Section-wise Grand Test – Reasoning Ability – SWGTR-180103
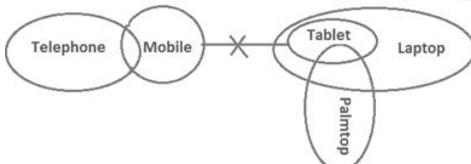## HINTS & SOLUTIONS

ANSWER KEY

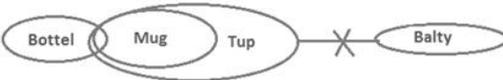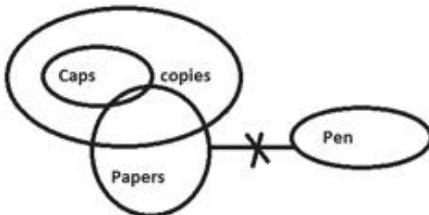|				
1. (4)	11. (2)	21. (1)	31. (3)	41. (3)
2. (5)	12. (3)	22. (4)	32. (2)	42. (4)
3. (2)	13. (3)	23. (3)	33. (3)	43. (4)
4. (5)	14. (2)	24. (4)	34. (4)	44. (3)
5. (4)	15. (2)	25. (4)	35. (2)	45. (5)
6. (2)	16. (3)	26. (2)	36. (1)	46. (2)
7. (4)	17. (1)	27. (5)	37. (5)	47. (1)
8. (4)	18. (5)	28. (1)	38. (3)	48. (4)
9. (3)	19. (3)	29. (4)	39. (5)	49. (2)
10. (2)	20. (4)	30. (1)	40. (5)	50. (1)

HINTS & SOLUTIONS
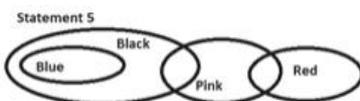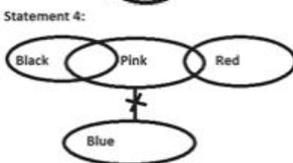
1. (4)

2. (5)

3. (2)

4. (5)

5. (4)

6. (2) In this question we have to choose an option which can be inferred from the given statement.
Option (i) can be inferred from the given statement as air pollution is the agenda of the meeting.

Option (ii) cannot be inferred from the given statement as nothing regarding this has been mentioned in the statement.
Option (iii) cannot be inferred as factual data cannot be inferred unless it is given in the statement.
Option (iv) cannot be inferred from the given statement as nothing regarding this has been mentioned in the statement.

7. (4) In this question, we have to choose an option which supports the facts given in the statement.
Option (i) supports the given statement as it points that there is indeed a slowdown in economy.
Option (ii) is not a correct choice as past predictions cannot form the basis for assessing the present situation.
Option (iii) also supports the statement as it mentions that Indian economy is in bad shape.

8. (4)
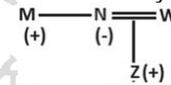
9. (3)
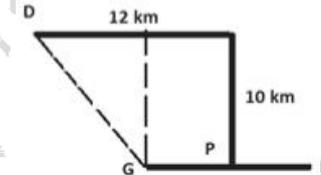
10. (2)
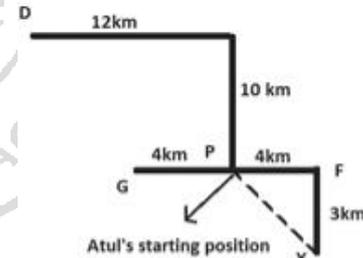
11-15. Step1. From the data given in the question,
Bike A started from point E and after moving 2km straight it turned left and moved 3km further after which it turned 90° clockwise and moved 4km. It then turned 90° anticlockwise and moved 8km. After this it turned 90° clockwise to move 4km towards east to reach a point H where it ran out of fuel.
As bike A was travelling towards east direction when it was moving towards H it means that it started its journey in east direction.
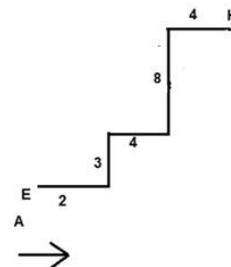
Step 2.
From the data given in the question,

