

1. Marathon is to race as hibernation is to

- A. Winter
- B. Bear
- C. Dream
- D. Sleep

2. $(51 + 52 + 53 + \dots + 100)$ is equal to

- A. 1325
- B. 5050
- C. 3775
- D. 3325

3. There is one married couple in the family. A and B are a married couple, A being the male member. D is the only son of C who is the brother of A. E is the sister of D. B is the daughter-in-law of F whose husband has died. How is E related to C?

- A. Son
- B. Grandson
- C. Daughter
- D. Son-in-law

4. If it was a Sunday on Jan 1, 2006. The day of the week on Jan 1, 2010 is _____

- A. Sunday
- B. Saturday
- C. Friday
- D. Wednesday

5. 1, 4, 9, 16, _____, 25, 36

- A. 9
- B. 23
- C. 25
- D. 36

6. The sum of two number is 25 and their difference is 13. Find their product.

- A. 104
- B. 114
- C. 315
- D. 325

7. Each question consist of two words which have a certain relationship to each other followed by four pairs of related words. Select the pair which has the same relationship :ARMY:LOGISTICS

- A. business:strategy
- B. soldier:students
- C. war:logic
- D. team:individual

8. Find the correctly spelt words.

- A. Rigerous
- B. Rigourous
- C. Regerous
- D. Rigorous

9. If the room had been brighter, I would have been able to read for a while before bed time.

- A. If the room was brighter
- B. If the room are brighter
- C. Had the room been brighter
- D. No improvement

10. Rearrange these parts which are labelled P, Q, R and S to produce the correct sentence.

P: Einstein was Q: although a great scientist R: weak in arithmetic S: right from his school days

- A. SRPQ
- B. QPRS
- C. QPSR
- D. RQPS

11. Fill the blank in the middle of the series or end of the series: ZA5, Y4B, XC6, W3D, _____

- A. E7V
- B. V2E
- C. VE5
- D. VE7

12. If the first two statements are true, the third statement is:

- I. All the tulips in Zoe's garden are white.
- II. All the pansies in Zoe's garden are yellow.
- III. All the flowers in Zoe's garden are either white or yellow.

- A. TRUE
- B. FALSE
- C. uncertain

13. Exercise is to gym then eating is to _____

- A. food
- B. dieting
- C. fitness
- D. restaurant

14. Generation Xers are those people born roughly between 1965 and 1981. As employees, Generation Xers tend to be more challenged when they can carry out tasks independently. This makes Generation Xers the most entrepreneurial generation in history.

This paragraph best supports the statement that Generation Xers :

- A. work harder than people from other generations.
- B. have a tendency to be self-directed workers.
- C. have an interest in making history.
- D. tend to work in jobs that require risk-taking behavior.

15. Introducing a boy, a girl said, "He is the son of the daughter of the father of my uncle." How is the boy related to the girl?

- A. Brother
- B. Nephew
- C. Uncle
- D. Son-in-law

16. Which one of the following is always found in 'Wonder'?

- A. Crowd
- B. Lumber
- C. Astonishment
- D. Rustic

17. A pineapple costs Rs 7 each. A watermelon costs Rs 5 each. X spends Rs 38 on these fruits. The number of pineapples purchased is

- A. 2
- B. 3
- C. 4
- D. Data inadequate

18. A, B, C, D and E are sitting on a bench. A is sitting next to B, C is sitting next to D, D is not sitting with E who is on the left end of the bench. C is on the second position from the right. A is to the right of B and E. A and C are sitting together. Then the persons on either side of A are _____

- A. B, D
- B. B, C
- C. E, D
- D. C, E

19. Choose the word which is different from the rest.

- A. Dagger
- B. Hammer
- C. Knife
- D. Sword Blade

20. Find the word that names a necessary part of the underlined word. : vertebrate

- A. backbone
- B. reptile
- C. mammal
- D. animal

21. The least number which when divided by 5, 6, 7 and 8 leaves a remainder 3, but when divided by 9 leaves no remainder, is:

- A. 1677
- B. 1683
- C. 2523
- D. 3363

22. If $144 = 14.4x$, then the value of x is: $0.144x$

- A. 0.0144
- B. 1.44
- C. 14.4
- D. 144

23. The captain of the cricket team of 11 members is 26 years old and the wicket keeper is 3 years older than captain. If the ages of these two are excluded, the average of the remaining players is one year less than the average age of the whole team. What is the average age of the team?

- A. 23 years
- B. 24 years
- C. 25 years
- D. None of these

24. The present ages of three persons in proportions 4:7:9. Eight years ago, the sum of their ages was 56. Find their present ages (in years).

- A. 8, 14, 18
- B. 8, 20, 28
- C. 16, 28, 36
- D. 20, 35, 45

25. Two pipes can fill a tank in 20 and 24 minutes respectively and a waste pipe can empty 3 gallons per minute. All the three pipes working together can fill the tank in 15 minutes. The capacity of the tank is

- A. 180
- B. 150
- C. 120
- D. 60

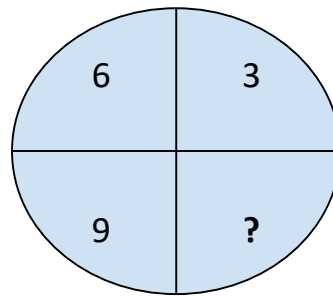
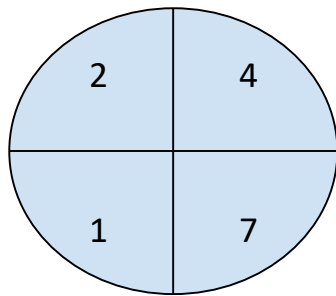
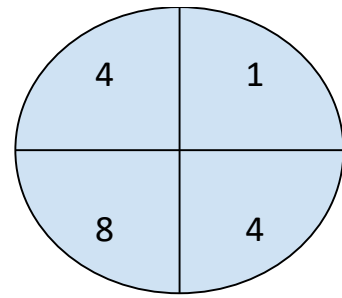
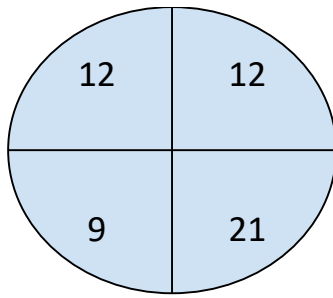
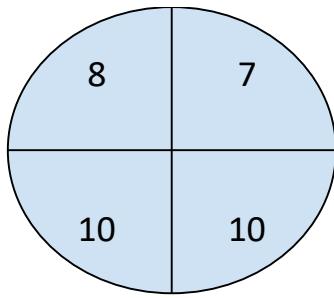
26. The average weight of 8 persons increase by 2.5 kg when a new person comes in place of one of them weighing 65 kg. What will be the weight of the new person?

