Alpha-Numeric, Number, Ranking & Time Sequence, Logical, Alphabet

REASONING WORKBOOK

QUESTIONS

1.	How many such digits are there in the given sequence, each of which is not immediately preceded by a letter but immediately followed by a symbol?						
	, ,	0 T > 1	2 P # 3 Q ÷ 6 φ 4 η 5 Δ	Δ			
	(a) None	(b) One	(c) Two	(d) Three			
2.	In the following number two digits which immed	r sequence, the sum of two liately follow the same digi 7 5 0 4 6 5 0 5	b digits which immediately t '0'. How many such 0's a 6 0 9 0 0 8 2 0 0 0 0 0 7	precede the digit '0' exceeds the sum of are there? 5 4 0 0 8			
	(a) 5	(b) 6	(c) 7	(d) 8			
3.	How many such digits a by a letter?	are there in the given arrar	ngement, each of which is	preceded by a numeral but not followed			
		A 5 # 2 6 B ₹ I	D π FH1G7%34*				
	(a) None	(b) One	(c) Two	(d) Three			
4.	If the numbers from 6 to come at the seventh pla	o 79 which are exactly divi ace from the bottom?	sible by 3 are arranged in	the descending order, then which would			
	(a) 18	(b) 21	(c) 24	(d) 27			
5.	Based on the positions	of elements in the given a	rrangement, if $8 \pi \phi$: F \$	G, then B C W:?			
	What is the missing terr	n '?' equal to?					
		$8 \pi \phi BCW > 6MT$	P 2 Q < L # H * % R A 4	! =₹ E G \$ F			
	(a) E₹ =	(b) = ₹ E	(c) ₹ = E	(d) ₹ E =			
6.	242142432462	14423562442123	3 4				
	Which figures have equ	al frequencies in the abov	e given series?				
	(a) 5 and 6	(b) 3 and 4	(c) 2 and 5	(d) 2 and 4			
7.	If the digits in the number 21647839 are arranged in ascending order, then which of the following will be the difference of the third digit from the right end and the fourth digit to the left of this digit in the new arrangement?						
	(a) 3	(b) 4	(c) 5	(d) 6			
Direct	ion (8-9): The next two	questions are based on th 248 635 432 78	e given five numbers. 31 605				
8.	If 1 is added to and sub formed numbers are are (a) 1	otracted from the middle d ranged in the descending o (b) 4	igit and the last digit resp order, then what will be th (c) 7	ectively of each number and then newly e middle digit of the middle number? (d) 6			
9.	If one's and hundred's o	ligits are interchanged in e	ach of the five numbers, t	then which number will be the largest?			
	(a) 605	(b) 781	(c) 635	(d) 248			
10.	Which of the following	is exactly in the middle of P 4 A 5 E ₹ 6 @ \$ M 1	5 and U in the given array $7 \pm U = \frac{1}{2} > 8 D N W < 1$	ngement?			
	(a) @	(b) \$	(c) M	(d) T			
11.	Sunita ranked 13th fror there in the list if only o	n the top and Geeta ranke me candidate occured betw	d 12th from the bottom in veen them?	a merit list. How many candidates were			
	(a) 25	(b) 22	(c) 26	(d) Any one of (b) and (c)			
12.	In a rank chart of 60 st ahead of Shweta. How	udents, boys are twice to t many girls are there after	hat of girls. Shweta ranks her in rank chart?	17th from the top and there are 9 boys			
	(a) 12	(b) 8	(c) 7	(d) 5			

