

### Workshop Solutions 14 Aug 2018

**1. Option C**

I: Perimeter =  $2(80+40)=240$   
 No. of poles =  $240/24=10$   
 II: Area of circle =  $320 \Rightarrow 22/7 * r * r = 320$   
 $r=101.81 \Rightarrow r > 10$   
 Hence  $II > I$

A bag contains 3 red, 4 green and 2 blue balls. Two balls are drawn at random.

**2. Option C**

I:  $7C2/9C2=7/12$   
 II:  $A \rightarrow 10 \text{ days} \Rightarrow \text{fraction of work in 7 days} = 7/10$   
 Hence  $II > I$

**3. Option A**

I: Train : Platform =  $30 : 30 \Rightarrow 300m = 1 : 1 = 300m$   
 II: Train : Platform =  $25 : 30 = 5 : 6 \Rightarrow 5 = 200 \Rightarrow 6 = 240$

**4. Option E**

$12x^2 - 5x - 3 = 0 \Rightarrow 12x^2 + 4x - 9x - 3 = 0$   
 Gives  $x = -1/3, 3/4 \Rightarrow 3y^2 - 11y + 6 = 0$   
 $3y^2 - 9y - 2y + 6 = 0 \Rightarrow \text{Gives } y = 2/3, 3$

Put all values on number line and analyze the relationship  $-1/3 \dots 2/3 \dots 3/4 \dots 3$

**5. Option C**

Quantity I: 20% Increase =  $1/5$   
 $1/(1+5) * T = 5 \Rightarrow T = 30 \text{ Kg}$   
 Quantity II:  
 $100 \Rightarrow 110 \text{ } 125 \Rightarrow 125 - 110 = 15$   
 $15/125 * T = 6 \Rightarrow T = 50 \text{ Kg} \Rightarrow II > I$

**6 to 10**

Floor No	Flat 1	Flat 2
5	D	-/F
4	-	B
3	C	-/F
2	A	E
1	H	G

**6. Option C**

**7. Option C**

**8. Option A**

**9. Option D**

All others live on different flat numbers. C and D on same flat number

**10. Option B**

All others live on different flat numbers. C and D on same flat number

**11. (d)**

Conclusions :  
 I.  $H > L \rightarrow \text{True}$   
 II.  $K > T \rightarrow \text{False}$

**12. (d)**

Conclusions :  
 I.  $V < U \rightarrow \text{True}$   
 II.  $Z < F \rightarrow \text{False}$

**13. (b)**

Conclusions :  
 I.  $Y < M \rightarrow \text{False}$   
 II.  $O > S \rightarrow \text{False}$

**14. (b)**

Statement :  $O \text{ R } < P > Q$   
 Conclusions :  
 I.  $Q > R \rightarrow \text{False}$   
 II.  $Q < R \rightarrow \text{False}$

**15. (b)**

Statement :  $T = R > P \leq Q$   
 I.  $T < Q \rightarrow \text{False}$   
 II.  $Q \geq T \rightarrow \text{False}$

**(16-18) :**

- (i) All building are houses  $\rightarrow$  Universal Affirmative (A-type),
- (ii) Some oceans are seas  $\rightarrow$  Particular Affirmative (I-type).
- (iii) No house is an apartment  $\rightarrow$  Universal Negative (E-type).
- (iv) Some houses are not apartments  $\rightarrow$  Particular Negative (O-type).

Some seas are oceans.  
 $\swarrow$   
 All oceans are rivers.

$I + A \Rightarrow$  I-type of Conclusion  
 "Some seas are rivers." (A)  
 All oceans are rivers.

$\swarrow$   
 No river is a canal.  
 $A + E \Rightarrow$  E-type of Conclusion  
 "No ocean is a canal." (B)  
 Some seas are rivers.

$\swarrow$   
 No river is a canal.  
 $I + E \Rightarrow O_1$ -type of Conclusion  
 "Some canals are not seas." (C)

**16. (a) All oceans are rivers.**

Its converse "Some rivers are oceans", is true.  
 Thus, Conclusion I is true.

**17. (e) Conclusion B is Conclusion I. Conclusion A is Conclusion II.**

18. (d)  
No day is night.

All nights are noon.

$E + A \Rightarrow O_1$ , -type of Conclusion

"Some noon are not days." (A)

All nights are noon.

