

- There will be a certain relationship between the first two numbers. We have to find that and accordingly solve the question.
81: 729 :: 49 : ?
(a) 313 (b) 379
(c) 343 (d) 330
- 45 girls are sitting in a row. If Radha is sitting in the 21st position from the left end, then what is her position from the right end?
(a) 20 (b) 23
(c) 25 (d) 31
- If 15 August is the third Monday, then what date will be three days after the third Tuesday of the same month?
(a) 27 (b) 22
(c) 23 (d) 20
- Find out the missing letter from the given responses.
B H N
D J P
G M ?
(a) U (b) V
(c) X (d) S
- Complete the number series.
1, 9, 25, 49, 81, ?
(a) 87 (b) 100
(c) 121 (d) 125
- A, P, R, X, S and Z are sitting in a row. S and Z are in the centre. A and P are at the ends. R is sitting to the left of A. Who is to the right of P?
(a) A (b) X
(c) S (d) Z
- Find out the wrong number in the series.
121, 144, 169, 195, 225, 256
(a) 121 (b) 195
(c) 265 (d) 225
- ELFA, GLHA, ILJA, _____, MLNA
(a) OLPA (b) KLMA
(c) LLMA (d) KLLA
- Which pair does NOT belong to others?
(a) 7-49 (b) 5-125
(c) 11-121 (d) 9-81
- Pointing out to a photograph, a man tells his friend, "She is the daughter of the only son of my father's wife." How is the girl in the photograph related to the man?
(a) Niece (b) Mother
(c) Daughter (d) Sister

Directions (Q.11-14) : Read the subsequent records carefully and answer the following questions:

- Parul, Jaman, Rohit. Seena, Tina, and Utkarsh are six individuals in a house, and each of them is engaged in a distinct profession – Doctor, Lawyer, Teacher, Engineer, Nurse, and Manager.
 - Each of them stays at a residence on a distinct day of the week from Monday to Saturday.
 - The Lawyer stays at the residence on Thursday,
 - Rohit stays at the residence on Tuesday.
 - Parul, the Doctor no longer stays at residence both on Saturday or on Wednesday.
 - Seena is neither the Doctor nor the Teacher and stays at the residence on Friday.
 - Jaman is the Engineer and Tina is the Manager
- Who remains at home on Monday?
(a) Parul (b) Seena
(c) Rohit (d) Tina
 - Which of the following combinations is not correct?
(a) Rohit — Teacher
(b) Jaman — Engineer
(c) Seena — Nurse
(d) Tina — Lawyer
 - Who among them remains at home on the following day of the Lawyer?
(a) Seena (b) Jaman
(c) Rohit (d) Tina
 - Which of the following combinations is correct?
(a) Teacher — Wednesday
(b) Nurse — Friday
(c) Lawyer — Tuesday
(d) Manager — Friday
 - Ram introduces Rohit saying; He is the husband of the granddaughter of the father of my father." How is Rohit related to Ram?
(a) Brother-in-law (b) Father-in-law
(c) Brother (d) Father
 - Which of the following statements is not correct?
(a) B earns more than D.
(b) C earns more than D
(c) A earns more than B
(d) B earns more than C.
 - Consider the following sequence that follow some arrangement:

c_accaa_aa_bc_b

The letters that appear in the gaps are

- (a) abba (b) cbbb
 (c) bbbb (d) cccc

Directions (Q.18) : Read the following and answer the following:

The sum of the income of A and B is more than that of C and D have together. The sum of the income of A and C is the same as that of B and D have taken together. Moreover, A earns half as much as the sum of the income of B and D.

18. Whose income is the highest?
 (a) A (b) C
 (c) B (d) D
19. There is a certain relation between two given words. Find out the best alternative which shares a similar relationship.

Cataclysm : Flood :: Annihilation : ?

