**ANALYTICAL REASONING**.

**Directions for questions 1 to 4:** Nine persons

A, B, C, D, E, F, G, H and I are sitting on a bench in a park not necessarily in the same order. C is to the immediate right of D and is positioned three places to the right of E. B sits at one of the ends. F is three places to the left of B. A is to the immediate left of F. H sits between G and F.

1. Who among the following are the immediate

neighbours of A?

(a) G and E (b) D and G (c) C and F (d) E and D

2. Who is sitting in the middle of the bench in thepark?

(1) A (2) C (3) D (4) G

3. Who among the following is at one of the ends other than B?

(1) C (2) G (3) D (4) E

4. Who among the following is to the immediate left of G?

(1) H (2) B (3) D (4) F

**Directions for questions 5 and 6:** Six persons Arun, Basha, Chandru, Dilip, Edwin and Francis are standing in a queue to buy train tickets.

a. Dilip and Arun have 2 persons between them.

b. Arun is right in front of Chandru.

c. Edwin is not near Dilip.

d. Francis is just behind Basha.

5. Who is in front?

(1) Arun (2) Basha (3) Chandru (4) Dilip

6. Where is Chandru?

(1) Between Arun and Edwin (2) In the last

(3) Between Arun and Dilip

(4) Between Arun and Francis

**Directions for questions 7 and 8:**

Eight friends A, B, C, D, E, F, G and H are sitting in a circle facing towards the center. G and D are sitting on either side of B. H is three places to the left of B and two places to the right of A. C is sitting between A and G. B and E are not sitting opposite to each other.

7. Who is the three places to the left of D?

(1) A (2) H (3) E (4) F

8. Which of the following statements is not true?

(1) D and A are sitting opposite to each other.

(2) C is three places to the right of D.

(3) Only H is sitting between F and D.

(4) Only A is sitting between C and F

**Directions for questions 9 to 11:**

For breakfast, four fruits are to be selected from seven fruits – Apple, Banana, Mango, Guava, Orange, Musambi and Grapes – kept at the breakfast table, subject to the following conditions:

a. Orange and Musambi cannot be selected together.

b. At least 2 of Apple, Banana and Mango must be selected.

c. Either guava or grapes must be selected.

9. In how many ways can a person select four

fruits under the given conditions?

(1) 20 (2) 35 (3) 25 (4) 14

10. If Apple, Banana and Mango are selected as the three fruits then which of the following fruits will not find a place in the breakfast table?

(1) Grapes (2) Orange

(3) Musambi (4) More than one of the above

11. Which of the following cannot be the possible combination at the breakfast table?

(1) Apple, Banana, Mango, Grapes.

(2) Apple, Banana, Grapes, Guava.

(3) Apple, Banana, Guava, Orange.

(4) Banana, Mango, Guava, Musambi.

**Answer Questions 12 to 16 on the basis of the information given below:**

Five cities all got more rain than usual this year. The five cities are: Last Stand, Mile City, New Town, Olliopolis, and Polberg. The cities are located in five different areas of the country: the mountains, the forest, the coast, the desert, and in a valley. The rainfall amounts were: 12 inches, 27 inches, 32 inches, 44 inches, and 65 inches.

\* The city in the desert got the least rain; the city in the forest got the most rain.

\* New Town is in the mountains.

\* Last Stand got more rain than Olliopolis.

\* Mile City got more rain than Polberg, but less rain than New Town.

\* Olliopolis got 44 inches of rain.

\* The city in the mountains got 32 inches of rain; the city on the coast got 27 inches of rain.

12. Which city got the most rain?

a) Last Stand b) Mile City c) New Town

d) Olliopolis e) Polberg

13. How much rain did Mile City get?

a) 12 inches b) 27 inches c) 32 inches

d) 44 inches e) 65 inches

14. Which city is in the desert ?

a) Last Stand b) Mile City c) New Town d) Olliopolis e) Polberg

15. Where is Olliopolis located?

a) mountains b) coast c) valley d) desert e) forest

16. Where is New Town located?

a) mountains b) coast c) valley d) desert e) forest

**Directions for the questions 17 and 18:** Among the three persons A, B and C one is a truth teller, one is a liar and the other is an alternator. A truthteller is person who always tells the truth. A liar is a person who always lies. An alternator is person who alternates between make a true statement and a false statement. Each of them made the following statements in reply to the question asked about them

A I am not the liar. C is the liar

B: I am the liar. A is the truth teller

C: I am the alternator. B is the liar

17. Who is the liar?

(1) A (2) B (3) C (4) Cannot be determined

18. Who is the truth teller?

(1) A (2) B (3) C (4) Cannot be determined

**Directions for the questions 19 to 22:** P, Q, R, S, T, U and V are seven players. They form two teams of two players each and one team of three players. P and Q cannot be in the same team. Q and R cannot be in the same team where as T and U must be in the same team. V and S cannot be in the same team.

19. If R, S and P form a team of three players which of the following can be the members of one of the other team?

(1) P and T (2) V and Q

(3) T and U (4) Both (2) and (3)

20. If T, U and V form a team of three members then in how many in how many ways can the teams of two members be formed?

(1) 2 (2) 4 (3) 3 (4) 1

21. If S and P are not in the same team then in how many ways can the teams of two members be formed?

(1) 4 (2) 7 (3) 8 (4) 5

22. If Q, T and U form a team of three members which of the following cannot be the two teams of two members each?

(1) PR, VS (2) PS, RV

(3) PV, RS (4) Both (1) and (2)

**Directions for the questions 23 to 25:** There are three on-off switches on a control panel A, B, and C. They have to be changed from an initial setting to a second setting according to the following conditions :  
In case only switch A is the switch on in the initial setting , then turn on switch B. In case switches A and B are the only switches on in the initial setting, then turn on switch C.  
In case all the three switches are on initially setting, then turn off the switch C.  
For any other initial setting, turn on all switches that are off and turn off all switches, if any, that are on.

23. In case in the initial setting is the switches A and B are on and the switch C is off, then what could be the second setting?

a) A on, B on, C on b) A on, B off, C on

c) A on, B off, C off d) A off, B on, C off

24. In case switch A is off in the second setting, which among the following could have been the initial setting ?

a) A on, B on, C on b) A on, B on, C off

c) A on, B off, C on d) A on, B ffn, C off

25. In case only switch B is on in the second setting, which among the following could have been the initial setting ?

a) A on, B on, C on. b) A on, B off, C on.

c) A off, B on, C off. d) A off, B off, C on.