1

Bike B started moving from point F and after moving 3km it turned to its right and moved 2km to reach a point where it turned 45° towards its left and moved 4√2 km. It then turned 45° to its right to move 3km in west direction to reach point O where its driver stopped to pick up S. After picking up S from point O, bike B turned left and moved in a clockwise motion along the circular track on which S was standing, after travelling 11km it stopped at a point Y where it was facing towards west direction and it is also given that S moved the same amount of distance in bike B as it moved with Q on the circular track and Q moved one fourth of the total track length to reach O where he dropped S. It means one fourth of the total track length $= \pi r / 4 = 11$. Therefore radius of the track = 7km.

it means Bike B started its journey towards south direction. Also it moved 4km south and 4km west at it travelled 4√2 km because both the angles are 45° and by applying Pythagoras theorem $\left(P^2 + B^2 = H^2\right). 2x^2 = \left(4\sqrt{2}\right)^2$.
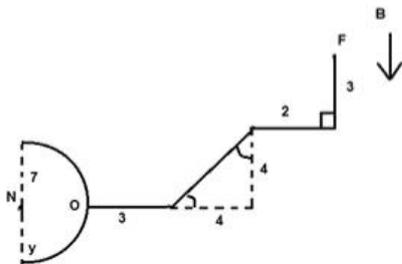

Step3.
From the data given in the question,
Q who is not travelling in bike D started from point M and moved 4km straight before taking a left turn towards point Z which is four km away from that turn. It means Q is travelling in bike C with S as he dropped him at point O. After reaching Z, Q stopped for a while to meet P which means P is not travelling with Q, neither is he travelling in bike B or D as it is not possible geometrically. While on his journey U stopped at point Z to meet S which implies that U is travelling with P on bike A. The shortest distance between point H and Z is 4√2 km which means bike A moved 4km north from point Z before taking a right turn towards east direction to reach H. From Z, Q kept on moving ahead and after moving 4km, he turned towards his right and moved 4km to reach a point which lies on the circumference of a circular track with point N as its center. He then started moving along that track in clockwise motion and after covering one fourth of the length of the track he reached point O where he dropped S and turned back to reach point where he entered the circular track travelling the same path he came from. As we know that tangent to point O on the circular track is towards South direction (See step2) we can deduce that C started its journey in south direction. Bike C started its journey in the same direction as the bike which is driven by T, it means T also started his journey in south direction.

Bike D started it journey from a point which is 25km to the south of point H. It means the distance between points Y and W = 25-22(4+4+7+7) = 3km. And the distance between point N and W = 7+3=10km. After moving 8km it turned towards its right and moved a certain distance to reach point N. It means D travelled 6kms to reach point N (By Pythagoras theorem). It also implies that T was travelling

in bike B alone as that bike picked up S at some point in its journey and it is given that no bike can accommodate more than two persons.
We get our final solutions as,
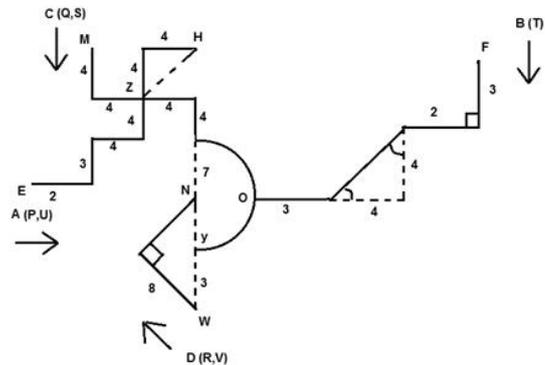
11. (2)   12. (3)
13. (3)   14. (2)   15. (2)
16-20.   i. It is given that A and B are a married couple, A being the male member. D is the only son of the one who likes Dangal, who is the brother of A. E is the sister of D. B is the daughter-in-law of F. H is the mother of G, who is sister of A so from the given definite conditions, we draw blood relation diagram-