- (a) Earthquake (b) Emergency
 (c) Fire (d) Steam

20. Examine the following statements :

- I. All children are inquisitive
 II. Some children are inquisitive
 III. No children are inquisitive
 IV. Some children are not inquisitive

Among these statements the two statements which cannot both be true simultaneously but can both be false, would be

- (a) I and III (b) I and IV
 (c) II and III (d) III and IV

21. Which of the following can be inferred from the statement that "Either John is stupid or John is lazy" ?

1. John is lazy/therefore, John is not stupid
 2. John is not lazy/therefore, John is stupid
 3. John is not stupid/therefore, John is lazy
 4. John is stupid/therefore, John is not lazy

Codes:

- (a) 1 and 2 (b) 2 and 3
 (c) 3 and 4 (d) 1 and 4

22. Six roads lead to a country. They may be indicated by letters X, Y, Z and digits 1, 2, 3. When there is storm, Y is blocked. When there are floods X, 1 and 2 will be affected. When road 1 is blocked, Z also is blocked. At a time when there are floods and a storm also blows, which road(s) can be used?

- (a) Z and 2 (b) Only Z

- (c) Only 3 (d) Only Y

23. Examine the following statements:

1. George attends Music classes on Monday
2. He attends Mathematics classes on Wednesday
3. His Literature classes are not on Friday
4. He attends History classes on the day following the day of his Mathematics classes
5. On Tuesday he attends his Sports classes. If he attends just one subject in a day and his Sunday is free, then he is also free on

- (a) Monday (b) Thursday
 (c) Saturday (d) Friday

24. In an accurate clock, in a period of 2 hours 20 minutes (140 minutes), the minute hand will move over

- (a) 520° (b) 320°
 (c) 840° (d) 140°

25. Two important characteristics of a hypothesis are that it should be testable and that it should be stated in a manner that it can be refuted. Which one of the following hypothesis fulfills these characteristics?

- (a) Intelligent persons have good memory
 (b) Some birds are animals
 (c) Some businessman are dishonest
 (d) All men are mortal

26. In the series POQ, SRT, VUW, _____, the blank space refers to

- (a) XYZ (b) XZY
 (c) YXZ (d) YZY

27. Examine the following statements regarding a set of balls

1. All balls are black
2. All balls are white
3. Only some balls are black
4. No balls are black

Assuming that the balls can only be black or white, which two of the statements given above can both be true, but cannot both be false? Choose the correct answer from the codes given below:

