Alpha-Numeric, Number, Ranking and Time Sequence Test

## QUESTIONS

**Direction (15) Study the following arrangement carefully and answer the questions given below:**
**R D A K 5 B I 2 M J E N 9 7 U Z V 1 W 3 H 4 F Y 8 P 6 Y G**

**1.** How many such numbers are there in the above arrangement/ each of which is immediately preceded by a consonant and immediately followed by a vowel?
(a) None (b) One
(c) Two (d) Three

**2.** Which of the following is the eighth to the left of the seventeenth element from the left end?
(a) M (b) J
(c) 8 (d) 5

**3.** Three of the following four are alike in a certain way, based on their positions in the above arrangement and so form a group. Which is the one that does not belong to that group?
(a) E 9 J (b) Z 1 U
(c) H W 4 (d) D K R

**4.** Which of the following is the sixth to the right of the nineteenth element from the right end[7]
(a) V (b) Z
(c) 5 (d) 1

**5.** How many such consonants are there in the above arrangement, each of which is immediately preceded by a number and immediately followed by another consonant?
(a) None (b) One
(c) Two (d) Three

**Direction (610): These questions are based on the following arrangement:**

$$J\ Y\ 2 = S\ £\ \xi\ E\ G\ M\ ¤\ 7\ \$\ H\ P\ 9\ K\ L\ \beta\ @\ W\ Q\ 1\ 3\ \#\ C\ D\ ©$$

**6.** How many such symbols are there in the above arrangement each of which is either immediately followed by a number or immediately preceded by a letter, but not both?
(a) Nil (b) One
(c) Three (d) Four

**7.** How many such letters are there in the above arrangement each of which is either immediately followed by a number or immediately preceded by a symbol, but not both?
(a) Four (b) Five
(c) Six (d) Eight

**8.** How many such numbers are there each of which is either immediately followed by a symbol or immediately preceded by a letter, but not both?
(a) One (b) Three
(c) Four (d) Five

**9.** Three of the following four are alike in a certain way based on the position of the elements in the above arrangement and hence form a group. Which one does not belong to the group?
(a) 2 YS (b) G E ¤
(c) PHK (d) K I @

**10.** 2 Y S is to E G £ in the same way as P H K is to_____.
(a) W Q $\beta$ (b) @ W L
(c) @ $\beta$ Q (d) @ W K

**Direction (11-12); Answer the following questions referring to the symbol/letter/number sequence given below:**

**9 4 V ? 3 K Q @ 8 M U * 2 D J $ 7 Z B £ V D P I G X 5 A L O R**

**11.** How many symbols in the sequence are either immediately followed by a letter belonging to the first half of the English alphabet or by a number?

(a) Two (b) Three

(c) Four (d) Five

**12.** What is the total number of the numbers immediately followed by a letter and the symbols immediately preceded by a letter, together in the given sequence?

(a) 6 (b) 7

(c) 9 (d) Above 9

**Direction (13-16): Study the following arrangement carefully and answer the questions given below:**

**P 1 % T R A 5 # D M 7 K * E G 2 8 $ H 3 1 4 V U 6 F ⊕ 9 Z**

**13.** How many symbols are there in the above arrangement, each of which is immediately preceded by a consonant and also immediately followed by a consonant?

(a) None (b) One

(c) Two (d) Four

**14.** How many such vowels are there in the above arrangement, each of which is immediately preceded by a digit and immediately followed by a consonant?

(a) None (b) One

(c) Two (d) Five

**15.** Which of the following is exactly in the middle of the fifth element from the left end and the seventh element from the right end?

(a) G (b) 2

(c) * (d) E

**16.** If the position of the last twelve elements in the above arrangement are reversed, then which of the following will be the tenth element to the right of the eleventh from the left end?

(a) H (b) I

(c) F (d) 9

**Direction (17-18): Answer the questions referring to the symbol/letter/number sequence given below:**

**2 P J @ 8 $ L B 1 V # Q 6 $ G W 9 K C D 3 © • £ 5 F R 7 A Y 4**

**17.** How many such symbols are there in the sequence which are either immediately preceded or immediately followed by the letter which is from the first half of the English alphabet?

(a) 6 (b) 7

(c) 8 (d) 3

**18.** P @ L is to Y75 in the same way as $ 1 # is to_____.

(a) R £ © (b) F £ 3

(c) 5 £ © (d) F • 3

**Direction (19-21): Study the following digit-letter-symbol sequence carefully and answer the questions given below:**

**19.** Which of the following is sixth to the right of eighteenth element from the left end?

(a) % (b) C

(c) 1 (D) E

**20.** If the first fifteen elements in the above sequence are written in reverse order then which of the following will be twenty-first from the right end?