ii. It is given that C's brother that means A likes Wonder women and sits third to the right of the one who likes Mission impossible. A faces outside the centre. Both face the same direction. There is only one person A sits between the one who likes Salt movie and D's grandfather, who likes transformer movie. F is third to the left of B's sister-in-law(G), who likes Sultan movie so there can be four possibilities-

iii. Case 1- when F sits to the left to A and G faces outside the centre so G is a immediate neighbour of D. E's grandmother that means H sits opposite to D, who likes Salt movie and exactly one of them is facing the centre, so H likes Mission impossible. The one who likes Lucy is second to the left of C, who is facing the centre so C sits immediate left to H. B likes neither Lucy nor Raees which can't be possible so this case will be eliminated.
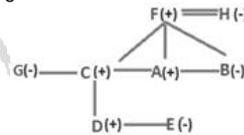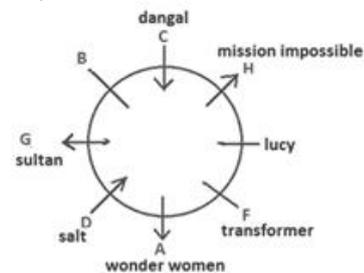
iv. Case 2-When F sits to the left to A and G faces inside the centre. After using the condition which are used in Case-1, this case will be eliminated as C's position can't be fixed.
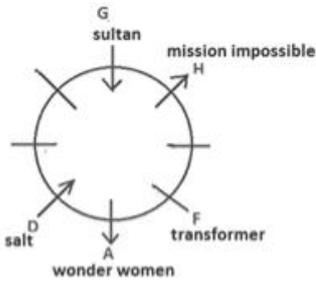
v. Case 3- when F sits to the right to A and G faces outside the centre. After using the conditions which are used in Case-1, this case will be eliminated as C's position can't be fixed.
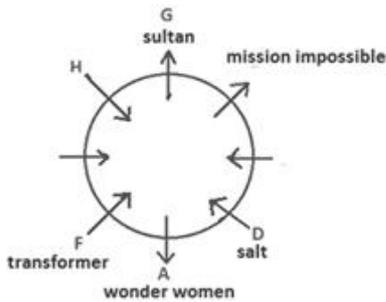
vi. Case 4- when F sits to the right to A and G faces inside to the centre. After using the conditions which are used in Case-1 and the neighbours of the one who likes Lucy movie are facing the same direction, H faces opposite to the centre and D faces to the centre. The final arrangement is-

16. (3) 17. (1)
18. (5) 19. (3) 20. (4)
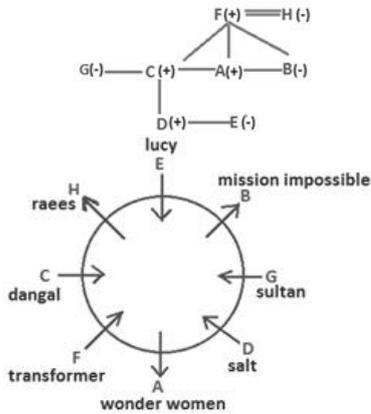
21-25. This coding decoding question is based on the latest pattern. In this question, following logic are used to decode the code,

(i) If the total number of letters in the word is even then the first letter of the code will be @. On the other hand, if the total number of letters in the word is odd, then the first letter of the code will be #.

(ii) If the total number of letters in the word is even then takes the letter which comes first in the alphabetical series between the middle two alphabets and is used as the second letter of the code. On the other hand, if the total number of letters in the words is odd then the middle letter of the word is used as the second letter of the code.

(iii) The numerical value of the code represents the ranking of the greater of the first and the last letter of the word.