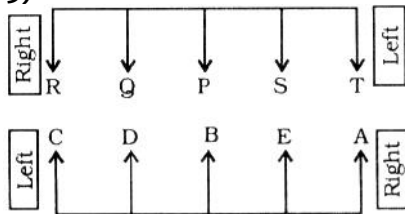
No noon is an evening.

$A + E \Rightarrow E$ -type of Conclusion

"No night is an evening." (B)

19. (e) ; 20. (d);

(21-25):



21. (c) Two persons - P and S - are seated between Q and T.

22. (b) Except S, all others are seated at the ends.

23. (e) P and B are sitting exactly in the middle of row

24. (e) D and E are Immediate neighbours of B.

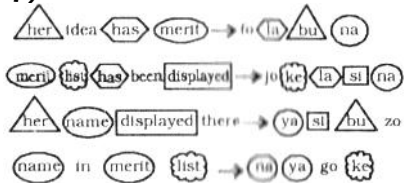
B sits exactly in the middle of the row. P faces B.

Either Q or S is an immediate neighbour of P' who faces B.

B.

25. (d) R and A are sitting opposite diagonally.

(26-27):



26. (e) 'ke' stands for 'list'

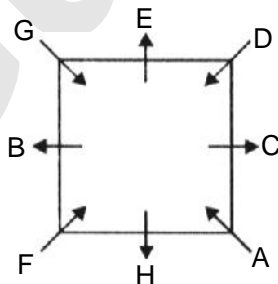
27. (b) name  $\Rightarrow$  ya; has  $\Rightarrow$  la;

been  $\Rightarrow$  jo; displayed  $\Rightarrow$  si

28. (c) 29. (a)

30. (c)

(31-35):



31. (c) Except F, all others sit in the middle of the sides.

32. (a) H sits third to the left of D.

33. (d) E is third to the right of A.

34. (d) F sits second to the right of G.

35. (b) H and B are immediate neighbours of F.

36 to 40

Explanation

Days	Shops	Number of Mobiles
Monday	D	13
Tuesday	E	6
Wednesday	G	12
Thursday	C	20
Friday	F	27
Saturday	B	15
Sunday	A	10

36. Answer - (d) 10

37. Answer - (c) C - Thursday - 20

38. Answer - (d) A

39. Answer - (b). Wednesday

40. Answer - (d) E

41. (d)

We require 2 equations to get the ages of both. But from both statements we get a single statement

$$3S - 2R = 0.$$

42. (d)

Let length of train = x m.

Let speed of train = y m/s

From statement I, let speed of another train = z m/s

$$\text{So } (x+300)/24 = y+z$$

$$\text{From statement II, } (x+650)/35 = y$$

So from both statements also we have 3 variables and 2 equations.

43. (e)

From both:

$$\text{Distance that bus travelled} = 60 \times 2 = 120 \text{ km}$$

So from II, car can travel 120 km in 3 hrs. So speed of car =  $120/3 = 40 \text{ km/hr}$

$$\text{Now from I, speed of truck} = 40/2 = 20 \text{ km/hr}$$

44. (d)

$$\text{From I: } 2I = P \cdot 6 \cdot 6/100$$

$$\text{From II: } I = P \cdot 6 \cdot 1/100$$

$$\text{And also } I = 3P/4 \cdot 8 \cdot 1/100$$

So cannot be determined from any statement or both.

45. (d)

From both statements we get same equation. So 1 equation in 2 variables cannot be solved.

46.  $3 \times 2 = 6$

$6 \times 3 = 18$

$18 \times 2 = 36$

$36 \times 3 = 108$

$108 \times 2 = 216$

47.  $77 + 13 = 90 + 15 = 107$

$90 + 17 = 107$

$107 + 19 = 126$

$126 + 23 = 149$

$149 + 29 = 178$

48.  $6 + 18 = 24$

49.

$$\begin{aligned}24 - 13 &= 11 \\11 + 18 &= 29 \\29 - 13 &= 16 \\16 + 18 &= 34 \\3 \times 1 - 1 &= 2 \\2 \times 2 + 2 &= 6 \\6 \times 4 - 3 &= 21\end{aligned}$$

50.

$$\begin{aligned}21 \times 8 + 4 &= 172 \\20 \times 5 - 1 &= 9 \\9 \times 1 - 2 &= 7 \\7 \times 2 - 3 &= 11 \\11 \times 4 - 4 &= 40 \\40 \times 8 - 5 &= 315\end{aligned}$$

Gupta Classes