(a) 2 (b) $

(c) = (d) D

**21.** What should come in place of question mark in the following on the basis of above sequence?

*** R J : F 6 @ , L J $ : Q @ E , D $ M : ?**

(a) # M C (b) P E W

(c) P ? + (d) PER

**22.** How many 5's are there in the following sequence such that the sum of the two immediately following digits is greater than the sum of the two immediately preceding digits?

**3 7 6 5 8 3 2 4 5 5 4 8 7 9 1 5 3 4 8 7 5 9 8 7 6 4**

(a) One (b) Two

(c) Three (d) Four

**23.** How many such 9's are there in the following number series, which are immediately preceded by 3 and followed by 6?

**3 9 6 9 3 9 3 9 3 9 6 3 6 3 9 5 6 9 5 6 9 3 9 6 3 9**

(a) Nil (b) 2

(c) 3 (d) 4

**24.** If the following numbers are written in descending order, then what will be the middle digit of the middle term?

**723, 789, 585, 659, 713, 785, 689**

(a) 1 (b) 7

(c) 8 (d) 3

**25.** The following question is based on the five three-digit numbers given below.

**394, 632, 783, 576, 895**

If the positions of the first and the second digit within each number are interchanged, then which of the following will be the second highest number?

(a) 632 (b) 783

(c) 876 (d) 394

**26.** How many 3's are there in the following series/ which are not preceded by an odd number but followed by 4?

**1 5 3 2 3 4 6 5 3 4 7 8 3 4 9 2 3 4 5 6 3 4 3 5 3 4**

(a) None (b) Two

(c) Four (d) One

**27.** Bhavna's rank is $27^{th}$ in the class from top. Preksha is 7 ranks ahead of Bhavna in the class. Preksha's rank from the last is $36^{th}$. How many students are there in the class?

(a) 55 (b) 63

(c) 43 (d) 56

**28.** Amit is ranked $11^{th}$ from the top and Ravi is ranked $14^{th}$ from the bottom in a class of 35 students. How many students are there between Amit and Ravi?

(a) 10 (b) 9

(c)6 (d)7

**29.** In a class among the passed students/ Neeta is $22^{nd}$ from the top. Kalpana who is 5 ranks below Neeta who is $34^{th}$ from the bottom. All the students from the class appeared for an examination. If the ratio of the students who passed in the examination to those who failed is 5 : 1 for the class, then how many students were there in the class?

(a) 66 (b) 60

(c) 75 (d) 90

**30.** Samrat remembers that his brother's birthday is after 15th but before 18th of May, while his sister remembers that her brother's birthday is after 16th but before 19th of May. On which date in May is Samrat's brother's birthday?
(a) 16th (b) 18th
(c) 19th (d) 17th

**31.** Parth left home for the bus stop 15 minutes earlier than the usual time. It takes 10 minutes to reach the stop. He reached the stop at 8:40 a.m. What time does he usually leave home for the bus stop?
(a) 8:30 a.m. (b) 8:45 p.m.
(c) 8:55 a.m. (d) 8:45 a.m.

**32.** On reaching the place of meeting 15 minutes before 08:30 hours, Pawan found himself half an hour earlier than the man who was 40 minutes late. What was the scheduled time of the meeting?
(a) 8:00 hrs (b) 8:05 hrs
(c) 8:15 hrs (d) 8:45 hrs

**33.** If in a particular year, 16th June was friday, then the first friday in July of that year will fall on which date?
(a) 8th July (b) 5th July
(c) 7th July (d) 6th July

**34.** There are twenty people working in an office. The first group of five works between 8:00 a.m. and 2:00 p.m. The second group of ten works between 10:00 a.m. and 4:00 p.m. And the third group of five works between 12 noon and 6:00 p.m. There are three computers in the office which all the employees frequently use. During which of the following hours the computers are likely to be used most?
(a) 10:00 a.m. - 12 noon
(b) 1:00 p.m - 3:00 p.m.
(c) 12 noon - 2:00 p.m.
(d) 2:00 p.m. - 4:00 p.m.