- A. 76 kg
- B. 76.5 kg
- C. 85 kg
- D. 80 kg

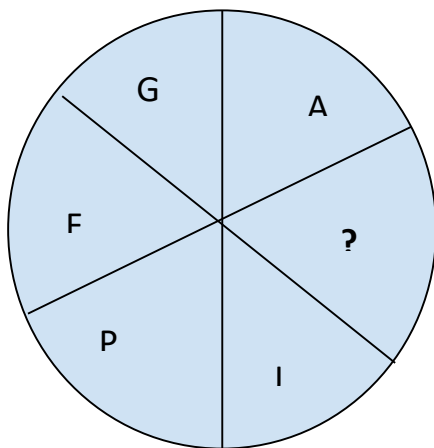
27. The difference between a two digit number and the number obtained by interchanging the digit is 36. What is the difference between the sum and the difference of the digits of the number if the ratio between the digits of the number is 1:2?

- A. 4
- B. 8
- C. 16
- D. None of the above

28. Which number replaces the question mark?



29. Which letter replaces the question mark?



30. A man has Rs. 480/- in the denominations of one-rupee notes, five-rupee notes and ten-rupee notes. The number of notes of each denomination is equal. What is the total number of notes that he has?

- | | |
|-------|-------|
| A. 45 | B. 60 |
| C. 75 | D. 90 |

31. If $a - b = 3$, and $a^2 + b^2 = 29$, find the value of ab .

- | | |
|-------|-------|
| A. 10 | B. 12 |
| C. 15 | D. 18 |

32. Make a meaningful sentence. The correct order of parts is the answer.

- | | | | | |
|----------|----------------|-----------|-------|---------|
| 1. I | 2. Immediately | 3. Salary | 4. my | 5. want |
| A. 43152 | B. 15432 | | | |
| C. 25143 | D. 42351 | | | |

33. Arrange the sentence

1. him
2. the
3. to
4. charge
5. handover

- A. 42531
C. 41352

- B. 51342
D. 52431

34. Arrange the sentence

1. Bag?
2. You
3. Seen
4. Have
5. my

- A. 51432
C. 43152

- B. 42351
D. 42153

35. Choose synonym: BRIEF

- A. Limited
C. Little

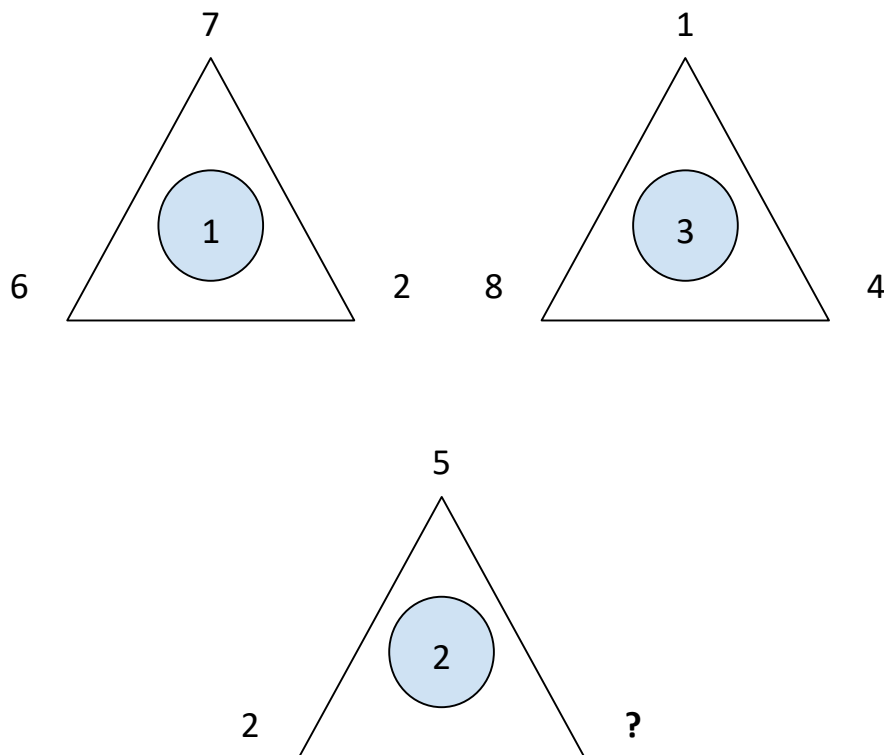
- B. Small
D. short

36. Choose synonym: ALERT

- A. Energetic
C. Intelligent

- B. Observant
D. watchful

37. Which number replaces the question mark?



38. How many days are there in x weeks x days?

- A. $7x^2$
- B. $8x$
- C. $14x$
- D. 7

39. A sum of money at simple interest amounts to Rs. 815 in 3 years and to Rs. 854 in 4 years. The sum is:

- A. Rs. 650
- B. Rs. 690
- C. Rs. 698
- D. Rs. 700

40. Look at this series: 7, 10, 8, 11, 9, 12, What number should come next?

- A. 7
- B. 10
- C. 12
- D. 13

41. A sum of Rs. 12,500 amounts to Rs. 15,000 in 4 years at the rate of simple interest. What is the rate of interest?

- A. 0.03
- B. 0.04
- C. 0.05
- D. 0.06

42. Choose synonym: FAKE

- A. Original
- B. Imitation
- C. Trustworthy
- D. Loyal

43. Change the voice (active/ passive voice)

They greet me cheerfully every morning.

- A. Every morning i was greeted cheerfully.
- B. I am greeted cheerfully by them every morning.
- C. I am being greeted cheerfully by them every morning.
- D. Cheerful greeting is done by them every morning to me.

44. Communication is a part of _____ skills.

- A. soft
- B. hard
- C. rough
- D. short

45. Correct the sentence

He is too important for tolerating any delay.

- A. to tolerate
- B. to tolerating
- C. at tolerating
- D. with tolerating

46. In a certain store, the profit is 320% of the cost. If the cost increases by 25% but the selling price remains constant, approximately what percentage of the selling price is the profit?

- A. 0.3
- B. 0.7
- C. 1
- D. 2.5

47. The sum of the ages of 5 children born at the intervals of 3 years each is 50 years. What is the age of the youngest child?

- A. 4 years
- B. 8 years
- C. 10 years
- D. 12 years

48. Find the odd man out: 396, 462, 572, 427, 671, 264

- A. 396
- B. 427
- C. 671
- D. 264

49. Which letter replaces the question mark: B, C, E, G, ?

- A. K
- B. M
- C. H
- D.

