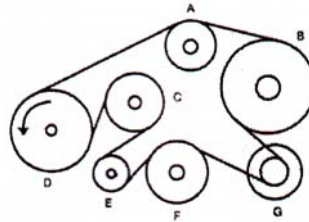


SNAP – 2008

ANALYTICAL & LOGICAL REASONING SECTION

For all questions in this section, correct answers carry 2 marks each.

1. A band passes around all the wheels so that they can all be turned by the driving wheel. When the driving wheel turns in the direction shown. Which way will the wheel B turn?



- (a) Clockwise (b) Cannot move (c) Anti-clockwise (d) Either way
2. In a certain language, (A) 'Sun shines brightly' is written as 'ba lo sul'; (B) 'Houses are brightly lit' as 'kado udo ari ba'; and (C) 'Light comes from sun' as 'dapi kup lo nro'. What words will be written for 'sun' and 'brightly'?

- (a) Lo, ba (b) ba, lo (c) snl, lo (d) ba, sul

3. Given are the following three equations:

1. =

2. =

3. =

How many circles are equivalent to a square, as per the ratios in the three given equations?

- (a) =
- (b) =
- (c) =
- (d) =

4. Each child in a family has at least 4 brothers and 3 sisters. What is the smallest number of children the family might have?

- (a) 7 (b) 8 (c) 9 (d) 10

5. In the following question two statements are followed by two conclusions numbered I and II. Assume the two statements are true even if they are at variance with commonly known facts. Then pick the correct answer from the choices given below.

- (A) only conclusion I follows
 (B) Only conclusion II follows

(C) Both conclusions I & II follow

(D) Neither conclusion I nor conclusion II follows

Statements: Some doctors are fools. Joshi is a doctor.

Conclusions: I. Joshi is a fool.

II. Some fools are doctors.

(a) A

(b) B

(c) C

(d) D

6. Debu walks towards east then towards North and turning 45° right walks for a while and lastly turns towards left. In which direction is he walking now?

(a) North

(b) East

(c) South-East

(d) North-West

Directions for questions 7 – 9: Read the following instructions and answer.

- I. There is a rectangular wooden block of length 4 cm, height 3 cm and breadth 3 cm.
- II. The two opposite surfaces of $4\text{ cm} \times 3\text{ cm}$ are painted yellow on the outside.
- III. The other two opposite surfaces of $4\text{ cm} \times 3\text{ cm}$ are painted red on the outside.
- IV. The remaining two surfaces of $3\text{ cm} \times 3\text{ cm}$ are painted green on the outside.
- V. Now, the block is cut in such a way that cubes of $1\text{ cm} \times 1\text{ cm} \times 1\text{ cm}$ are created.

7. How many cubes will have only one colour?

(a) 10

(b) 12

(c) 14

(d) 18

8. How many cubes will have no colour?

(a) 1

(b) 2

(c) 4

(d) 8

9. How many cubes will have any two colours?

(a) 32

(b) 24

(c) 16

(d) 12

10. Read the following about the grid given below and answer.

- The cells in this grid contain the digits 1 to 9 in random order.
- Column A contains no odd digits.
- Cell C3 minus Cell C2 equals 4.
- The sum of three digits in Row 1 is 17.
- Number 7 is in column B; its left hand neighbour is not 4.
- The digits of Column C add upto 14.
- 2 is not in the same horizontal row as 8; and 9 is not immediately below 3.

	A	B	C
1			
2			
3			

Which cell holds the number 9?

(a) B1

(b) B3

(c) C2

(d) C1

11. Replace the question mark with the right option.

4, 32, 288, ?, 31680

(a) 25600

(b) 2880

(c) 7420

(d) 10000

12. In the Sunday bazaar, Jamuna sells her lemons at Rs. 0.50 for two. Her neighbor Seema has a little smaller lemons; she sells hers at Rs. 0.50 for three. After a while, when both ladies have the same number of lemons left, Seema is called away. She asks her neighbour to take care of her goods. To make things simple, Jamuna puts all lemons in one big pile, and starts selling five lemons per one rupee. When Seema returns, at the end of the day, all lemons have been sold. But when they start

dividing the money, there appears to be a shortage of Rs. 3.50. Supposing they divide the money equally, how much does Jamuna lose with this deal?