13.	Pradeepand Munesh participated in a race competition. Pradeep took more time than Munesh to touch the finishing line. If Pradeep got fifth rank in the competition, which of the following statements is surely correct?								
	(a) Munesh was two ranks upper than Pradeep								
	(b) There were at least one participant in rankJpetween Pradeep and Munesh								
	(c) There were at most three participants in rank between Pradeep and Munesh								
	(d) Data inadequate								
14.	In a row of 15 students	arranged in descending o	rder of their heights, Jai s	stands eleventh. Seven new students join					
	the group, each shorter t	than Jai. What will be the	Jai's new position If all the	e students are now arranged in ascending					
	order of their heights?								
	(a) 6th	(b) 8th	(c) 10th	(d) 12th					
15.	Kuldeep is 9 ranks ahea	d of Gauri who ranks nin	eteenth in the class in the	annual examinations. What is Kuldeep's					
	rank from the bottom if	there are 38 students in th	ne class?						
	(a) 30th	(b) 9th	(c) 29th	(d) 22nd					
16.	There is a queue agains	t a railway ticket counter.	The passenger A is 9th fr	om the front and another passenger B is					
	6th from the back. If a	third passenger C is exac	ctly in the middle of A an	nd B is 20th from the front. How many					
	passengers are there in a	all in the queue?							
	(a) 49	(b) 42	(c) 40	(d) 36					
17.	Among five friends A, B	B, C, D and E, D is lighter	than only B. A is heavie	r than E and C is lighter than B. Who is					
	heaviest amongst them?								
	(a) B or D	(b) B	(c) D	(d) Data inadequate					
18.	Five friends A, B, C, D a	and E when stand in asce	nding order of ages, A is t	the eldest. C is younger to D but older to					
	B. E is younger to both A	A and D. Among them th	e possible order of their a	ges in ascending order is?					
	(a) E, B, C, D, A	(b) B, C, E, D, A	(c) B, E, C, D, A	(d) All of these					
19.	If the day before yesterd	lay was Sunday, when wi	ll Thursday be?						
	(a) Yesterday	(b) Tomorrow	(c) Day after tomorrow	(d) Today					
20.	Anna leaves her house a	t 5 minutes to 10 in the mo	orning and reaches market	t in 25 minutes. She finishes her shopping					
	in 55 minutes and leave	s for her farm house. She	takes 40 mins to reach the	here. After watering there which takes 40					
	minutes, she leaves for r	(1-) 11 EE	(-) 11 15	(d) 10, 20 - m					
91	(a) 12: 55 p.m.	(0) 11 : 33 a.m.	(C) 11 : 10a.III.	(d) 10: 20 a.m.					
21.	manager who was 25 m	inutes late. What was the	es belore 11: 50 hours, 11	ound myself half an nour earlier than the					
	(a) $11 \cdot 10$ hours	(b) $11 \cdot 20$ hours	(c)11.15 hours	(d) $11 \cdot 40$ hours					
22	If 1st May is Wednesday	then 1st July will be on	(0)11.10 110013	(d) 11;. 10 hours					
22.	(a) Sunday	(b) Monday	(c) Tuesdau	(d) Wednesday					
23.	Nalini and her company	v go to the movies on eve	erv Friday. They went to t	the movie 20 days ago. What day of the					
	week is today?	3							
	(a) Wednesday	(b) Thursday	(c) Tuesday	(d) Saturday					
24.	Apeksha eats something	after every one and a ha	alf hours. Her friend Neela	am had invited her for a dinner party on					
	the same day. Apeksha a	answered Neelam for a qu	estion on phone call at 20): 20 hours that she had eaten 40 minutes					
	ago and the next time sł	ne will eat at the party. W	hat is the scheduled time	of the party?					
	(a) 20 : 50 hrs	(b) 21 : 00 hrs	(c) 21 :05 hrs	(d) 21 : 10 hrs					
25 .	In February, the first Sur	nday falls on 6th. If the co	rresponding year is non-le	eap year, what will be the last day of that					
	month?								
	(a) Sunday	(b) Monday	(c) Tuesday	(d) Data inadequate					
26 .	If all the numbers in the	given below arrangemen	t are dropped, which of t	he following will be the tenth element to					
	the left of the eleventh e	lement from the right end	?	(SOF NCO 2016)					
		M % R 4 A T # J @ 7 I	05©IFN1 E\$36W	U 2 H 8 * K 9 B Q					
	(a) %	(b) F	(c) Q	(d) R					

27. In the given question, two rows of numbers are given. The resultant number in each row is to be worked out separately based on the following rules and the question below the rows of numbers is to be answered. The operations on numbers progress from left to right. (SOF NCO 2016)

Rules:

(i) If a two-digit odd number is followed by a prime number, the first number is to be multiplied by the prime number.(ii) If an even number is followed by another even number, the first number is to be divided by the second number.(iii) If an odd number is followed by a composite odd number, the first number is to be added to the second number.(iv) If an even number which is a multiple of 5 is followed by another number which is also a multiple of 5, the second number is to be subtracted from the first number.

(v) If a number which is a perfect square is followed by another number which is also a perfect square, the square roots of the two numbers is to be multiplied.

(d) 22

60 4 11

m 15 18

If m is the resultant of the first row, what is the resultant of the second row?

- (a) 180 (b) 10 (c) 165
- In a row of girls, Purnima is eighth from the right and Bhavana is twelfth from the left. When Purnima and Bhavana interchange their positions, Bhavana becomes twenty-first from the left. Which of the following will be Purnima's new position from the right? (SOF NCO 2016)

 (a) 8th
 (b) 17th
 (c) 21st
 (d) Data inadequate
- 29. Two rows of numbers are given. The resultant number in each row is to be worked out separately based on the following rules and the question below the rows of numbers is to be answered. The operations on numbers progress from left to right. (SOF NSO 2016)

Rules:

(i) If an odd number is followed by another odd number which is a perfect square, then they are to be added.

(ii) If an even number is followed by an odd number or an odd number is followed by an even number, they are to be multiplied.