3	P	8
9	G	1
2	U	4
3	W	1
7	?	1

50. Which letter replaces the question mark?

- A. I
- B. V
- C. R
- D. B

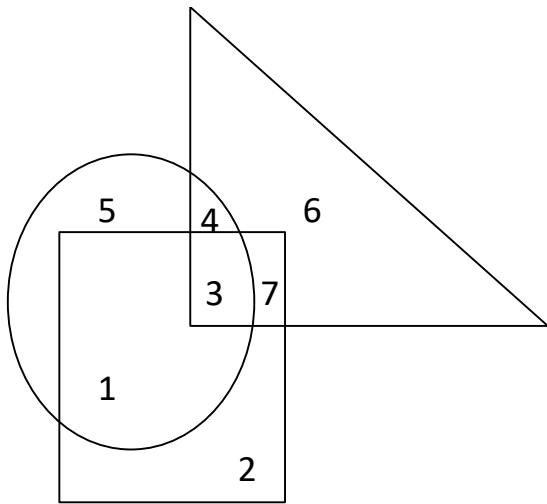
51. Which letter replaces the question mark?

6	4	4	1
4	N	L	7
5	U	?	1
6	10	14	2

- A. R
- B. S
- C. Q
- D. T

52. In a box, there are 8 red, 7 blue and 6 green balls. One ball is picked up randomly. What is the probability that it is neither red nor green?

53.Circle indicates ‘strong’, the square indicates ‘tall’ and the triangle ‘army officers’. The strong army officers who are not tall are shown.



- A. 4
C. 5

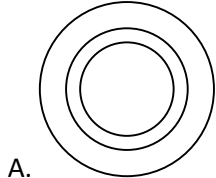
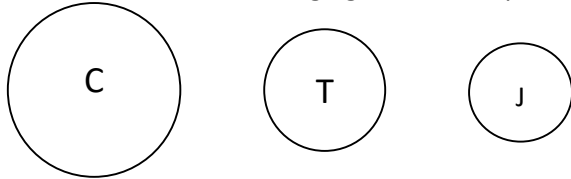
- B. 3
D. 6

54. A person walked diagonally across a square plot. Approximately, what was the percent saved by not walking along the edges?

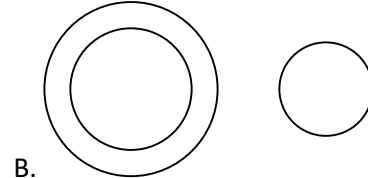
- A. 0.35
C. 0.2

- B. 0.3
D. 0.25

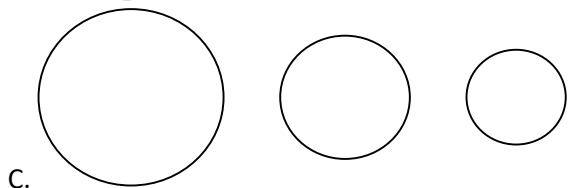
55. Which of the following figures best depicts the relationship among criminals, thieves and judges?



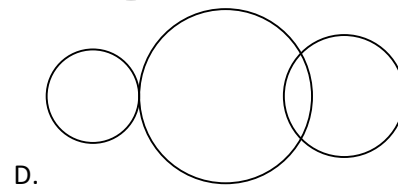
A.



B.



C.



D.

56. Ten years ago, P was half of Q's age. If the ratio of their present ages is 3:4, what will be the total of their present ages?

- A. 45
C. 35

- B. 40
D. 30

57. In the first 10 overs of a cricket game, the run rate was only 3.2. What should be the run rate in the remaining 40 overs to reach the target of 282 runs?

- A. 6.25
C. 7.4

- B. 5.5
D. 5

58. History abounds in instances of courage. (Choose a near antonym of the courage word)

- A. shines
- B. lacks
- C. suffices
- D. fails

59. The great dancer impressed the appreciative crowd by his nimble movements. (Choose the near synonym of nimble word)

- A. unrhythmic
- B. new
- C. quickening
- D. clear

60. Rearrange the parts which are labelled P, Q, R and S to produce the correct sentence and choose the proper sequence.

P: it struck me

Q: of course

R: suitable it was

S: how eminently

- A. SPQR
- B. QSRP
- C. PSRQ
- D. QPSR

61. The man to who I sold my house was a cheat. (Replace the phrase in “to who I sold” to make the sentence grammatically correct)

- A. to whom I sell
- B. to who I sell
- C. who was sold to
- D. to whom I sold

62. ARMY: LOGISTICS (Choose a pair which has the same relationship)

- A. Business: Strategy
- B. Soldier: Student
- C. War: Logic
- D. Team: Individual

63. In how many ways can the letters of the word ‘TEACHER’ be arranged?

- A. 2520
- B. 5040
- C. 360
- D. 720

64. What is the probability of getting a sum 10 from three throws of a dice?

- A. 25/216
- B. 46388
- C. 45870
- D. 10/216

65. 17 people at a party shake hands once with everyone else in the room. How many handshakes took place?

- A. 136
- B. 272
- C. 120
- D. 240

66. The angle between the minute hand and the hour hand of a clock when the time is 2:10 is:

- A. 10
- B. 0
- C. 5
- D. 20

67. Michael has 10 pairs of black socks, 8 pairs of white socks, 5 pairs of red socks and 7 pairs of green socks. Everything is mixed in a draw. As there is no light he was not able to identify the color of the socks. What are the max, no. of socks she has to pull out in order to make sure that he gets one pair?

68. Frog in the Well A frog is at the bottom of the well, which is 26 meters deep. Every day the frog jumps 6 meters upwards and falls 5 meters down. How many days will it take for the frog to reach the top?

69. John and his family members want to cross to the other side of the bridge at night. They have only one lamp which lasts for only 30 minutes. A maximum of only two persons can cross at one time. and they must have the lamp with them. Each person walks at a different speed, John walks at a speed of 1 min, his brother Jack walks at 3 min, his mother Julie walks at 6 min, his father Jeff walks at 8 min and his grandpa George walks at 12 min. A pair must walk together at the rate of the slower person. How can John's family cross the bridge?

70. There are 9 identical balls. In that one of the balls is overweight. There are only two chances to weigh in the weighing machine. How to find the overweight ball? Write steps only.

71. A milkman carries a full 12 liter container of milk. He needs to deliver exactly 6 liters to a customer who only has 8-liter and 5-liter containers. How can he do this? Write steps only.

72. How many seconds will a 500 meter long train take to cross a man walking along with a speed of 3 km/hr in the direction of the moving train if the speed of the train is 63 km/hr?

- | | |
|-------|-------|
| A. 25 | B. 30 |
| C. 40 | D. 45 |

73. What is the average of the first five multiples of 12?

74. A mother is twice as old as her son. If 20 years ago, the age of the mother was 10 times the age of the son, what is the present age of the mother?

