

## PUZZLE – 4

Direction: A, B, C, D, E, F and G were seven students in the same class. After the marks for the class test in mathematics were announced, they gave the following replies as none of them was happy with their respective marks.

- A B, C and I, together scored 195
- B C, D and I, together scored 210
- C D, E and I, together scored 196
- D E, F and I, together scored 208
- E F, G and I, together scored 213
- F All seven of us together scored 491.

1.	How many r	marks were scored by	D?
	a) 89	b) 88	c) 83
	d) 72	e) none of the	se

2.	What are the marks scored by G?				
	a) 88	b) 83	c) 80		
	d) 81	e) 89			

3. If no student had a score less than 50, who scored the highest marks? a) B b) D c) F

	d) cannot be determined	e) G
4.	How many marks did A score?	

•	110W many		
	a) 67	b) 71	c) 68
	d) 57	e) 87	

Direction: Five girls and four boys of a class were to be sent for a sports camp. Their teacher was asked to measure the weight of these students. But the weighing machine available in the school was defective and only measured weights greater than 100 kg. Hence, the teacher decided to measure the weight of three students at a time, but all three students selected would be of the same gender. He took all the possible weight combinations of girls as well as of boys. For girls, the measurements were 122 kg, 127 kg, 130 kg, 130 kg, 133 kg, 134 kg, 137 kg, 138 kg, 142 kg and 145 kg. For boys, the measurements were 174 kg, 170 kg, 165 kg and 163 kg. No two boys or no two girls had the same weight.

- 5. What is the average weight of the nine students? a) 50.33 kg b) 48.22 kg d) 49.67 kg c) 51.44 kg
- 6. What is the difference in the weights of the second heaviest boy and the second lightest girl? a) 14 kg b) 15 kg
  - c) 18 kg d) 20 kg
- 7. What is the weight of the heaviest boy? a) 54 kg b) 56 kg c) 59 kg d) 61 kg
- 8. How many girls weighs less than all the boys? a) 5 b) 4 d) 2 c) 3

**Direction:** Six students (A, B, C, D, E and F) of a class get different scores in an aptitude examination based on the CAT. It is known that the scores were in the order A> B> C> D> E> F.

1 Visit: www.fundamakers.com

It is also known that when seven teachers at their school were quizzed about the totals, they had this to say.

The English Teacher said:

"Exactly five of them scored a total of 232." The Math Teacher said:

"Exactly five of them scored a total of 238." The Biology Teacher said:

"Exactly five of them scored a total of 244." The Geography Teacher said:

"Exactly five of them scored a total of 245." The Marathi Teacher said:

"Exactly five of them scored a total of 250." The Hindi Teacher said:

"Exactly five of them scored a total of 256." The History Teacher said:

"Exactly five of them scored a total of 235."

It is known that exactly one of the seven teachers is lying about the total of 5 of the six students. Based on this information, try to answer the question that follow:

9.	The difference between the highest and the lowest			
	score is:			
	a) 21	b) 24		
	c) 18	d) Cannot be determined		
10.	The second highes	st score is:		

a) 55 b) 56 c) 55 or 56 d) Cannot be determined

11. Which of the following in the least possible score? a) 34 b) 35

c) 37

- 12. If it is known that the sum of the two lowest scores is

80, then which of these could be the sum of two of the scores? . . . . .

d) Cannot be determined

300103:	
a) 93	b) 104
c) 111	d) 102

Direction: The rock band, aero smith, during one of its itineraries of India, staged exactly 5 concerts, one in each of the 5 major cities - Delhi, Mumbai, Calcutta, Hyderabad and Chennai. In each of the concerts, they performed all their biggest hits no. - livin on the edge, falling in love, walk this way, taste of India and love in elevator. Though they perform the same 5 no.s in each of the 5 concerts, no number was performed in the same position (i.e. first, second, third, fourth and fifth) at any two concerts. The following information is also known about the concerts.