(iii) If an even number is followed by another even number, the first number is to be divided by the second number.(iv) If an even number which is a multiple of 5 is followed by an odd number which is also a multiple of 5, then the second number is to be subtracted from the first number.

18	7	6
140	85	49

What is the sum of the resultants of the two rows?

(a) 104(b) 55(c) 121(d) 125Three persons P, Q and R are standing in a queue. There are five persons between P and Q and eight other persons

between Q and R. If there are only three persons ahead of Rand 21 persons behind P, what could be the minimum number of persons in the queue? (SOF NSO 2016) (a) 40 (b) 43 (c) 47 (d) 482

31. Two rows of numbers are given. The resultant number in each row is to be worked out separately based on the following rules and the question below the rows is to be answered. The operations on numbers progress from left to right.
(SOF IMO 2016)

Rules:

30.

(i) If an even number is followed by another even number they are to be added.

(ii) If an even number is followed by a prime number, they are to be multiplied.

(iii) If an odd number is followed by an even number, the even number is to be subtracted from the odd number.

(iv) If an odd number is followed by another odd number, the first number is to be added to the square of the second number.

(v) If an even number is followed by a composite odd number, the even number is to be divided by the odd number.

65 11 12

15 3 11

What is the sum of the resultants of the two rows?

(a) 366 (b) 66 (c) 264

The positions of how many digits in the number will remain same after the digits within the number 2138574 are
arranged in ascending order?(SOF IMO 2016)(a) Nil(b) Four(c) Three(d) Two

(d) 462

33. How many such consonants are there in the given arrangement, each of which is immediately preceded by a number but not immediately followed by a number? (SOF IMO 2016)

F 4 ©J 2 E % M P 5 W 9 @ I Q R 6 U H 3 Z 7 * A T B 8 V # G \$ Y D (b) One (c) Two (d) Three

(a) None (b) One (c) Two (d) Three
 34. Two rows of numbers are given. The resultant of each row is to be worked out separately based on the following rules and the question below the rows of numbers is to be answered. The operations on numbers in each row progress from left to right. (SOF IMO 2016)

Rules:

32.

(i) If an odd number is followed by another odd number, they are to be multiplied.

(ii) If an even number is followed by another even number, the first number is to be divided by the second even number.

(iii) If an even number is followed by the perfect square of an odd number, the first number is to be subtracted from the second number.

(iv) If an odd number is followed by an even number, the two are to be added.

(v) If an even number is followed by an odd number which is not a perfect square, the square of the odd number is to be added to the even number.

96	16	81
11	15	18

If x and y are the resultant of first and second row respectively, then what is the value of y - 2x?

(a) 108	(b) 33	(c) 105	(d) 36
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35. Two rows of numbers are given. The resultant number in each row is to be worked out separately based on the following rules and the question below the rows of numbers is to be answered. The operations on numbers progress from left to right.
(SOF NCO 2017)

Rules:

(i) If an odd number is followed by another composite odd number, then they are to be added.

(ii) If an even number is followed by an odd number, then they are to be added.

(iii) If an even number is followed by a number which is the perfect square, then the even number is to be subtracted from the perfect square.

(iv) If an odd number is followed by a prime odd number, then the first number is to be divided by the second number.

(v) If an odd number is followed by an even number, then the second one is to be subtracted from the first number.

24 15 3

d 615

If d is the resultant of the first row, then what will be the resultant of the second row?

(a) 37 (b) 8 (c) 22 (d) 29

36. How many consonants are there in the given sequence which are immediately followed by a digit and immediately preceded by a symbol? (SOF NCO 2017)

M N @ 1 T 2 # R U 3 © P Z K * 7 B A 6 £ G V 9 W 0 Y Z

(a) None (b) One (c) Two (d) Three

37. In the given question, two rows of numbers are given. The resultant number in each row is to be worked out separately based on the following rules and the question below the rows of numbers is to be answered. The operation on numbers progress from left to right. (SOF NSO 2017)

Rules:

(i) If a two digit odd number is followed by a prime number, the first number is to be multiplied by the prime number. (ii) If an even number is followed by another even number, the first number is to be divided by the second number. (iii) If an odd number is followed by a composite odd number, the first number is to be added to the second number. (iv) If an even number which is multiple of 5 is followed by another number which is also a multiple of 5, the second number is to be subtracted from the first number.

(v) If a number which is a perfect square is followed by another number which is also a perfect square, the resultant number is the product of the square root of the two numbers.