75. 40% of 280 = _____

76. A shopkeeper sold an article for Rs. 2500. If the cost price of the article is 2000, find the profit percent.

77. A running man crosses a bridge of length 500 meters in 4 minutes. At what speed he is running?

78. What is the probability of getting an even number when a dice is rolled?

79. A, B and C are partners. They have invested Rs.35000, Rs. 25000 and 10,000 respectively for the same period. If the total profit is Rs. 18000, find the share of A.

80. Find the odd man out: 1, 5, 11, 17, 23, 29

81. The sum of the ages of 5 children born at the intervals of 3 years each is 50 years. What is the age of the youngest child?

82. There are 15 people in a group. They shake hands with each other. Find the different number of handshakes.

83. If from a pack of 52 playing cards, 1 card is drawn at random. What is the probability that it is either a king or queen?

- 84.** Shyam travels 7 km North, and then he turns to his right and walks 3 km. He again turns to his right and moves 7 km forward. Now in which direction is he from his starting point?
- 85.** A mixture contains alcohol and water in the ratio of 4:3. If 5 liters of water is added to the mixture, the ratio becomes 4: 5. Find the quantities of alcohol in the given mixture.
- 86.** A and B can complete a piece of work in 8 days, B and C can do it in 12 days, C and A can do it in 8 days. A, B and C together can complete it in?
- 87.** If the radius of a circle increased by 20%, then what is the % change in area?
- 88.** Introducing a man, a lady said that "He is the father of my mother's daughter's only brother". How is the man related to the lady?
- 89.** In what ratio must rice costing Rs. 8.50 per kg be mixed with rice costing Rs. 13 per kg so that the mixture be worth Rs. 10 per kg?
- 90.** A train 180m long is running at a speed of 65 km/h. In what time will it pass a man who is running at a speed of 5 km/h in the same direction?
- 91.** Out of four numbers, the average of the first 3 numbers is thrice the fourth number. If the average of all four numbers is 5, what is the fourth number?
- 92.** The average age of 5 children born at the intervals of 3 years each is 50 years. What is the age of the youngest child?
- 93.** A is B's sister. C is B's mother. D is C's father. E is D's mother. Then, how is A related to D?
 A. Grandfather
 B. Grandmother
 C. Granddaughter
 D. Great Grandmother
- 94.** Angle between subsequent divisions in clock (360 degrees)?
 A. 30 degrees
 B. 90 degrees
 C. 120 degrees
 D. 180 degrees
- 95.** Arrange the words in a sequence: country, member, state, community, city, family
- 96.** Tick the most reputed testing standard.
 A. Microsoft
 B. ISO
 C. M Bridge Awards
 D. QAI
- 97.** On 5th December, 1993, Raju celebrated his birthday on Sunday. What will be the day of his birthday in 1997?
 A. Wednesday
 B. Thursday
 C. Friday
 D. Saturday
- 98.** Find the odd one out: 396, 462, 572, 427, 671, 264
 A. 671
 B. 264
 C. 462
 D. 427

99. X and Y invest Rs. 21000 and Rs. 17500 respectively in a business. At the end of the year, they make a profit of Rs. 26400. What is the share of X in the profit?

- A. 14400
- B. 26000
- C. 12000
- D. 12500

100. If the median of the observations 2, 3, 5, 6, x, 8, 9 is 6 the value of x cannot be equal to?

- A. 8
- B. 1
- C. 10
- D. None of them

101. Two numbers have a ratio of 2:3. If their sum is 20, then what is the sum of the squares of two numbers?

- A. 324
- B. 200
- C. 196
- D. None of them

102. Which word does not belong to others?

- A. Inch
- B. Kilogram
- C. Centimeter
- D. yard

103. How many seconds will a 500 meter long train take to cross a man walking with a speed of 3km/hr in the direction of the moving train if the speed of the train is 63km/hr?

- A. 25
- B. 30
- C. 40
- D. 45

104. A, B and C can do a piece of work in 20, 30 and 60 days respectively. In how many days can A do the work if he is assisted by B and C on every third day?

- A. 12 days
- B. 15 days
- C. 16 days
- D. 18 days

105. 3 pumps, working 8 hours a day, can empty a tank in 2 days. How many hours a day must 4 pumps work to empty the tank in 1 day?

- A. 9
- B. 10
- C. 11
- D. 12

106. Two trains running in opposite directions cross a man standing on the platform in 27 seconds and 17 seconds respectively and they cross each other in 23 seconds. The ratio of their speed is:

107. In how many ways can the letter of the word 'LEADER' be arranged?

- A. 72
- B. 144
- C. 360
- D. 720

108. What is the probability of getting a sum 9 from two throws of a dice?

109. 12 people at a party shake hands once with everyone else in the room. How many handshakes took place?

- A. 72
- B. 66
- C. 76
- D. 64

110. Michael has ten pairs of black socks, eight pairs of white socks and seven pairs of green socks. Everything is mixed in a draw. As there is no light she was not able to identify the color of the socks. What is the maximum no. of socks she has to pull out in order to make sure that she gets one pair?

111. Frog in the well A frog is at the bottom of the well, which is 20 meters deep. Every day the frog jumps 5 meters upwards and falls 4 meters down. How many days will it take for the frog to reach the top?

112. Four people need to cross a rickety bridge at night. Unfortunately, they have only one torch and the bridge is too dangerous to cross without one. The bridge is only strong enough to support two people at a time. Not all people take the same time to cross the bridge. Times for each person: 1 min, 2 min, 7 min and 10 min. What is the shortest time needed for all four of them to cross the bridge?

LOGICAL TEST

Directions (Q. 1-2)

1. Six men B, D, C, M, J and K are split in two groups of three each and are made to stand in two rows, such that a man in one row is exactly facing a man in the other row.

2. M is not at the ends of any row and is to the right of J, who is facing C. K is to the left of D. who is facing M.

1) Which of the following groups of men are in the same row?

A. BMD

B. MJK

C. BDC

D. None of these

2) Who is to the immediate left of B?

A. M

B. D

C. J

D. Data inadequate

Directions (Q. 3-7)

There are seven professors A, B, C, D, E, F and G teaching seven subjects History, Geography, Physics, Chemistry, Maths, Biology and English from Monday to Friday at Gaya College. Each professor teaches a different subject and not more than two subjects are taught on any one of the days.

1) Chemistry is taught by professor B on Tuesday.

2) Professor D teaches on Friday but neither Geography nor Physics.

3) Professor F teaches History but neither on Thursday nor on Friday.

4) Professor A teaches English on the day on which History is taught

5) Professor C teaches Maths on Monday.

6) Geography and Chemistry are taught on the same day.

7) Professor G teaches on Thursday.

3) On which of the following days is English taught?

A. Wednesday

B. Monday

C. Tuesday

D. Cannot be determined

4) Which of the following subjects is taught by professor G?