(S>U)
∧
A B S U R D --------> @ S 4 (D>A, Rank of D=4)

D I G I T A L --------> # I 12 (L>D, Rank of L=12)

21. (1) 22. (4)
23. (3) 24. (4) 25. (4)
26. (2) I. D > B ≤ A(FALSE)
         II. E ≥ D > B = C(TRUE)
27. (5) I. L > U > Z(TRUE)
         II. R > U ≥ K(TRUE)
28. (1) I. J = P ≥ R > I(TRUE)
         II. Y < J = P ≥ R(FALSE)
29. (4) I. T < K > M = N(FALSE)
         II. V ≥ K > M > S(FALSE)
30. (1) I. F ≤ X ≤ E(TRUE)
         II. R < X ≥ F(FALSE)

31-35.
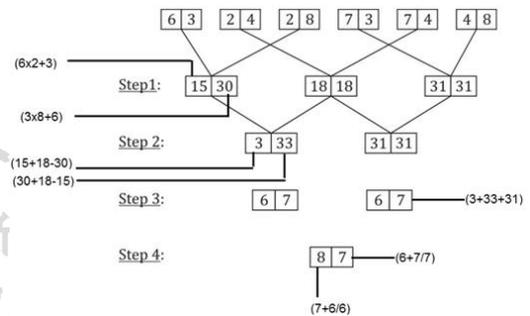
For step-I, Both the numbers of 1st block is written as, Ist digit of block-1 of the Input(6) multiplied by 1st digit of block-3(2) with addition of 2nd digit of block-1(3) of the Input. Similarly, 2nd digit of block-1 is multiplied with 2nd digit of block-3 with addition of 1st digit of block-1. This process is same for Block-2 and Block-3 in step-1.

For step-II, both the numbers of 1st block is written as, 2nd digit of block-1 of the step-1 (30) is subtracted from the sum of the Ist digit of block-1 of the step-1(15) and 1st digit of block-2 of the step-1(18). Similarly, 1st digit of block-1 is subtracted from the sum of the 2nd digit of block-1 of the step-1 and 2nd digit of block-2 of the step-1. This process is same for Block-2 in step-2.

For step-III, 1st block of step-3 is written as , the sum of 2nd digit of block-1 of the step-2(33), Ist digit of block-1 of the step-2(3) and 1st digit of block-2 of the step-2(31). Similarly, block-2 is written as the sum of the 1st digit of block-1 of the step-2, 2nd digit of block-1 and 2nd digit of block-2 of the step-2.

For Step- IV, 1st digit of block-1 of step-4 is written as the sum of 2nd digit of block-1 of step-3(7) and the resultant of (1st digit of block-1 of step-3(6) is divided by 1st digit of block-2 of step-3(6)). Similarly, 2nd digit of block-1 of step-4 is written as the sum of 1st digit of block-1 of step-3 and the resultant of (2nd digit of block- 1 of step-3 divided by 2nd digit of block-2 of step-3).

2 3	4 1	5 3	1 6	1 9	6 4

Step1:   13 11   5 13   12 25

Step 2:   7 11   4 33

Step 3:   2 2   5 1

Step 4:   2.4 4

31. (3)   32. (2)
33. (3)   34. (4)   35. (2)

36-40. From the given conditions, first we try to complete their training time order from 1st to 7th.

The number of players who complete their training before V is same as the numbers of players, who complete their training after V. Hence V completes his training in 4th position. P completes his training immediately before Q. U completes his training immediately after Q but not after R. Hence P, Q, U completes his training in either 1st, 2nd, 3rd position respectively or in 5th, 6th, 7th position respectively. If U completes his training in 7th position, then R must be complete his training before U, which cannot be possible. So P, Q, U completes his training in 1st, 2nd, 3rd position respectively.

Also we try to complete circular arrangement from the given conditions; R sits third to the left of S but completes his training after S. Hence S completes his training before R. T sits to the immediate left of the player, who completes his training before two players (means 5th position player). No two adjacent player finish their training immediately one after the other. Hence S completes his training in 5th position. And T completes his training in 7th position and R completes his training in 6th position.

Q sits to the immediate left of V. Hence V sits either immediate left of R or second left of R. If V sits immediate left of R, then Either U or P sits immediate right of S, which is not possible. So V sits second to the left of R. And U sits immediate right of R.