**35.** How many days will there be from 26th January 2004 to 15th May 2004 (both days included)?
(a) 110 (b) 111
(c) 112 (d) 113

**36.** If the second day of a month is a Saturday, then which of the following would be the last day of the next month which has 31 days?
(a) Sunday (b) Monday
(c) Friday (d) Data inadequate

**37.** Vikas remembers that his father's birthday is between 13th and 16th of June/ whereas his sister remembers that their father's birthday is between 14th and 18th of June. On which day is their father's birthday?
(a) 14th June (b) 15th June
(c) 17th June (d) 18th June

**38.** If the letters of the given below series are written in reverse order, then which letter will &e third to the left of eighteenth letter from the right end? **(SOF NCO 2016)**
**I X Y A N O F M P B L Q R D S T W C K G U V E J Z**
(a) O (b) U
(c) V (d) S

**39.** in the following 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 of numbers progress from left to right.
Rules:
(i) If a two-digit odd number is followed by a two-digit odd number they are to be added
(ii) If a two-digit even number is followed by a two-digit odd number which Is a perfect square, the even number is to be subtracted from the odd number,
(iii) If a three-digit number is followed by a two-digit number the first number is to be divided by the second number.
(iv) If a prime number is followed by an even number the two are to be added,
(v) If an even number is followed by another even number the two are to be multiplied.

16 8 32

132 11 $X^2$

If X is the resultant of the first row, then what is the resultant of the second row? **(SOF NCO 2016)**

(a) 192 (b) 128

(c) 132 (d) 144

**40.** 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.

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, then 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.

10 15 5

14 11 *p*

If p is the resultant of the first row, what will be the resultant of the second row? **(SOF NSO 2016)**

(a) 6 (b) 81

(c) 5 (d) 24

**41.** How many such 5's are there in the given below arrangement each of which is immediately preceded as well as followed by an even digit?

**9 9 2 3 2 5 9 5 8 5 8 5 4 3 1 8 1 7 4 7 6 5 2 1 2 6 1 3 2 4 6 2 4**

(a) None (b) One

(c) Two (d) Three

**42.** How many such 1's are there in the given arrangement, each of which is immediately preceded by a perfect square?

**6 4 1 2 5 2 8 5 2 6 4 1 3 9 1 8 1 2 5 8 6 1 3 5 1 4 9 4 7 3 2 1 7 2 5 9**

(a) None (b) One

(c) Two (d) Three

**43.** This question is based on the six numbers given below :

**2 7 1 3 6 1 9 1 2 7 1 4 4 5 9 1 8 7**

If the first and the second digits of each number are interchanged and if the third digit of each number is placed between these two digits, then which number will be the third number from the top, if the new numbers are arranged in the descending order? **(SOF IMO 2016)**

(a) 187 (b) 271

(c) 459 (d) 361

**44.** Which of the following is the twelfth to the left of the twenty-first from the left end in the given arrangement?

**(SOF IMO 2016)**

**B 4 @ D A © 7 9 F % 2 R 5 H 6 E * N $ 1 U W 3 P T 8 6 V # Y I**

(a) R (b) 1

(c) 5 (d) F

**45.** If first 6 letters of the English alphabet are written in reverse order then next 6 letters are written in reverse order and so on but the last two letters Y and Z are interchanged, then which will be the 4th letter to the left of the 13th letter from the right? **(SOF NCO 2017)**

(a) J (b) H

(c) I (d) O

**46.** How many symbols are there in the given series which are preceded by a consonant and followed by an odd number? **(SOF NCO 2017)**

**R T @ 4 5 L S # 2 U V 3 £ 0 1 N P * 3 $ V E J 5 Q R © 6**

(a) One (b) Two

(c) Four (d) Three

**47.** How many 2's are there in the given arrangement/each of which Is not Immediately preceded by a perfect square and followed by an odd number? **(SOF NSO 2017)**

**6 4 2 5 2 8 2 9 2 1 3 8 6 2 1 2 5 8 6 1 2 4 2 5**

(a) 4 (b) 3

(c) 2 (d) 5

**48.** Consider the following letter/number/symbol arrangement and answer the question that follows: **(SOF IMO 2017)**

**@ C F S 9 W A * X 6 9 Q J % H 8 U N 1 2 T # 4 5 7 K**

What should come in the place of the question mark (?) in the following series based on the above arrangement?

