y + 85y \times \frac{5}{9} = 9520$$

$$135y + 425y = 9520 \times 9$$

$$y = \frac{9520 \times 9}{560} = 153$$

$$\text{Total profit earned by them} = 100 \times 153 = 15,300$$

S48. Ans.(e)

Sol. Total surface area of full cylinder = $2\pi r^2 + 2\pi rh$

$$\text{Total surface area of half cylinder} = 2\pi r^2 + \frac{2\pi rh}{2} = 2\pi r^2 + \pi rh$$

ATQ,

$$2\pi r^2 + 2\pi rh - 2\pi r^2 - \pi rh = 308$$

$$\pi rh = 308$$

$$\Rightarrow h = \frac{308}{22} \times \frac{7}{7} = 14$$

$$\text{Volume of cylinder} = \pi r^2 h = \frac{22}{7} \times 7 \times 7 \times 14 = 2156 \text{cm}^3$$

S49. Ans.(b)

Sol. Overall rate for 2 years in scheme 'A' = $2 \times 20 = 40\%$

Overall rate for 2 years in scheme 'B' = $10 + 10 + \frac{10 \times 10}{100} = 21\%$

ATQ,

$$\frac{40X}{100} + \frac{21 \times 1.5X}{100} = 572$$

$$40X + 31.5X = 57200$$

$$\Rightarrow X = \frac{57200}{71.5} = 800$$

Interest earned from scheme 'B' = $1.5 \times 800 \times \frac{21}{100} = 252$

S50. Ans.(a)

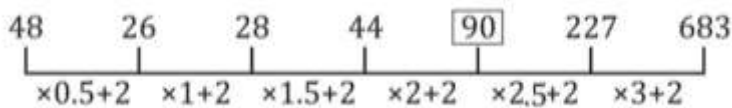
Sol. Length of rectangle = $\sqrt{784} = 28$

Breadth of rectangle = $\frac{88}{4} = 22$

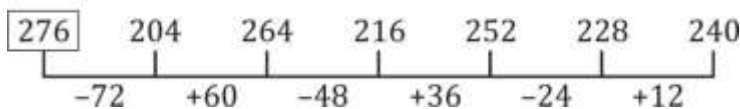
Area of rectangle = $28 \times 22 = 616 \text{ cm}^2$

S51. Ans.(e)

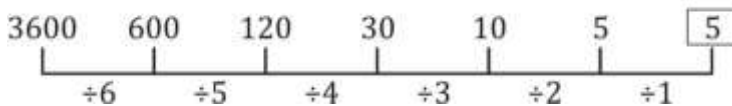
Sol.

**S52. Ans.(a)**

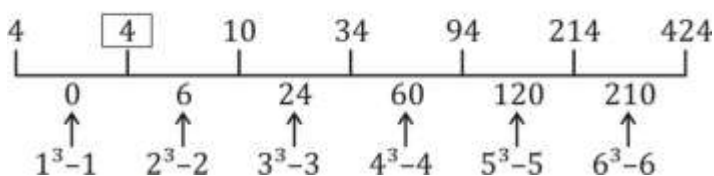
Sol.

**S53. Ans.(d)**

Sol.

**S54. Ans.(b)**

Sol.



BILINGUAL



IBPS RRB PRIME

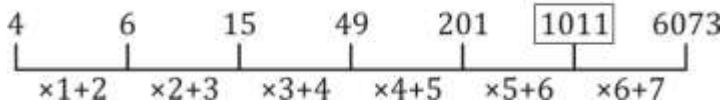
PO+CLERK

160+ TOTAL TESTS

60 Full Length Mocks
100+ Practice Tests
eBooks

S55. Ans.(e)

Sol.



Solutions (56-60)

Let no. of boys in class 'X' = $100x$

No. of girls in class 'Y' = $100x$

No. of boys in class 'Y' = $100x + 10$

No. of girls in class X = $\frac{100x}{2} = 50x$

Total no. of students in class 'X' = $100x + 50x = 150x$

Total no. of students in class 'Y' = $100x + 100x + 10 = 200x + 10$

ATQ,

$$\frac{200x+10}{150x} = \frac{140}{100}$$

$$\Rightarrow 200x + 10 = 210x$$

$$\Rightarrow x = 1$$

X		Y	
Boys	Girls	Boys	Girls
100	50	110	100

$$\text{Mentor in class X} = \frac{40}{100} \times 100 = 40$$

$$\text{Mentor in class Y} = \frac{60}{100} \times 100 = 60$$



S56. Ans.(a)

$$\text{Sol. Required\%} = \frac{110-50}{50} \times 100$$

$$= \frac{60}{50} \times 100 = 120\%$$

S57. Ans.(a)

$$\text{Sol. Required difference} = 60 - 40 = 20$$

S58. Ans.(e)