The final arrangement are-

36. (1)   37. (5)
38. (3)   39. (5)   40. (5)

41-45. i. It is given that the one who goes to Alcott brand store stays on the fourth floor. W bought Top and does not stay on the ground floor. V stays on the second floor and goes to Lifestyle store .The one who goes to Color plus store stays on the third floor. Y goes to Adidas store and stays on an even-numbered floor and bought Handbag so there can be two possibilities-

ii. Case 1-When Y stays on the 6th floor. R stays on an even-numbered floor below the floor on which Y stays so R stays on 4th floor. The one who goes to Pantaloons store stays on the floor just above the floor on which the one who goes to Adidas store stays. There are two floors between the floors on which the people who go to Zara store and Adidas store stay. The one who bought Jeans goes to Zara store.

iii. There are three people live between the floors on which the one who bought shirt and the one who bought Jeans stay. The person who bought shirt stays below the person who bought Jeans. The one who bought Handbag stays immediate below to the one who bought shoes. There are three floors between the floors on which T and X stay. T goes to Allen solly store. There is one floor between the floors on which W and X stay. W does not go to Color plus store so T can be placed on 1st, 5th and 8th floor but all the cases will be eliminated as the position of W can't be fixed.

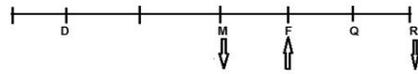| Floor	Persons	Items	Brand Store
9		Jeans	Zara
8			
7		Shoes	Pantaloons
6	Y	Handbag	Adidas
5		Shirt	
4	R		Alcott
3			Color plus
2	V		Lifestyle
1			

iv- Case 2- When Y stays on the 8th floor. After using the conditions which are used in Case-1,The one who stays on 9th floor goes to Pantaloons store, the one who stays on 5th floor goes to Zara store. The one who stays on ground floor bought shirt.

v. When T stays on 7th or 6th floor, the condition of W can't be satisfied so T stays on 1st floor so X stays 5th floor and W stays 7th floor. U stays on a floor immediately above the Z's floor so U stays on 4th floor so R stays on 6th floor and S stays on top floor.

vi. The one who bought Perfume stays immediate above to T. There is one floor between the floors on which the one who bought trousers and the one who bought Perfume stay. The one who bought Saree does not stay on sixth floor. The one who bought Jewellery stays on an even numbered floor so R bought jewellery. The final arrangement is-

Floor	Persons	Items	Brand Store
9	S	shoes	Pantaloons
8	Y	Handbag	Adidas
7	W	Top	Park Avenue
6	R	Jewellery	Monte Carlo
5	X	Jeans	Zara
4	U	trousers	Alcott
3	Z	Saree	Color plus
2	V	Perfume	Lifestyle
1	T	shirt	Allen solly

41. (3)   42. (4)
43. (4)   44. (3)   45. (5)
46. (2) Only statement II is sufficient to answer the question as from II statement it is clear that H lives on 4th floor. Statement I is not required to answer the question.

Floors	Persons
8	K
7	
6	I
5	N
4	H
3	
2	
1	

47. (1)   From Only statement I there will be two possible cases---

Case 1-

Case 2-

From both possible cases it is clear that Q sits to the immediate right of F. So only Statement I alone is sufficient to answer the question but Statement II alone is not sufficient to answer the question.

48. (4)   Statement I and II together are not sufficient to answer the question as by combining both I and II together we get the code of Benefit can be either mlp or hlt.

49. (2)   Inference is something which can be drawn from the facts stated in the statement.
For I-This statement can be inferred from the given statement as it is clearly mentioned in the given statement that both Modi-Abe will set the future direction of the special strategic and global partnership between the two countries.
For II- This statement can also be inferred from the given statement because it is given that with an eye on widening economic ties and making India a hub of Japanese investments, Prime Minister Shinzo Abe will launch mega initiatives.
For III- This statement cannot be inferred from the given statement as it is not mentioned in the given statement.

50. (1)   In the above question we have to find which statement concluded from the given statement.
For I- This statement can be deduced from the given statement because it is stated in the given statement that the tree of peace in Kashmir has not dried up means there is a hope and the situation in Kashmir Valley has improved significantly over the past year.
For II- This statement cannot be deduced from the given statement because it is not mentioned in the given statement.
For III- This statement also cannot be deduced from the given statement because it is not mentioned in the given statement.