- (a) 1 and 4 (b) 1 and 3
 (c) 2 and 3 (d) 2 and 4

28. Examine the following statements:

1. All members of Mohan's family are honest
2. Some members of Mohan's family are not employed

3. Some employed persons are not honest
 4. Some honest persons are not employed
 Which one of the following inferences can be drawn from the above statements?
- (a) All members of Mohan's family are employed
 (b) The employed members of Mohan's family are honest
 (c) The honest members of Mohan's family are not employed
 (d) The employed member of Mohan's family are not honest
29. A, B, C, D, E, F and G are members of a family consisting of 4 adults and 3 children, two of whom, F and G are girls. A and D are brothers and A is a doctor. E is an engineer married to one of the brothers and has two children. B is married to D and G is their child. Who is C?
- (a) G's brother (b) F's father
 (c) E's father (d) A's son
30. Which one of the following satisfies relationship
Dda: aDD :: Rrb : ?
- (a) DDA (b) RRR
 (c) bRR (d) BBr
31. A, B, C, D, E and F, not necessarily in that order, are sitting on six chairs regularly placed around a round table. It is observed that A is between D and F, C is opposite to D and D and E are not on neighbouring chairs. Which one of the following pairs must be sitting on neighbouring chairs?
- (a) A and B (b) C and E
 (c) B and F (d) A and C
32. If in a certain code SAND is VDQG and BIRD is ELUG, then what is the code for LOVE?
- (a) PRYG (b) ORTG
 (c) NPUH (d) ORYH
33. In a group of five people, K, L and M are ambitious, M, N, and R are honest, L, M and N are intelligent and K, N and R are industrious. Among these neither industrious nor ambitious person(s) would include
- (a) K alone (b) L and R
 (c) M and N (d) none of the group
34. On another planet, the local terminology for earth, water, light, air and sky are 'sky', 'light', 'air', 'water' and 'earth' respectively. If someone is thirsty there, what would he drink?
- (a) Sky (b) Water
 (c) Air (d) Light
35. In a code language, 'SOLID' is written as 'WPSLPIMFHA', What does the code 'ATEXXQIBVO' refer to?
- (a) EAGER (b) WAFER
 (c) WAGER (d) WATER
36. Examine the following relationships among members of a family of six persons A, B, C, D, E and F.
- The number of males equals that of females
 - A and E are sons of F.
 - D is the mother of two, one boy and one girl
 - B is the son of A
 - There is only one married couple in the family at present
- Which one of the following inferences can be drawn from the above?
- (a) A, B and C are all females
 (b) A is the husband of D
 (c) E and F are children of D
 (d) D is the granddaughter of F
37. In a certain code, MARCH is written as OCTEJ, how is RETURN written in that code?
- (a) TFUVSM (b) QGSTQM
 (c) TGVWTP (d) TGRVSO
38. A, B, C, D, E and F not necessarily in that order are sitting in six chairs regularly placed around a round table. It is observed that.
- A is between D and F
 - C is opposite to D
 - D and E are not on neighbouring chairs
- Which one of the following must be true
- (a) A is opposite B
 (b) D is opposite E
 (c) C and B are neighbours
 (d) B and E are neighbours
- Directions (Q.39-42) : The details given below relate to the FOUR items that follow:**
 Amit wishes to buy a magazine, four magazines one each on politics, sports, science and films are available to choose from. They are edited by Feroz, Gurbaksh, Swami and Ila (not necessarily in that order) and published by Aryan, Bharat, Charan and Dev Publishers (not necessarily in that order) Further, it is given that
- (i) Dev publishers have published the magazine edited by Feroz.

- (ii) The magazine on politics is published by Aryan Publishers
 (iii) The magazine, on films is edited by Swami and is not published by Charan Publishers
 (iv) The magazine on science is edited by Ila.

For the following four items, select the correct answer.

39. The magazine on science is published by
 (a) Aryan Publishers
 (b) Bharat Publishers
 (c) Charan Publishers
 (d) Dev Publishers
40. The magazine on sports is
 (a) edited by Feroz
 (b) edited by Gurbaksh
 (c) published by Bharat Publishers
 (d) published by Charan Publishers
41. The magazine on film is
 (a) published by Dev Publishers
 (b) published by Bharat Publishers
 (c) edited by Gurbaksh
 (d) published by Charan Publishers
42. The magazine on politics is
 (a) edited by Ila
 (b) edited by Gurbaksh
 (c) published by Dev Publishers
 (d) published by Charan Publishers
43. A person stands at the middle point of a wooden ladder, which starts slipping between a vertical wall and the floor of a room. The path traced by a person standing at the middle point of the slipping ladder, is
 (a) a straight line
 (b) an elliptical path
 (c) a circular path
 (d) a parabolic path

Directions (Q.44-47) : Based on the information given below, answer the four items which follow it:

Gopal, Harsh, Inder, Jai and Krishnan have Ahmedabad, Bhopal, Cuttack, Delhi and Ernakulam as their hometowns (not necessarily in that order). They are studying in Engineering, Medical, Commerce, Economics and History college. (not necessarily in that order). None of the five boys is studying in his hometown, but each of them studies in one of the cities given above.

Further, it is given that

- (i) Gopal's home town is Ernakulam.

- (ii) Harsh is not studying in Ahmedabad or Bhopal
 (iii) Economics college is in the Bhopal
 (iv) Inder's hometown is in Cuttack
 (v) Krishnan is studying in Delhi
 (vi) Jai is studying in Ernakulam and the History college is in his hometown Ahmedabad
 (vii) Engineering college is situated in Ernakulam.