A. Biology

B. Geography

C. Physics

D. Chemistry

5) On which of the following days is Geography taught?

A. Monday

B. Tuesday

C. Wednesday

D. Thursday

6) Which subject is taught on Friday?

A. Physics

B. History

C. Geography

D. Biology

7) Which of the following pairs of professors teaches on Tuesday?

A. B and D

B. A and B

C. B and F

D. None of these

8) Look at this series: 22, 21, 23, 22, 24, 23, _____. What number should come next?

A. 22

B. 24

C. 25

D. 26

9) Look at this series: 53, 53, 40, 40, 27, 27, _____. What number should come next?

- A. 12
- B. 14
- C. 27
- D. 53

10) Look at this series: 21, 9, 21, 11, 21, 13, 21.... What number should come next?

- A. 14
- B. 15
- C. 21
- D. 23

11) Look at this series: 58, 52, 46, 40, 34, _____. What number should come next?

- A. 28
- B. 26
- C. 30
- D. 32

12) A train running at the speed of 60 km/hr crosses a pole in 9 seconds. What is the length of the train?

- A. 120 metres
- B. 180 metres
- C. 324 metres
- D. 150 Metres

13) A train 125 m long passes a man, running at 5 km/hr in the same direction in which the train is going, in 10 seconds. The speed of the train is:

- A. 45 km/hr
- B. 50 km/hr
- C. 54 km/hr
- D. 55 m/hr

14) The length of the bridge, which a train 130 metres long and travelling at 45 km/hr can cross in 30 seconds, is

- A. 200 m
- B. 225 m
- C. 245 m
- D. 250 m

15) Two trains running in opposite directions cross a man standing on the platform in 27 seconds and 17 seconds respectively and they cross each other in 23 seconds. The ratio of their speeds is

16) A train passes a station platform in 36 seconds and a man standing on the platform in 20 seconds. If the speed of the train is 54 km/hr, what is the length of the platform?

- A. 120 m
- B. 240 m
- C. 300 m
- D. None of these

Directions (Q. 17-20)

In a class there are seven students (including boys and girls) A, B, C, D, E, F and G. They sit on three benches I, II and III. Such that at least two students on each bench and at least one girl on each bench. C who is a girl student, does not sit with A, E and D. F the boy student sits with only B. A sits on the bench I with his best friends. G sits on the bench III. E is the brother of C.

17. How many girls are there out of these 7 students?

- A. 3
- B. 3 or 4
- C. 4
- D. Data inadequate

18. Which of the following is the group of girls?

- A. BAC
- B. BFC
- C. BCD
- D. CDF

19. Who sits with C?

- A. B
- B. D
- C. G
- D. E

20. On which bench there are three students?

- A. Bench I
- B. Bench II
- C. Bench III
- D. Bench I or II

21. Look at this series: 36, 34, 30, 28, 24, _____. What number should come next?

- A. 20
- B. 22
- C. 23
- D. 26

Directions (Q. 22-25)

Amit, Bharat, Chandan, Dinesh, Eeshwar and Ferguson are cousins. None of them are of the same age, but all of them have birthdays on the same date. The youngest of them is 17 years old and Eeshwar, who is the eldest, is 22 years old. Ferguson is somewhere between Bharat and Dinesh in age. Amit is elder to Bharat and Chandan is older than Dinesh.

22. Which of the following is not possible?

- A. Dinesh is 20 years old
- B. Ferguson is 18 years old
- C. Ferguson is 19 years old
- D. Ferguson is 20 years old

23) If Bharat is 17 years old, then which of the following could be the ages of Dinesh and Chandan respectively?

- A. 18 and 19
- B. 19 and 21
- C. 18 and 20
- D. 18 and 21
- E. None of these

24) If two of the cousins are between Chandan and Ferguson in age, then which of the following must be true?

- A. Amit is between Ferguson and Dinesh in age
- B. Bharat is 17 years old
- C. Bharat is younger than Dinesh
- D. Ferguson is 18 years old

25) If Chandan is 19 years old, which of the following must be true?

- A. Amit is 20 years old and Dinesh is 21 years old
- B. Bharat is 18 years old and Amit is 20 years old
- C. Bharat is 20 years old and Amit is 21 years old
- D. Dinesh is 17 years old and Bharat is 21 years old

Directions (Q. 26-30)

K, L, M, N, P, Q, R, S, U and W are the only ten members in a department. There is a proposal to form a team from within the members of the department subject to the following conditions:

A team must include exactly one among P, R, and S.

A team must include either M or Q, but not both

If a team includes K, then it must also include L, and vice versa.

If a team includes one among S, U, and W, then it must also include the other two.

Land N cannot be members of the same team

L and U cannot be members of the same team

The size of a team is defined as the number of members in the team.

26) Who cannot be a member of a team of size 3?

- A. L
- B. M
- C. N
- D. P
- E. Q

27) Who can be a member of a team of size 5?

- A. K
- B. L
- C. M
- D. P
- E. R

28) What would be the size of the largest possible team?

- A. 8
- B. 7
- C. 6
- D. 5
- E. cannot be determined

29) What could be the size of a team that includes K?

- A. 2 or 3
- B. 2 or 4
- C. 3 or 4
- D. Only 2
- E. Only 4

30) In how many ways can a team be constituted so that the team includes N?

- A. 2
- B. 3
- C. 4
- D. 5
- E. 6

31. Pointing to Manju, Raju said, "The son of her only brother is the brother of my wife". How is Manju related to Raju?

- A. Mother's sister
- B. Grandmother
- C. Mother-in-law
- D. Sister of father-in-law
- E. Maternal aunt

32. Introducing a man to her husband, a woman said, "His brother's father is the only son of my grandfather." How is the woman related to this man?

- A. Mother
- B. Aunt
- C. Sister
- D. Daughter
- E. Grandmother

33. How is Radha's mother's mother's daughter-in-law's daughter related to Radha?

- A. Sister
- B. Mother
- C. Cousin
- D. Aunt

34. A is the husband of B. E is the daughter of C. A is the father of C. How is B related to E?

- A. Mother
- B. Grandmother
- C. Aunt
- D. Cousin

35. Mr. Ramu's mother's father-in-law's only son's only daughter's son is Chetan. How is Ramu related to Chetan?

- A. Uncle
- B. Nephew
- C. Niece
- D. Father
- E. Cannot be determined

*** Refer to the data below and answer the questions that follow. ***

A, B, C, D, E, F and G are the seven members of a family. There are two married couple and two children in the 3rd generation.

G is B's mother.

D is E's mother.

F is C's son

B is E's Aunt.