- (a) Rs. 10.50 (b) Rs. 11.50 (c) Rs. 42.00 (d) Rs. 52.50

13. There are two cups, one containing orange juice and one containing an equal amount of lemonade. One teaspoon of the orange juice is taken and mixed with the lemonade. Then a teaspoon of this mixture is mixed back into the orange juice. Is there more lemonade in the orange juice or more orange juice in the lemonade?

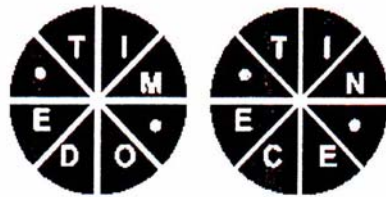
- (a) More orange juice in the lemonade
 (b) More lemonade in the orange juice
 (c) Equal amount of each juice between the two cups
 (d) None of the above

14. Consider the statement and decide which of the assumptions are implicit:–
 “In the present period of economic hardships, education and small family norm may lead the nation to progress and prosperity”

Assumptions: A. Education and small family norms are directly related to nations progress.
 B. Big families find it difficult to bear the cost of education.

- (a) Only A is implicit (b) Only B is implicit
 (c) Both A & B are implicit (d) Neither A nor B is implicit

15. Fill in the blanks to find two words that are synonyms



- (a) KS, ST (b) MS, NT (c) ST, DN (d) MS, DN
INMODEST (b) **INDECENT**

16. Beautiful beaches attract people, no doubt about that. Just look at the city’s most beautiful beaches, which are amongst the most overcrowded places in the state.

Which of the following exhibits a pattern of reasoning similar to the one exhibited in the argument above?

- (a) Moose and bear usually appear at the same drinking hole at the same time of day. Therefore, moose and bear must be feeling thirsty at about the same time.
 (b) Children who are scolded severely tend to misbehave more often than other children. Hence if a child is not scolded severely, that child is less likely to misbehave
 (c) During warm weather my dog suffers more class than during cool weather. Therefore, fleas must thrive in a warm environment
 (d) Tally accounting software helps increase the work efficiency of its users. As a result, these users have more time for other activities.

17. Abdul, Mala, and Chetan went bird watching. Each of them saw one bird that none of the others did. Each pair saw one bird that the third did not. And one bird was seen by all three. Of the birds Abdul saw, two were yellow. Of the birds Mala saw, three were yellow. Of the birds Chetan saw, four were yellow. How many yellow birds were seen in all? How many non–yellow birds were seen in all?

- (a) 7 yellow birds and 3 non yellow birds (b) 5 yellow birds and 2 non yellow birds
 (c) 4 yellow birds and 2 non yellow birds (d) 3 yellow birds and 2 non yellow birds

18. In each of the following sets I & II, find the word or pair of words different from the other three words or pair of words:

- I. J. Lake K. Brook L. Stream M. River
 II. J. Weighty – Heavy K. Broad – Wide L. Big – Large M. Tiny – Small

- (a) I – J, II – J (b) I – K, II – M (c) I – K, II – J (d) I – J, II – K

19. A, B, C and D are standing on the four corners of a square field as shown in the figure. From the positions shown in the figure, A walks to the North position and B walks to the East position while C decides to walk two sides in anticlockwise direction. B walks to North and then changes his mind to take the previous position. Identify the choice with correct positions.



- (a) A & B occupy the same position.
 (b) C & D occupy the same position.
 (c) D & B are in their original positions.
 (d) B & C are in diagonally opposite positions.

20. A gambler bet on a horse race, but the bookie wouldn't tell him the results of the race. The bookie gave clues as to how the five horses finished – which may have included some ties – and wouldn't pay the gambler off unless the gambler could determine how the five horses finished based on the following clues:

- Penn Fe finished before Night Marvel and after Wish Bones.
- Wish Bones tied with Penn Fe if and only if Hallelujah did not tie with Sundae.
- Penn Fe finished as many places after Sundae as Sundae finished after Wish Bones if and only if Wish Bones finished before Night Marvel.

The gambler thought for a moment, then answered correctly. How did the five horses finish the race?

- (a) Sundae came in first. Wish Bones and Hallelujah tied for second place. Penn Fe came in fourth. Night Marvel came in fifth.
 (b) Wish Bones came in first. Sundae and Penn Fe tied for second place. Hallelujah came in fourth. Night Marvel came in fifth.
 (c) Wish Bones came in first. Sundae and Hallelujah tied for second place. Penn Fe came in fourth. Night Marvel came in fifth.
 (d) Penn Fe came in first. Night Marvel and Hallelujah tied for second place. With Bones came in fourth. Sundae came in fifth.