Based on the information given above answer the next FOUR items:

44. Which is Krishnan's hometown?
 (a) Ahmedabad
 (b) Cuttack
 (c) Bhopal
 (d) Cannot be determined.
45. Which college is situated in Inder's hometown?
 (a) Commerce
 (b) Medical
 (c) Economics
 (d) Commerce or Medical
46. Who studies in Bhopal ?
 (a) Gopal (b) Harsh
 (c) Gopal or Inder (d) Inder or Harsh
47. If Inder studies in Ahmedabad, then which one of the following is the correct combination of person Hometown-Place of study?
 (a) Gopal – Ernakulam – Delhi
 (b) Jai – Ahmedabad – Ernakulam
 (c) Krishnan – Delhi – Ernakulam
 (d) Harsh – Bhopal – Delhi
48. An equilateral triangular plate is to be cut into n number of identical small equilateral triangular plates. Which of the following can be possible value of n ?
 (a) 196 (b) 216
 (c) 256 (d) 296
49. P, Q, R, S and T reside in a five-storeyed (Ground + 4) building, and each of them resides on a separate floor.
 Further:
 1. T does not reside on the topmost floor.
 2. Q does not reside on the ground floor.
 3. S resides on one storey above that of P and one storey below that of R. To know as the which one of the five persons resides on the ground floor which of the above statements are sufficient/ insufficient?
 (a) 1 and 3 are sufficient
 (b) 2 and 3 are sufficient

- (c) 1, 2 and 3 are sufficient
(d) 1, 2 and 3 are insufficient
50. A box contains five sets of balls while there are 3 balls in each set. Each set of balls has one color which is different from every other set, what is the least number of balls that must be removed from the box in order to claim with certainty that a pair of balls of the same colour has been removed?
(a) 6 (b) 7
(c) 8 (d) 9
51. In an office, the number of persons who take tea is twice the number of persons who take only coffee. The number of persons who take coffee is twice the number of persons who take only tea.
Consider the following statement:
- The sum of the number of persons who take either tea or coffee or both is four times the number of persons who take both coffee and tea.
 - The sum of the number of persons who take only coffee and those who take only tea is twice the number of persons who take both tea and coffee.
- Which of the statement(s) given above is/are correct?
(a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
52. A family of two generations consisting of six members P, Q, R, S, T and U has three males and three females. There are two married couples and two unmarried siblings. U is P's daughter and Q is R's mother-in-law. T is an unmarried male and S is a male. Which one of the following is correct?
(a) R is U's husband
(b) R is S's wife
(c) S is unmarried
(d) None of the above
53. If in a particular year 12th January is a Sunday, then which one of the following is correct?
(a) 15th July is a Sunday if the year is leap year.
(b) 15th July is a Sunday if the year is not a leap year.
(c) 12th July is a Sunday if the year is a leap year.
(d) 12th July is not a Sunday if the year is a leap year.
54. Consider the following statements:
1. The minimum number of points of intersection of a square and a circle is 2.
2. The maximum number of points of intersection of a square and a circle is 8.
Which of the above statements is/are correct?
(a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
55. The letters from A to Z are numbered from 1 to 26 respectively. If $GHI = 1578$ and $DEF = 912$, then what is ABC equal to:
(a) 492 (b) 468
(c) 262 (d) 246
56. What is the missing term @ in the following?
 $ACPQ : BESU :: MNGI : @$
(a) NPJL (b) NOJM
(c) NPIL (d) NPJM
57. Three Statements S1, S2 and S3 are given below followed by a Question:
S1: C is younger than D, but older than A and B.
S2: D is the oldest.
S3: A is older than B.
Question:
Who among A, B, C and D is the youngest?
Which one of the following is correct in respect of the above Statements and the Question?
(a) S1 alone is sufficient to answer the Question.
(b) S1 and S2 together are sufficient to answer the Question.
(c) S2 and S3 together are sufficient to answer the Question.
(d) S1 and S3 together are sufficient to answer the Question.
58. Consider two statements S1 and S2 followed by a question:
S1 : p and q both are prime numbers.
S2 : p + q is an odd integer.
Question : Is pq an odd integer?
Which one of the following is correct?
(a) S1 alone is sufficient to answer the question
(b) S2 alone is sufficient to answer the question
(c) Both S1 and S2 taken together are not sufficient to answer the question
(d) Both S1 and S2 are necessary to answer the question
59. Which year has the same calendar as that of 2009?
(a) 2018 (b) 2017
(c) 2016 (d) 2015