36. How is D related to B?

- A. Sister
- C. Mother

- B. Sister-in-law
- D. Aunt

37. If C is B's husband, how is F related to E?

- A. Brother
- C. Cousin

- B. Sister
- D. Cannot be determined

38. If A is G's son, how is A related to F?

- A. Uncle
- C. Cousin

- B. Father
- D. Brother

39. Who is E's father? (Use the data if necessary from the previous question)

- A. B
- C. C

- B. A
- D. G

40. How many females are there in the family? (Use the data if necessary from the previous question)

- A. 3
- C. 5

- B. 4
- D. Cannot be determined

41. In a certain code language if the word 'MUSEUM' is coded as 'LSPAPG', then how will the word 'PALACE' be coded in that language?

- A. OYIWX Y
- C. IYXYWO

- B. OYIXYW
- D. YXWYOI

42. In a certain code language, if the number 1 is assigned to all the letters in odd numbered places in the alphabet and the remaining letters are assigned the number 2, then what is the code for the word 'DANCE'?

- A. 21211
- C. 22111

- B. 12121
- D. 21121

43. In a certain code language, if the word 'DISTANCE' is coded as EDCINSAT, then how will you code 'ACQUIRE' in that language?

- A. EACIQUR
- C. ERCIAQU

- B. EACRIUQ
- D. EARCIQU

44. In a certain code language, if the value of $28 + 1450$ and $36 + 43 = 63$, then what is the value of $44 + 52 = ?$

- A. 54
- C. 58

- B. 56
- D. 62

45. These questions are based on a certain code language. Understand the logic in the coding and answer the following questions.

"PROCESSOR" is coded as D4F3C5C1E1S1S1E3C6

Find code for "QUADRANT"

- A. Q1C7A1B2F6A1B7E4
- C. Q1C7A1B2F3A1B7E4

- B. Q1D6A1B2F3A1B7E4
- D. Q1C7A1D2C6A1B7E5

46. In a certain code language, 'kewxashumadeko' means 'she is eating apples'; 'kewtepo qua' means 'she sells toys' and 'sullimdeko' means 'I like apples'. Which word in that language means 'she' and 'apples'?

- A. xas&deko
- B. xas&kew
- C. kew&deko
- D. kew&xas

47. Five plays A, B, C, D and E are to be staged from Monday to Friday of a week. On each day, only one play will be staged. D or E should not be either the first or last to be staged. E should be immediately followed by C. B should be staged immediately after D. One play is staged between A and B.

- A.
- B.
- C.
- D.

48. 4, 3, 4, 9, 32,

- A. 125
- B. 135
- C. 145
- D. 155

49. 16 (81) 25 49 (169) 36 64 (?) 4

- A. 121
- B. 84
- C. 81
- D. 100

50. Which term of the series 5, 8, 11, 14, is 320?

- A. 104th
- B. 105th
- C. 106th
- D. 64th

51. In the series 5, 10, 20, 40, what will be the 10th term?

- A. 1280
- B. 2560
- C. 1820
- D. 2650

52. What is the angle between the two hands of a clock when the time shown by the Clock is 5.30 p.m.?

- A. 0
- B. 5
- C. 3
- D. 15

53. By how many degrees does the minute hand move at the same time, in which the hour hand moves by 18 degrees?

- A. 168 degree
- B. 216 degree
- C. 196 degree
- D. 276 degree

54. In the time in which the second hand covers 3960 degrees, how many degrees does the hour hand move?

- A. 11 degree
- B. 5.5 degree
- C. $\frac{3}{4}$ degree
- D. 55 degree

55. If today is Thursday, after 730 days which will be the day of the week?

- A. Thursday
- B. Friday
- C. Saturday
- D. Monday

P, Q, R, S, T, U, V and W are sitting round the circle and are facing the centre:

P is second to the right of T who is the neighbour of R and V.

S is not the neighbour of P.

V is the neighbour of U.

Q is not between S and W. W is not between U and S.

56. Which two of the following are not neighbours?

A. RV

B. UV

C. RP

D. QW

57. One is immediate right to the V?

A. P

B. U

C. R

D. T

58. Which of the following is correct?

A. P is to the immediate right of Q

B. R is between U and V

C. Q is to the immediate left of W

D. U is between W and S

Each Question given below has a problem and two statements numbered I and II giving certain information. You have to decide if the information given in the statements is sufficient for answering the problem.

59. How is D related to A?

I. B is the brother of A.

II. B is D's son.

A. if the data in statement I alone are sufficient to answer the question;

B. if the data in statement II alone are sufficient to answer the question;

C. if the data either in I or II alone are sufficient to answer the question;

D. if the data even in both the statements together are not sufficient to answer the question;

E. if the data in both the statements together are needed;

60. Who is C's partner in a game of cards involving four players A, B, C and D?

I. D is sitting opposite to A.

II. B is sitting to the right of A and left of D.

A. if the data in statement I alone are sufficient to answer the question;

B. if the data in statement II alone are sufficient to answer the question;

C. if the data either in I or II alone are sufficient to answer the question;

D. if the data even in both the statements together are not sufficient to answer the question;

E. if the data in both the statements together are needed;

61. In which year was Sanjay born?

I. Sanjay is six years older than Gopal.

II. Gopal's brother was born in 1982.

III. Sanjay's brother is two years younger than Gopal's brother who was eight years younger

A. A. I and II together.

B. B. II and III together.

C. C. I and III together.

D. D. I, II and III together.

E. None of these

62. Study the following arrangement carefully and answer the questions given below: 1 to 5

B # b A R 5 8 E % M F 4 J 1 U @ H 2 9 T 1 6 9 * W 3 P # K 7 \$ Y

If all the numbers in the above arrangement are dropped, which of the following will be the eleventh from the right end?

- | | |
|------|---------|
| A. U | B. T |
| C. F | D. H |
| | E. None |

63. How many such consonants are there in the above arrangement each of which is immediately preceded by a consonant and also immediately followed by a number?

- | | |
|---------|--------------------|
| A. None | B. One |
| C. Two | D. Three |
| | E. More than three |

64. How many such symbols are there in the above arrangement each of which is immediately preceded by a letter and also immediately followed

- | | |
|---------|--------------------|
| A. None | B. One |
| C. Two | D. Three |
| | E. More than three |

65. How many such numbers are there in the above arrangement each of which is immediately preceded by a consonant and also immediately followed by a symbol ?