- 1- Taste of India was performed as the third no. in the Hyderabad and as the fourth no. in Delhi.
- 2- In all the cities, except Chennai, falling in love was performed before love in elevator.
- 3- In Calcutta, livin on the edge was performed as the third no. whereas Taste of India was performed before livin on the edge.
- 13. Which of following was performed as the 1<sup>st</sup> no. in Mumbai?
  - a) falling in love b) walk this way
  - c) love in an elevator d) CBD



- 14. In how many of the concerts were walking this way performed before fall in love?a) 1 b) 2 c) 3 d) CBD
- In which city was livin on the edge performed as the 5<sup>th</sup> no.

a) Delhi b) Mumbai c) Hyderabad d) CBD

16. In how many of the concerts was love in an elevator performed immediately after taste of India?a) 0b) 1c) 2

d) CBD

17. In which city was walk this way performed as the 2<sup>nd</sup> no.?

a) Calcutta b) Mumbai c) Delhi d) CBD

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

Five friends, Parag. Rajesh. Ramesh, Tushar and Vilas, met in Goa to celebrate their graduation from the prestigious National Institutes of Management (NIMS) one each at Ahmadabad. Bangalore. Calcutta. Lucknow and Indore (not necessarily In that order). After the celebrations, they left for their hometowns Ahmadabad. Bangalore. Calcutta. Lucknow and Indore (not necessarily In that order). Their planes were scheduled to leave Goa airport at 9 AM. 11 AM. 1 PM. 3 PM and 5 PM (not necessarily in that order). The five friends specialized in HR, Marketing. Systems. Finance and Operations (not necessarily in that order).

Further, the following details are known:

- 1. No friend graduated from the NIM located in his hometown.
- The aeroplane of the friend whose hometown Is Lucknow was the first aeroplane scheduled to leave while the aeroplane of the friend who graduated from NIM Ahmedabad was the last aeroplane scheduled to leave.
- 3. Ramesh's hometown Is Indore and he graduated from NIM Ahmedabad.
- 4. Parag's aeroplane to Ahmedabad was scheduled to leave at 3 PM.
- 5. Vitas graduated from an NIM located in Tushar's hometown while Rajesh graduated from an NIM located in VIIases hometown.
- 6. The aeroplane of the friend who graduated from NIM Bangalore was scheduled to leave before the aeroplane of the friend whose hometown Is Bangalore.
- 7. The friend whose hometown is Lucknow specialized In Finance while the friend who graduated from NIM Lucknow specialized in Operations.
- 8. The friend whose hometown Is Calcutta specialized in Marketing while the friend who graduated from NIM Indore specialized In HR.
- 9. Parag did not graduate from NIM Calcutta or NIM Lucknow.
- 18. Where did Parag graduate from?
  - A) Ahmedabad B) Bangalore
    - C) Indore D) Cannot be determined
- 19. What was Ramesh's specialization? A) Finance B) Marketing
  - C) Systems D) Operations

- 20. Who specialized in Marketing?A) TusharB) Rajesh or VilasC) Tushar or Rajesh
  - D) Tushar or Vilas or Rajesh
- 21. If Tushar graduated from Bangalore, whose hometown is Bangalore?
  A) Private D) Vilage (C) Tuchar (D) Para

A) Rajesh B) Vilas C) Tushar D) Parag

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

Drona once wanted to test his students in the skills they had learnt from him. So he conducted five competitions/exams one each on archery, wrestling, spear throw, swimming and vedic theory. Five students Arjun, Yudhisthira, Duryodhan, Dushasan and Bhima

participated in all the competitions. The student winning a particular competition/exam was awarded 5 points; the runner up was awarded 4 points and so on; and the person who was last was awarded 1 point. Following is known about the outcome of various competitions:

- Arjun scored highest points cumulatively
- Dushasan scored more points than Bhima cumulatively each student came first in at least one competition and also came last in at least one competition
- Yudhisthira did not secure the same place in any two of the competitions
- Bhima was not first in the swimming competition
- Dushasan came first in Spear throw and came last in Vedic theory
- Arjun and Yudhisthira secured consecutive positions in all competitions except swimming competition in which Yudhisthira was last
- Bhima scored a total of 13 points in all the competitions and stood fourth in both Spear throw competition and Vedic theory exam
- Duryodhan came second in the wrestling competition while Arjun came first in the vedic theory exam
- 22. How many points did Arjun score in all the competitions together? A) 18 B) 17 C) 16 D) 19.
- 23. Who stood 3rdin wrestling competition?A) YudhisthiraB) DuryodhanC) ArjunD) Dushasan
- 24. In how many competitions did Dushasan secure third spot? A) 0 B) 1 C) 2 D) 3

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

A couple was confused as to what to name their new born son. So they went to a numerologist and he suggested the following. (A

numerologist considers the numerical value of all the alphabets as A=1, B=2, ..., and Z=26)

- 1. It must be a nine lettered name starting with 'R'
- The letter 'H' must appear in the name twice and there must be at least 3 other alphabets between them
- 3. The letter 'Z' should not appear in the name
- 4. Exactly one vowel must be repeated and one third of the letters in the name must be vowels

2 | Visit: <u>www.fundamakers.com</u>



- 5. There should be exactly two prime valued consonants in the name
- 6. Sum of values of all the vowels in the name must be 23
- 7. The vowels must occupy prime numbered positions in the name and must not be placed next to each other
- 8. Sum of values of first three letters, middle three letters and last three letters in the name must be 26, 43 and 32 respectively
- 9. The prime valued consonant must be the third letter in the name

The couple followed all the conditions in naming their son.