Sol. Total no. of students in Class 'Z'

$$= \frac{140}{100} \times 110 + \frac{120}{100} \times 50$$

$$= 154 + 60 = 214$$

S59. Ans.(e)

$$\text{Sol. Required difference} = 100 + 110 - 50 - 100$$

$$= 210 - 150 = 60$$

S60. Ans.(c)

Sol. Total no. of girls who failed = $\frac{80}{100} \times 50 + \frac{55}{100} \times 100$
 = 40 + 55 = 95

S61. Ans.(b)

Sol. $(X - 4) \times 5 = (X + 5) \times 4$

$$5X - 20 = 4X + 20$$

$$X = 40$$

$$(Y - 15) \times 6 = (Y + 15) \times 3$$

$$2Y - 30 = Y + 15$$

$$Y = 45$$

Quantity II > Quantity I

S62. Ans.(e)

Sol. Ratio of profit share of A and B

$$\frac{x \times 8}{5} : \frac{x \times 1.6 \times 9}{9}$$

Quantity I: A's profit = $25,200 \times \frac{5}{14} = 9000$

Quantity II: B's profit = $14,000 \times \frac{9}{14} = 9000$

Quantity I = Quantity II

S63. Ans.(e)

Sol. ATQ,

$$\frac{X \times 20 \times 2}{100} + X \left[1 + \frac{10}{100} \right]^2 - X = 4880$$

$$\frac{40X}{100} + \frac{21X}{100} = 4880$$

$$\frac{61X}{100} = 4880$$

$$\Rightarrow X = 8000$$

Quantity I: $8000 + 2000 = 10,000$

Quantity II: $8000 \times \frac{125}{100} = 10,000$

Quantity I = Quantity II

S64. Ans.(b)

Sol.

$$X = \frac{{}^5C_2}{{}^8C_2} = \frac{5 \times 4}{8 \times 7} = \frac{5}{14}$$

Quantity II > Quantity I



S65. Ans.(d)**Sol.**

$$2^{y+4} \cdot 3^{2y+4} \cdot 4^{2y+4} = 3^{2y+4} \cdot 2^{2y+16}$$

$$y + 4 + 4y + 8 = 4y + 16$$

$$y = 4$$

$$x^2 - 10 + 24 = 0$$

$$x^2 - 6x - 4x + 24 = 0$$

$$x(x-6) - 4(x-6) = 0$$

$$(x-4)(x-6) = 0$$

$$x = 4, 6$$

Quantity II \geq Quantity I**S66. Ans.(d)****Sol.** Total pens sold by Abhi in two months = 6500 + 7000 = 13500

Total pens sold by Satish and Veer in January = 4500 + 7500 = 12000

$$\text{Required \%} = \frac{13500-12000}{12000} \times 100 = \frac{1500}{12000} \times 100 = 12.5\%$$

S67. Ans.(e)**Sol.** Total pens sold by Mohit = 5500 + 6500 = 12000

$$\text{Total ball pens sold} = \frac{35}{100} \times 12000 = 4200$$

$$\text{Total gel pens sold} = 12000 - 4200 = 7800$$

$$\text{Total gels pens sold in February} = 7800 \times \frac{60}{100} = 4680$$

$$\text{Total ball pens sold in February} = 6500 - 4680 = 1820$$

S68. Ans.(a)

$$\text{Sol. Required amount} = 5 \times \frac{40}{100} \times 4500 + 10 \times \frac{25}{100} \times 6000$$

$$= 9,000 + 15,000 = 24,000$$

S69. Ans.(c)**Sol.** Total pens sold in January = 8000 + 4500 + 5500 + 7500 + 6500 = 32,000

Total pens sold in February = 6000 + 6000 + 6500 + 4500 + 7000 = 30,000

$$\text{Required Ratio} = \frac{32,000}{30,000} = \frac{16}{15}$$

S70. Ans.(a)

$$\text{Sol. Total pens sold by Anurag} = \frac{120}{100} \times 8000 + \frac{125}{100} \times 6000$$

$$= 9600 + 7500$$

$$= 17,100$$

**EPFO SSA 2019
PRIME****65+ TOTAL TESTS**

- ✓ 15 Full Length Mocks
- ✓ 30 Section Wise Sets
- ✓ 20 Topic Wise Sets
- ✓ eBook

BILINGUAL