*** 6 Q 9 J H % 8 N U 1 T ?**

(a) N (b) 4

(c) 2 (d) None of these

**49.** 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.

**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 a multiple of 5, the second number is to be subtracted from the first number

(v) If a number which is perfect square is followed by another number which is a perfect square, the resultant number is the product of the square roots of the two numbers. **(SOF IMO 2017)**

21 9 15

81 25 5

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

(a) 240 (b) 270

(c) 280 (d) None of these

**50.** Rita stands third in a row of twenty students/ arranged in ascending order of height. Five new students join the group/ all taller than Rita. What will be Rita's position if the students are now arranged in descending order of their heights? **(SOF IMO 2017)**

(a) 22nd (b) 23rd

(c)18th (d) None of these

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

## EXPLANATIONS

**2.** (a) : 17th element from the left end is V and 8th element to the left of V is M.

**3.** (c): Except (c), in all the groups, the 1st element moves 2 steps ahead to give the 2nd element, the 2nd element moves 3 steps backwards to give the 3rd element.

**4.** (a): 19th element from the right end is E and 6th element to the right of E is V.

**5.** (d): According to given statement, we have

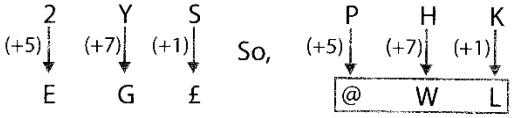
$R\ D\ A\ K\ 5\ B\ I\ 2\ \boxed{M}\ J\ E\ N\ 9\ 7\ U\ Z\ V\ 1\ W\ 3\ H\ 4\ \boxed{F}\ Y\ 8\ P\ 6\ \boxed{T}\ G$

**6.** (c) : $J\ Y\ 2 = S\ \boxed{£}\ \xi\ E\ G\ M\ \mathfrak{A}\ 7\ \$\ H\ P\ 9\ K\ L\ \boxed{\beta}\ @\ W\ Q\ 1\ 3\ \#\ C\ D\ \boxed{©}$

**7.** (d): $J\ \boxed{Y}\ 2 = \boxed{S}\ £\ \xi\ \boxed{E}\ G\ M\ \Phi\ 7\ \$\ \boxed{H}\ \boxed{P}\ 9\ K\ L\ \beta\ @\ \boxed{W}\ \boxed{Q}\ 1\ 3\ \#\ \boxed{C}\ D\ ©$

**8.** (c): $J\ Y\ 2 = S\ £\ \xi\ E\ G\ M\ \Phi\ \boxed{7}\ \$\ H\ P\ \boxed{9}\ K\ L\ \beta\ ©\ W\ Q\ \boxed{1}\ \boxed{3}\ \#\ C\ D\ ©$

**10.** **(b):**




**11.** (c): $9\ 4\ V\ \boxed{?}\ 3\ K\ Q\ \boxed{@}\ 8\ M\ U\ \boxed{*}\ 2\ D\ J\ \boxed{\$}\ 7\ Z\ B\ £\ V\ D\ P\ I\ G\ X\ 5\ A\ L\ O\ R$

**12.** (d): $9\ \boxed{4}\ V\ \boxed{?}\ \boxed{3}\ K\ Q\ \boxed{@}\ \boxed{8}\ M\ U\ \boxed{*}\ 2\ D\ J\ \boxed{\$}\ \boxed{7}\ Z\ B\ \boxed{\xi}\ V\ D\ P\ I\ G\ X\ \boxed{5}\ A\ L\ O\ R$

**15.** (d): $P\ 1\ \%\ T\ \boxed{R}\ A\ 5\ \#\ D\ M\ 7\ K\ *\ \boxed{E}\ G\ 2\ 8\ \$\ H\ 3\ 1\ 4\ \boxed{V}\ U\ 6\ F\ \oplus\ 9\ Z$

5th element from the left end is R and 7th element from the right end is V. So, E is exactly in the middle of R and V.

**16.** (c) : The new arrangement is:

P 1 % T R A 5 # D M 7 K * E G 2 8 Z 9 ⊕ F 6 U V 4 1 3 H $

11th element from the left end is 7 and 10th element to the right of 7 is F.

**17.** (d); $2\ P\ J\ \boxed{@}\ 8\ \boxed{\$}\ L\ B\ 1\ V\ \#\ Q\ 6\ \boxed{\delta}\ G\ W\ 9\ K\ C\ D\ 3\ ©\ \bullet\ £\ 5\ F\ R\ 7\ A\ Y\ 4$

**18.** (d): In the pair, the corresponding elements of both the terms occupy the same position from the left end and right end of the given sequence.