25.	What is	in the name?		
	A) H	B) N	C) S	D) A

- 26. Between which of the following letters and the middle letter of the name are there exactly 2 other letters? A) A B) W C) H D) G
- 27. What can be the difference in the values of the letters at the 4thand the 9thposition?A) 15 B) 13 C) 10 D) 12

**Directions:** P Q R S T U V W and X are members, who have to attend three meetings: M1, M2, and M3. It is given that:

- 1. Each number has to attend exactly one of the three meetings.
- 2. None of S T V has to attend meeting M1.
- 3. None of P R W has to attend meeting M2.
- 4. None of Q U X has to attend meeting M3.

100

5. The number of people attending meeting M1 should be two more than the number of people attending meeting M3.

28.	If Q and T	attend th	ne same meet	ing then how many			
	members will attend the meeting M1?						
ω.	A) 3	B) 4	C) 5	D) Either 1 or 2			

29. If R has to be there with X in a meeting and Q has to be there with V in another meeting, who will definitely attend the meeting M1?A) R, X, P & UB) R, X, P & W

C) R, X & P D) R & X

**Directions:** Three reviewers Amal, Bimal, and Komal are tasked with selecting questions from a pool of 13 questions (Q01 to Q13). Questions can be created by external "subject matter experts" (SMEs) or by one of the three reviewers. Each of the reviewers either approves or disapproves a question that is shown to them. Their decisions lead to eventual acceptance or rejection of the question in the manner described below.

If a question is created by an SME, it is reviewed first by Amal, and then by Bimal. If both of them approve the question, then the question is accepted and is not reviewed by Komal. If both disapprove the question, it is rejected and is not reviewed by Komal. If one of them approves the question and the other disapproves it, then the question is reviewed by Komal. Then the question is accepted only if she approves it.

A question created by one of the reviewers is decided upon by the other two. If a question is created by Amal, then it is first reviewed by Bimal. If Bimal approves the question, then it is accepted. Otherwise, it is reviewed by Komal. The question is then accepted only if Komal approves it. A similar process is followed for questions created by Bimal, whose questions are first reviewed by Komal, and then by Amal only if Komal disapproves it. Questions created by Komal are first reviewed by Amal, and then, if required, by Bimal.

The following facts are known about the review process after its completion.

- 1. Q02, Q06, Q09, Q11, and Q12 were rejected and the other questions were accepted.
- 2. Amal reviewed only Q02, Q03, Q04, Q06, Q08, Q10, Q11, and Q13.
- 3. Bimal reviewed only Q02, Q04, Q06 through Q09, Q12, and Q13.
- 4. Komal reviewed only Q01 through Q05, Q07, Q08, Q09, Q11, and Q12.
- 30. How many questions were DEFINITELY created by Amal?
- 31. How many questions were DEFINITELY created by Komal?
- 32. How many questions were DEFINITELY created by the SMEs?
- 33. How many questions were DEFINITELY disapproved by Bimal?a) 7 b) 4 c) 5 d) 3
- 34. The approval ratio of a reviewer is the ratio of the number of questions (s)he approved to the number of questions (s)he reviewed. Which option best describes Amal's approval ratio?
  a) lies between 0.25 and 0.75
  b) 0.25
  c) lies between 0.25 and 0.50
  - d) either 0.25 or 0.75
- 35. How many questions created by Amal or Bimal were disapproved by at least one of the other reviewers?a) 7 b) 2 c) 4 d) 5

Answer Kev

1. C	2. A	3. E	4. C	5. D	6. C	7. D	8. B	9. B	10. C
11. A	12. B	13. B	14. C	15. C	16. A	17. A	18. C	19. C	20. D
21. A	22. A	23. D	24. C	25. B	26. A	27. A	28. D	29. D	30. 3
31. 1	32. 3	33. B	34. A	35. D					