60. Mr. 'X' has three children. The birthday of the first child falls on the 5th Monday of April, that of the second one falls on the 5th Thursday of November. On which day is the birthday of his third child, which falls on 20th December?
 (a) Monday (b) Thursday
 (c) Saturday (d) Sunday
61. Consider the following Statements and Conclusions:
Statements:
 1. Some rats are cats.
 2. Some cats are dog.
 3. No dog is a cow.
Conclusions:
 I. No cow is a cat.
 II. No dog is a rat.
 III. Some cats are rats.
 Which of the above conclusions is/are drawn from the statements?
 (a) I, II and III (b) Only I and II
 (c) Only III (d) Only II and III
62. A five-storeyed building with floors from I to V is painted using four different colours and only one colour is used to paint a floor. Consider the following statements :
 1. The middle three floors are painted in different colours.
 2. The second (II) and the fourth (IV) floors are painted in different colours.
 3. The first (I) and the fifth (V) floors are painted red.
 To ensure that any two consecutive floors have different colours
 (a) Only statement 2 is sufficient
 (b) Only statement 3 is sufficient
 (c) Statement 1 is not sufficient, but statement 1 along with statement 2 is sufficient
 (d) Statement 3 is not sufficient, but statement 3 along with statement 2 is sufficient
63. P, Q and R are three towns. The distance between P and Q is 60 km, whereas the distance between P and R is 80 km. Q is in the West of P and R is in the South of P. What is the distance between Q and R?
 (a) 140 km (b) 130 km
 (c) 110 km (d) 100 km
64. In a school, 60% students play cricket. A student who does not play cricket, plays football. Every football player has got a two-wheeler. Which of the following conclusions *cannot* be drawn from the above data?
 1. 60% of the students do not have two-wheelers.
 2. No cricketer has a two-wheeler.
 3. Cricket players do not play football.
 Select the correct answer using the code given below :
 (a) 1 and 2 only (b) 2 and 3 only
 (c) 1 and 3 only (d) 1, 2 and 3
65. Seeta and Geeta go for a swim after a gap of every 2 days and every 3 days respectively. If on 1st January both of them went for a swim together, when will they go together next?
 (a) 7th January (b) 8th January
 (c) 12th January (d) 13th January
66. A man walks down the backside of his house straight 25 metres, then turns to the right and walks 50 metres again; then he turns towards left and again walks 25 metres. If his house faces to the East, what is his direction from the starting point?
 (a) South-East (b) South-West
 (c) North-East (d) North-West
67. Two Statements are given followed by two Conclusions:
Statements:
 All cats are dogs.
 All cats are black.
Conclusions:
 All dogs are black
 Some dogs are not black.
 Which of the above Conclusions logically follows/follow from the two given Statements, disregarding commonly known facts?
 (a) Only Conclusion-I
 (b) Only Conclusion-II
 (c) Neither Conclusion-I nor Conclusion-II
 (d) Both Conclusion-I and Conclusion-II
68. Consider the following sequence of numbers :
 5 1 4 7 3 9 8 5 7 2 6 3 1 5
 8 6 3 8 5 2 2 4 3 4 9 6
 How many odd numbers are followed by the odd number in above sequence?
 (a) 5 (b) 6
 (c) 7 (d) 8

69. A is 16th from the left end in a row of boys and V is 18th from the right end. G is 11th from A towards the right and 3rd from V towards the right end. How many boys are there in the row?
- (a) 40
 (b) 41
 (c) 42
 (d) Cannot be determined due to insufficient data

Directions (Q.70-71) : Read the following information and answer the two items that follow.