- | | |
|---------|--------------------|
| A. None | B. One |
| C. Two | D. Three |
| | E. More than three |

66. Which of the following is the twelfth to the left of the twentieth from the left end of the above arrangement?

- | | |
|------|------------------|
| A. E | B. W |
| C. S | D. J |
| | E. None of these |

67. If A is coded as +, B is coded as C is coded as and D is coded as / then valuate 7 A 7 B 2 C 2 7 D 3 C 4?

- | | |
|--------|---------|
| A. -58 | B. -56 |
| C. -48 | D. -106 |

68. If A is coded as, B is coded as +, C is coded as and D is coded as/then evaluate :

5 A 8 B 6 C 5 D 2 C 3 7

- | | |
|-------|-------|
| A. 43 | B. 44 |
| C. 52 | D. 42 |
| | E. 32 |

69. If "*" means -, "+" means /, "." means * and "/" means +, then $15 - 2 / 900 + 90 * 100 = ?$

- | | |
|--------|------------------|
| A. -30 | B. -40 |
| C. -50 | D. -60 |
| | E. None of these |

70. Find the next two terms of the series: 11 14 14 17 17 20 20

- | | |
|-----------|-----------|
| A. 21, 21 | B. 23, 23 |
|-----------|-----------|

C. 25, 25

D. 21, 23

E. None of the above

71. Find the next two terms: 17, 32, 19, 29, 21, 26, 23,

A. 25, 25

B. 23, 29

C. 23, 25

D. 23, 27

E. None of the above

72. Look at this series: J14, L16, P20, R22, ... What number should fill the blank?

A. S24

B. N18

C. M18

D. T24

E. None of the above

73. Look at this series: V, VIII, XI, XIV, XX, ... What number should fill the blank?

A. IX

B. XXIII

C. XV

D. XVII

E. None of the above

74. If 'waste management techniques' is coded as '25 19 16' in the given language, then how will 'farming fertilizer management' be coded as?

A. 25, 12, 11

B. 13, 25, 14

C. 12, 13, 25

D. 17, 13, 12

E. None of the above

75. What will be the code for 'few waste' in the given code language?

A. 16, 17

B. 17, 13

C. 14, 19

D. 19, 16

E. None of the above

76. Out of the five figures, four are similar in a certain manner. However, one figure is not like the other four. Choose the figure which is different from the rest.

A. 1

B. 2

C. 3

D. 4

E. 5

77. If it is possible to make only one meaningful word with the second, fifth, eighth and the eleventh letters (when counted from the left hand side) of the word 'DEVELOPMENT', which would be the second letter of the word from the left? If more than one such word can be formed, give X as the answer. If no such word can be formed, give Z as your answer.

A. E

B. L

C. T

D. X

E. Z

Four people A, B, C and D went to four different places which is Kerala, Delhi, Goa and Gujarat by different transports as follows- Train, Car, Aeroplane and Bus. The person who travelled to Delhi did not travel by Bus. C traveled by Aeroplane and went to Goa. A went to Kerala by Car and D travel by Bus.

78. The person who travels by Train?

A. is going to Delhi

B. is going to Kerala

C. is C

D. is D

E. None of the above

79. Who among the following person is going to Kerala?

- A. A
- B. B
- C. C
- D. D
- E. Data Inadequate

80. Who among the following person is going to Delhi?

- A. A
- B. B
- C. C
- D. D
- E. None of the above

81. Which person is going to Goa?

- A. A
- B. B
- C. C
- D. D
- E. Data Inadequate

82. The person who travels by Car is?

- A. B
- B. C
- C. going to Kerala
- D. going to Goa
- E. None of the above

83. Which number should be in the place of "?".

- A. 1
- B. 2
- C. 3
- D. 4
- E. None of the above

84. Find the number in the missing place?

- A. 18
- B. 19
- C. 22
- D. 38
- E. None of the above

85. What number should replace the question mark ("?")?

- A. 4
- B. 6
- C. 8
- D. 9
- E. None of the above

86. Blood Relations for a family consisting of L, M, N, R, P, Q is given below. Answer the following questions based on the relation given.

R is the daughter of L.

Q is the brother of L.

N and L are married couples.

P is the brother of N.

M is the son of N but N is not the mother of M

Find the maternal uncle of R?

- A. Q
- B. M
- C. N
- D. P
- E. None of the above

87. Who is the brother of R?

- A. L
- B. M
- C. N
- D. P
- E. None of the above

88. Which person in the following option does not belong to the same generation of Q?

- A. P
- B. N
- C. M
- D. L
- E. None of the above

89. How many female members are there in the family?

- A. One
- B. Three
- C. Two
- D. Four
- E. None of the above

90. How many male members are there in the family?

- A. Four
- B. Three
- C. Two
- D. One
- E. None of the above

A, B, C, D, E, F and G are sitting in a row facing North

F is to the immediate right of E.

E is 4th to the right of G.

Person who is third to the left of D is at one of the ends.

C is the neighbour of B and D.

91. How many people are there exactly between B and D?

- A. None
- B. 1
- C. 2
- D. 3
- E. 4

92. How many people are there to the left of C?

- A. 1
- B. 2
- C. 3
- D. 4
- E. 5

93. What is the position of D?

- A. Between B and F
- B. Between E and A
- C. Between G and C
- D. Between C and E
- E. None of These

94. Reshma and Praveena are ranked ninth and thirteenth from the top in a class of 57 students. What will be their respective ranks from the bottom of the class?

- A. 48,44
- B. 49,45
- C. 45,49
- D. 47,43
- E. None of these

95. If A + B means A is the brother of B; A - B means A is the sister of B and A x B means A is the father of B. which of the following means that C is the son of

- A. M - N x C + F
- B. F - C + N x M
- C. N + M - F x C
- D. M x N - C + F
- E. None of these

96. Six players K, M, G, D, L and T are sitting in a circular table facing the center. M is to the left of K. D is between G and T. L is between G and M. and M is diagonally opposite to D. Refer above for the questions 32 to 23. How many people are seated between L and K if counted clockwise?

- A. 1
- B. 2
- C. 3
- D. 4

97. How many people are seated between L and D if counted clockwise?

- A. 3
- B. 2
- C. 1
- D. 4

98. Who sits diagonally opposite to L?

- A. T
- B. D
- C. K
- D. M
- E. None of these

99. Who sits to the right of L?

- A. G
- B. M
- C. T
- D. K
- E. None of these

100. In a class of 90 students, where girls are twice that of boys, Shridar ranked fourteenth from the top. If there are 10 girls ahead of Shridar, how many boys are after him in rank?

- A. 23
- B. 26
- C. 25
- D. 22

101. A family went for a vacation. Unfortunately, it rained daily for 13 days when they were there. But whenever it rained in the mornings, they had clear afternoons and vice versa. In all, they enjoyed 11 mornings and 12 afternoons. How many days in all did they stay there?

- A. 25
- B. 18
- C. 21
- D. 22
- E. 32

102. In a queue, Amrita is 10th from the front while Mukul is 25th from behind and Mamta is just in the middle of the two. If there are 50 persons in the queue. What position does Mamta occupy from the front?