64	25	25
88	8	15

Find the sum of resultant of the both rows. (a) 41 (b) 51

(b) J

(c) 37 (d) 47

(d) L

38. If all the symbols are dropped from the given arrangement, then which of the following will be the twelfth element to the left of E? (SOF IMO 2017)

(a) U

39. Two rows of numbers are given. The resultant number in each row is to be worked out separately based on the following rules and the question below the rows of numbers is to be answered. The operations on numbers progress from left to right. (SOF IMO 2017)

Rules:

(i) If an odd number is followed by another composite odd number, they are to be multiplied.

(ii) If an even number is followed by an odd number, they are to be added.

- (iii) If an even number is followed by a number which is a perfect square, the even number is to be subtracted from the perfect square.
- (iv) If an odd number is followed by a prime odd number, the first number is to be divided by the second number.
- (v) If an odd number is followed by an even number, the second one is to be subtracted from the first one.

83 32 17

33 m 8

If m is the resultant of the first row, then what will be the resultant of the second row?

(a) 3 (b) 5 (c) 8 (d) 10

40. If first four letters of the English alphabet are written in reverse order; again next 5 letters are written in reverse order; again next 6 letters are written in reverse order; again next 7 letters are written in reverse order and finally, the remaining letters are also written in reverse order, then what will be the 9th letter to the right of the 7th letter from left end?

(SOF IMO 2017)

(a) M (b) N (c) O (d) V

ANSWER - KEY									
1.	D	2.	В	3.	В	4.	С	5.	А
6.	D	7.	С	8.	А	9.	D	10.	В
11.	D	12.	А	13.	С	14.	D	15.	С
16.	D	17.	D	18.	D	19.	С	20.	С
21.	С	22.	В	23.	В	24.	D	25.	В
26.	А	27.	В	28.	В	29.	D	30.	А
31.	D	32.	С	33.	В	34.	В	35.	С
36.	А	37.	А	38.	С	39.	А	40.	D

EXPLANATIONS 1. (d): 0 T > 2 P # 3 Q + 6 φ 4 η 5 Δ 2. (b): 7504650560900820000754008 (b): The required set is 34 * only. 3. (c):78, 75,.., 12, 9, 6 4. From the bottom, 1st number $= 2 \times 3 = 6$ 2nd number $= 3 \times 3 = 9$ \therefore 7th number = $8 \times 3 = 24$. (a) : B, C and W are the 4th, 5th and 6^{th} elements from the left end of the given arrangement, so the 4th, 5th and 6^{th} 5. elements from the right end will make the required term, that is, 'E \gtrless ='. 6. (d): 2 and 4 occur 9 times each. (c): 1 2 3 4 6 7 8 9 7. 8. (a): Final rearrangement: 790, 644, 614 441, 257. (d): The five numbers will become: 9. 842 536 234 187 506 Clearly, 842 is the largest that is formed from 248. 10. (b) : There are 9 elements between 5 and U. So the middle element will be 5th, that is \$. 11. (d): Geeta ranked either 11th or 15th from the top. (a) : There are 7 girls ahead of Shweta as she is 17th from top. So 20 - 8 = 12 girls are after Shweta in the rank 12. chart. 13. (c): Munesh could get any rank better than that of Pradeep, there were either one or two or three participants in rank between them. (d) : Jai is already 5th in the row of 15 students arranged in ascending order. So the required position will be (7 + 1)14. 5)th i.e., 12th. (c): Kuldeep's rank from the top = 19-9 = 10th. 15. So his rank from the bottom = 38 - 10 + 1 = 29th. 16. (d): $-\frac{8}{A} \xrightarrow{10} C \xrightarrow{10} B$ Number of passengers =8+1+10+1+10+1+5=36.17. (d) Not Available 18. (d) Not Available 19. (c) sit is Tuesday today. 20. (c): 9: 55 a.m. + 25 minutes + 55 minutes =11:15a.m. 21. (c): The manager reach the place at 11: 30 hrs - 20 minutes + 30 minutes =11:40hrs \therefore Scheduled time = 11:40 hrs - 25 mins = 11:15 hrs. 22. (b): May + June = 31 + 30 = 61 days

 $61 = 7 \times 8 + 5$

So 1st July will falls on Monday.

- **23.** (b): After $7 \times 3 = 21$ days, that is, tomorrow will be Friday.
- **24.** (d): Scheduled time = 20: 20 hrs 40 minutes + 90 minutes = 21:10 hours.
- **25.** (b): The Sundays fall on 6th, 13th, 20th and 27th. So 28th will fall on Monday.
- **26.** (a) Not Available
- **27.** (b) Not Available
- **28.** (b) Not Available
- **29.** (d) Not Available
- **30.** (a) Not Available
- **31.** (d) Not Available
- **32.** (c) Not Available
- **33.** (b) Not Available
- **34.** (b) Not Available
- **35.** (c) Not Available
- **36.** (a) Not Available
- **37.** (a) Not Available
- **38.** (c) Not Available
- **39.** (a) Not Available
- **40.** (d) Not Available