21. In a school drill, a number of children are asked to stand in a circle. They are evenly spaced and the 6th child is diametrically opposite the 16th child. How many children are made to stand in the circle?

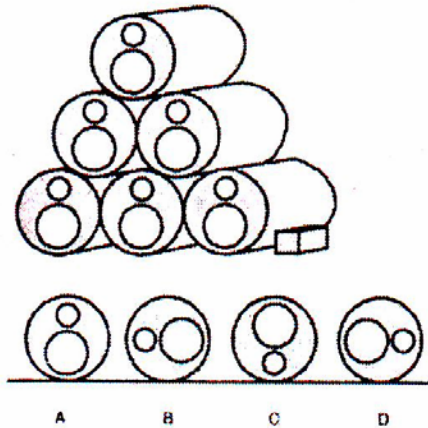
- (a) 16 (b) 20 (c) 22 (d) None of the above

22. In this question insert the missing number at the sign of interrogation.

8	4	9	5
5	7	3	4
3	4	5	8
39	44	60	?

- (a) 62 (b) 72 (c) 60 (d) 70

23. Steel cylinders are made so that each one has a large and small hole through the middle. In the drawing six cylinders have been staked on top of each other. To stop the cylinders from rolling on the smooth floor they are wedged by heavy blocks at each side of bottom row. If the heavy blocks are removed what would be the position of cylinders when they stopped rolling?



- (a) A (b) B (c) C (d) D

Directions for questions 24 – 26: Use the information given below to answer.

- (i) There is a group of 5 persons A, B, C, D and E
- (ii) In the group there is one badminton player, one chess player and one tennis player
- (iii) A and D are unmarried ladies and do not play any games
- (iv) No lady is a chess player or a badminton player
- (v) There is a married couple in the group of which E is the husband
- (vi) B is the brother of C and is neither a chess player nor a tennis player

24. Which of the group has only ladies?

- (a) ABC (b) BCD (c) CDE (d) None of the above

25. Who is the tennis player?

- (a) B (b) C (c) D (d) E

26. Who is the wife of E?

- (a) A (b) B (c) D (d) None of the above

27. Consider the following statements and answer the question.

M, N, O and P are all different individuals

M is the daughter of N.

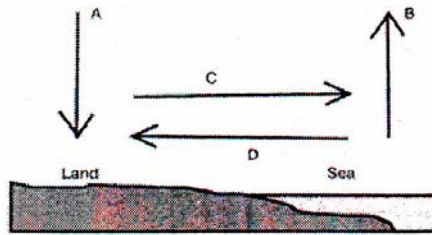
N is the son of O

O is the father of P.

Which among the following statements is contradictory to the above premises?

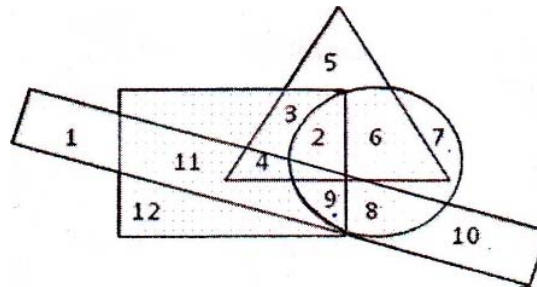
- (a) P is the father of M. (b) O has three children.
 (c) M has one brother. (d) M is the granddaughter of O.

28. The Drawing shows a cross section where the land meets the sea. The section covered is 5 kilometers. On a hot day, in which direction, indicated by four arrows, is the wind most likely to blow?



- (a) A (b) B (c) C (d) D

Directions for question 29 – 30: In the diagram below, the circle stands for 'educated', square stands for 'hard working', triangle for 'urban people' and rectangle for 'honest'. The different regions of the diagram are numbered from 1 to 12. Study the diagram carefully and answer the questions:



29. Uneducated urban hard-working and honest people are indicated by:
 (a) 3 (b) 11 (c) 9 (d) 4
30. Non-urban educated people who are neither hard-working nor honest are indicated by:
 (a) 5 (b) 7 (c) 10 (d) 11