**19.** (d) The 18th element from the left end is 1. So, the 6th element to the right of 1 is E.

**20.** (a) The new sequence is:

B % C 8 # M = D $ 2 L J T * R < K 1 & A W ? P E + Q @ 7 F 6

So, the 21st element from the right end of this arrangement is 2.

**21.** (b) : In each pairs, the corresponding elements of both the terms occupy the same position from the left and right end of the given sequence.

**22.** (c) : $3\ 7\ 6\ 5\ 8\ 3\ 2\ 4\ \boxed{5}\ \boxed{5}\ 4\ 8\ 7\ 9\ 1\ 5\ 3\ 4\ 8\ 7\ \boxed{5}\ 9\ 8\ 7\ 6\ 4$

**23.** (c) ; $3\boxed{9}\ 6\ 9\ 3\ 9\ 3\ \boxed{9}\ 6\ 3\ 6\ 3\ 9\ 5\ 6\ 9\ 5\ 6\ 9\ 3\ \boxed{9}\ 6\ 3\ 9.$

**24.** (a) : Numbers in descending order are

789, 785, 723, 713, 689, 659, 585

Here middle term is 713 and 1 is middle digit in 713.

**25.** (d):

| | | | | |
|---|---|---|---|---|
| 394 | 632 | 783 | 576 | 895 |
| 934 | 362 | 873 | 756 | 985 |

**26.** (c) : $1\ 5\ 3\ 2\ \boxed{3}\ 4\ 6\ 5\ 3\ 4\ 7\ 8\ \boxed{3}\ 4\ 9\ 2\ \boxed{3}\ \ 4\ 5\ 6\ \boxed{3}\ 4\ 3\ 5\ 3\ 4$

**27.** (a) : Rank of Bhavna = $27^{th}$ (from top)
Rank of Preksha = $20^{th}$ (from top)
Rank of Preksha = $36^{th}$ (from bottom)
Total students = 20 + 36 - 1 = 55.

**28.** (a): Students between Amit and Ravi = 35 - (10 + Amit + 13 + Ravi) = 10,

**29.** (a): We have. Rank of Neeta = $22^{nd}$ (from the top)
Rank of Kalpna = $27^{th}$ (from the top)
And also rank of Neeta = $34^{th}$ (from the bottom)
Clearly, total passed student = 22 + 34 - 1 = 55
Now, Pass : Fail =5:1
or, 55 : Fail =5:1
or. Fail students = $\frac{55}{5} \times 1 = 11$
So, total students in the class = 55 + 11 =66.

**30.** (d): According to Samrat, his brother's birthday is on one of the days among $16^{th}$ and $17^{th}$ of May. And according to his sister, her brother's birthday is on one of the days among $17^{th}$ and $18^{th}$ of May.
So, their brother's birthday is on the day common to both the above statements which is $17^{th}$ of May.

**31.** (d): Parth's usual time to leave home = 8:40 a.m. - 10 mins + 15 mins == 8:45 a.m.

**32.** (b) : Pawan reached the place at 8:15 hrs. Pawan is half an hour earlier to the man who was 40 minutes late. Hence, the other man reached at 8:15 hours + 30 mins = 8:45 hrs. Clearly, the scheduled time of the meeting was 40 minutes before 8:45 hrs, i.e., 8:05 hrs.

**33.** (c) : $16^{th}$ June falls on Friday.
So, $23^{rd}$ June, $30^{th}$ June and $7^{th}$ July also falls on Friday.

**34.** (c) : We have three time periods
(i) 8:00 a.m. — 2:00 p.m.
$\Rightarrow$ 8, 9, 10, 11, (12), (1), (2)
(ii) 10:00 a.m. — 4:00 p.m.
$\Rightarrow$ 10, 11, (12), (1), (2), 3, 4
(iii) 12 noon—6:00 p.m.
$\Rightarrow$ (12), (1), (2), 3, 4, 5, 6
From (i), (ii) and (iii), we see only three time digits 12, 1 and 2 are common to all of them. It means the common time period is 12 noon to 2 p.m.

**35.** (b): Here, 2004 is a leap year. So, February has 29 days.
Now, number of days =6+29+31 + 30 + 15= 111.

**36.** (d): The number of days in the current month is not mentioned.

**37.** (b): According to Vikas, his father's birthday is on one of the days among $14^{th}$ and $15^{th}$ of June.
And according to his sister, her father's birthday is on one of the days among $15^{th}$, $16^{th}$ and $17^{th}$ of June. So, their father's birthday is on the day common to both the above statements, which is $15^{th}$ June.