- A. 16
- B. 18
- C. 15
- D. 17
- E. None of these

103. A train running at the speed of 60 km/hr crosses a pole in 9 seconds. What is the length of the train?

- A. 120 metres
- B. 180 metres
- C. 324 metres
- D. 150 metres

104. A train 125 m long passes a man, running at 5 km/hr in the same direction in which the train is going, in 10 seconds. The speed of the train is:

- A. 45 km/hr
- B. 50 km/hr
- C. 54 km/hr
- D. 55 km/hr

105. The length of the bridge, which a train 130 metres long and travelling at 45 km/hr can cross in 30 seconds, is:

- A. 200 m
- B. 225 m
- C. 245 m
- D. 250 m

106. Two trains running in opposite directions cross a man standing on the platform in 27 seconds and 17 seconds respectively and they cross each other in 23 seconds. The ratio of their speeds is:

107. A train passes a station platform in 36 seconds and a man standing on the platform in 20 seconds. If the speed of the train is 54 km/hr, what is the length of the platform?

- A. 120 m
- B. 240 m
- C. 300 m
- D. None of these

Directions (Q. 108-111) In a class there are seven students (including boys and girls) A, B, C, D, E, F and G. They sit on three benches I, II and III. Such that at least two students on each bench and at least one girl on each bench. C who is a girl student, does not sit with A, E and D. F the boy student sits with only B. A sits on the bench I with his best friends, G sits on the bench III. E is the brother of C.

108. How many girls are there out of these 7 students?

- A. 3
- B. 3 or 4
- C. 4
- D. Data inadequate

109. Which of the following is the group of girls ?

- A. BAC
- B. BFC
- C. BCD
- D. CDF

110. Who sits with C?

- A. B
- B. D
- C. G
- D. E

111. On which bench there are three students?

- A. Bench I
- B. Bench II
- C. Bench III
- D. Bench I or II

112. Look at this series: 36, 34, 30, 28, 24, ... What number should come next?

- A. 20
- B. 22
- C. 23
- D. 26

113. Look at this series: 22, 21, 23, 22, 24, 23, ... What number should come next?

- A. 22
- B. 24
- C. 25
- D. 26

114. Look at this series: 53, 53, 40, 40, 27, 27.... What number should come next?

- A. 12
- B. 14
- C. 27
- D. 53

115. Look at this series: 21, 9, 21, 11, 21, 13, 21, ... What number should come next?

- A. 14
- B. 15
- C. 21
- D. 23

116. Look at this series: 58, 52, 46, 40, 34, ... What number should come next?

- A. 26
- B. 28
- C. 30
- D. 32

Directions (Q. 117-120) There are seven professors A, B, C, D, E, F and G teaching seven subjects History, Geography, Physics, Chemistry, Maths, Biology and English from Monday to Friday at Gaya College. Each professor teaches a different subject and not more than two subjects are taught on any one of the days.

- (i) Chemistry is taught by professor B on Tuesday.
- (ii) Professor D teaches on Friday but neither Geography nor Physics.
- (iii) Professor F teaches History but neither on Thursday nor on Friday.
- (v) Professor C teaches Maths on Monday.
- (iv) Professor A teaches English on the day on which History is taught.
- (vi) Geography and Chemistry are taught on the same day.
- (vii) Professor G teaches on Thursday.

117. On which of the following days is English taught?

- A. Wednesday
- B. Monday
- C. Tuesday
- D. Cannot be determined

118. Which of the following subjects is taught by professor G?

- A. Biology
- B. Geography
- C. Physics
- D. Chemistry

119. On which of the following days is Geography taught?

- A. Monday
- B. Tuesday
- C. Wednesday
- D. Thursday

120. Which subject is taught on Friday?

- A. Physics
- B. History
- C. Geography
- D. Biology

121. Which of the following pairs of professors teaches on Tuesday?

- A. B and D
- B. A and B
- C. B and F
- D. None of the above

Directions (Q. 122-126)

K, L, M, N, P, Q, R, S, U and W are the only ten members in a department. There is a proposal to form a team from within the members of the department, subject to the following conditions:

A team must include exactly one among P, R, and S.

A team must include either M or Q, but not both.

If a team includes K, then it must also include L, and vice versa.

If a team includes one among S, U, and W, then it must also include the other two.

L and N cannot be members of the same team.

L and U cannot be members of the same team.

The size of a team is defined as the number of members in the team.

122. Who cannot be a member of a team of size 3?

- A. L
- B. M
- C. N
- D. P
- E. Q

123. Who can be a member of a team of size 5?

- A. K
- B. L
- C. M
- D. P
- E. R

124. What would be the size of the largest possible team?

- A. 8
- B. 7
- C. 6
- D. 5
- E. cannot be determined

125. What could be the size of a team that includes K?

- A. 2 or 3
- B. 2 or 4
- C. 3 or 4
- D. Only 2
- E. Only 4

126. In how many ways can a team be constituted so that the team includes N?

- A. 2
- B. 3
- C. 4
- D. 5
- E. 6

Directions (Q. 127-130)

Amit, Bharat, Chandan, Dinesh, Eeshwar and Ferguson are cousins. None of them are of the same age, but all of them have birthdays on the same date. The youngest of them is 17 years old and Eeshwar, who is the eldest, is 22 years old. Ferguson is somewhere between Bharat and Dinesh in age. Amit is elder to Bharat and Chandan is older than Dinesh.

127. Which of the following is not possible?

- A. Dinesh is 20 years old
- B. Ferguson is 18 years old
- C. Ferguson is 19 years old
- D. Ferguson is 20 years old

128. If Bharat is 17 years old, then which of the following could be the ages of Dinesh and Chandan respectively?

- A. 18 and 19
- B. 19 and 21
- C. 18 and 20
- D. 18 and 21

129. If two of the cousins are between Chandan and Ferguson in age, then which of the following must be true?

- A. Amit is between Ferguson and Dinesh in age
- B. Bharat is 17 years old
- C. Bharat is younger than Dinesh
- D. Ferguson is 18 years old

130. If Chandan is 19 years old, which of the following must be true?

- A. Amit is 20 years old and Dinesh is 21 years old
- B. Bharat is 18 years old and Amit is 20 years old
- C. Bharat is 20 years old and Amit is 21 years old
- D. Dinesh is 17 years old and Bharat is 21 years old

Directions (Q. 131-132)

(i) Six men B, D, C, M, J and K are split in two groups of three each and are made to stand in two rows, such that a man in one row is exactly facing a man in the other row.

(ii) M is not at the ends of any row and is to the right of J, who is facing C. K is to the left of D, who is facing M.

131. Which of the following groups of men are in the same row?

- A. BMD
- B. MJK
- C. BDC
- D. None of these

132. Who is to the immediate left of B?

- A. M
- B. D
- C. J
- D. Data inadequate