The plan of an office block for six officers A, B, C, D, E and F is as follows : Both B and C occupy offices to the right of the corridor (as one enters the office block) and A occupies on the left of the corridor. E and F occupy offices on opposite sides of the Corridor but their offices do not face each other. The offices of C and D face each other. E does not have a corner office. F's office is further down the corridor than A's, but on the same side.

70. If E sits in his office and faces the corridor, whose office is to his left?
- (a) A (b) B
 (c) C (d) D
71. Who is/are F's immediate neighbor /neighbours?
- (a) A only (b) A and D
 (c) C only (d) B and C
72. If every alternative letter of the English alphabet from B onwards (including B) is written in lower case (small letters) and the remaining letters are capitalized, then how is the first month of the second half of the year written?
- (a) JuLY (b) jULy
 (c) jUly (d) jUIY
73. In the sequence 1, 5, 7, 3, 5, 7, 4, 3, 5, 7, how many such 5s are there which are not immediately preceded by 3 but are immediately followed by 7?
- (a) 1 (b) 2
 (c) 3 (d) None
74. 'A' started from his house and walked 20 m towards East, where his friend 'B' joined him. They together walked 10 m in the same direction. Then 'A' turned left while 'B' turned right and travelled 2 m and 8 m respectively.

Again 'B' turned left to travel 4 m followed by 5 m to his right to reach his office.

'A' turned right and travelled 12 m to reach his office. What is the shortest distance between the two offices?

- (a) 15 m (b) 17 m
 (c) 19 m (d) 20 m

75. If \$ means 'divided by'; @ means 'multiplied by'; # means 'minus'; then the value of $10\#5@1\$5$ is
- (a) 0 (b) 1
 (c) 2 (d) 9

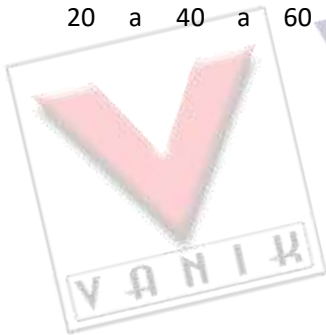
Directions (Q.76-78) : Read the following information and answer the three items that follow:

Six students A, B, C, D, E and F appeared in several tests. Either C or F scores the highest. Whenever C scores the highest, then E scores the least, Whenever F scores the highest, B scores the least. In all the tests they got different marks; D scores higher than A, but they are close competitors; A scores higher than B; C scores higher than A.

76. If F stands second in the ranking, then the position of B is
- (a) Third (b) Fourth
 (c) Fifth (d) Sixth
77. If B scores the least, the rank of C will be
- (a) Second (b) Third
 (c) Fourth (d) Second or third
78. If E is ranked third, then which one of the following is correct?
- (a) E gets more marks than C
 (b) C gets more marks than E
 (c) A is ranked fourth
 (d) D is ranked fifth
79. What is X in the sequence 132, 129, 124, 117, 106, 93, X?
- (a) 74 (b) 75
 (c) 76 (d) 77
80. If the numerator and denominator of a proper fraction are increased by the same positive quantity which is greater than zero, the resulting fraction is
- (a) always less than the original fraction
 (b) always greater than the original fraction
 (c) always equal to the original fraction
 (d) such that nothing can be claimed definitely

ANSWERS KEYS

1	c	21	b	41	b	61	c
2	c	22	c	42	b	62	b
3	d	23	d	43	c	63	d
4	d	24	c	44	c	64	d
5	c	25	a	45	d	65	d
6	b	26	c	46	c	66	d
7	b	27	a	47	b	67	c
8	d	28	b	48	c	68	b
9	b	29	d	49	d	69	b
10	c	30	c	50	a	70	c
11	a	31	b	51	b	71	a
12	d	32	d	52	b	72	d
13	a	33	d	53	c	73	a
14	b	34	d	54	b	74	b
15	a	35	d	55	d	75	d
16	c	36	b	56	d	76	c
17	b	37	c	57	d	77	d
18	b	38	d	58	b	78	b
19	c	39	c	59	d	79	c
20	a	40	a	60	b	80	b



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