Satyam Aptitude Paper Aug 2008

Directions (Q. 1-5): Study the following information carefully and answer the questions given below:

Ten persons P, Q, R, S, T, U, V, W, X and Y are sitting around a round table facing towards the centre of the table.
U is sitting between T and W. R, who is not sitting adjacent to X, is sitting third to the right of T. Y is sitting fourth to the left of W. S and V are adjacent to each other. X, who is sitting fifth to the left of S, is not sitting adjacent to W, R or Y. S is not sitting third to the right of R.

1. Who is sitting second to the right of R?
1) P
2) Q
3) X
4) S
5) Either P or Q

2. Who is sitting fourth to the right of W?
1) P
2) Q
3) S
4) V
5) Either S or V

3. In which of the given pairs is the second person sitting third to the left of the first person?
1) UV
2) TR
3) YS
4) WS
5) None of these

4. Which of the following statements is certainly correct?
1) Q is sitting on the immediate left of W.
2) T and S are sitting adjacent to each other.
3) P is sitting on the immediate right of Y.
4) T is fourth to the left of X.
5) None of these

5. Which of the following statements is definitely false?
1) X is sitting adjacent to P.
2) Q is sitting adjacent to X.
3) Q is sitting between X and W.
4) Y is sitting between P and R.
5) Y is sitting adjacent to V.

6. Four of the following five are alike in a certain way and hence form a group. Which of the following

does not belong to that group?
1) Anklet
2) Armlet
3) Bangle
4) Earring
5)Necklace

Directions (Q.7-10): In each question below is given a statement followed by three assumptions numbered I, II and III. An assumption is something supposed or taken for granted. You have to consider the statements and the following assumptions and decide which of the assumptions is implicit in the statement.

7. Statement: State XYZ has decided to provide subsidy for a battery-powered bike and the subsidy would initially be restricted to 200 units.
Assumptions:
I. The move may allure all citizens to buy battery-powered bike.
II. The move may encourage the people to purchase battery-powered bike.
III. Battery-powered bike may prove friendly for the state as well as the customers.

1) Only I and II
2) Only II and III
3) Only I and III
4) All I, II and III
5) None of these

8. Statement: The water of the Ganga is more fit for taking a holy dip than it used to be 20 years ago, despite unrelenting discharge of effluents by some of the rogue cities along its banks; now the biochemical oxygen demand (BoD) has fallen 6.2 milligrams per litre (mgl) to 2.7 mgl in latest count last year.
Assumptions: I. More the BoD, less the chances of survival of the river life.
II. Decrease in BoD spells good for the humans as well as water life.
III. BoD is the only key indicator of river health.

1) Only I and II
2) Only II and III
3) Only I and III
4) All I, II and III
5) None of these

9. Statement: Targeting Buddhist tourists from both India and abroad, the Indian Railways will launch a unique express train connecting all important places of Buddhist pilgrimage in India besides one in Nepal.
Assumptions: I. A unique express train connecting all important places of Buddhist pilgrimage may attract a large number of Buddhist tourists.
II. The move may help the Indian Railways to generate more revenue.
III. Buddhist tourists prefer on-board and off-board catering and housekeeping services.

1) Only I and II
2) Only II and III
3) Only I and III

4) All I, II and III
5) None of these

10. Statement: For the first time, policemen in the City of Lakes are being watched round- the-clock through the close-circuit television cameras connected to the office of the Superintendent of Police.
Assumptions: I. The move may be helpful in reducing the cases related to custodial deaths.
II. The move may reduce the cases regarding dereliction from duty by the police personnel.
III. The move may improve the police-public interaction.

1) Only I and II
2) Only II and III
3) Only I and III
4) All I, II and III
5) None of these

Directions (Q. 11-15): The sentences given in each question, when properly sequenced, form a coherent paragraph. Each sentence is labelled with a letter. Choose the most logical order of sentences from among the five given choices to construct a coherent paragraph.

11. A. In deciding to redouble the war effort, Mr Bush now finds himself almost alone.
B. Instead, he dismissed General Abizaid, and reshuffled key figures in his Iraq team.
C. General John Abizaid, the head of Central Command that overseas American strategy in Iraq and Afghanistan, all but rejected the idea of a "surge" of forces two months ago.
D. Mr Bush has always said he would defer to his military commanders, but this time he did not take their advice.
E. He told a Senate hearing that raising troop levels by 20,000 would have only a "temporary effect" on security and would delay the day Iraqi forces could take control.

1) CEDBA
2) DBACE
3) ACEDB
4) CEABD
5) DECBA

12. A. Much has been made of the risk for Western Europe of depending too heavily of Russian exports of gas.
B. Russia under Vladimir Putin is prone to using energy exports as a blunt tool of foreign policy, especially when trying to bully countries in its hinterland.
C. This week it blocked oil exports passing via Belarus to Europe, though that spat was soon resolved.
D. Complicating the matter is an argument over the security of energy supply in Europe.
E. Last year Russia interrupted gas deliveries to Ukraine, affecting supplies in central and Western Europe too.

1) DECBA
2) ECDAB
3) ECABD
4) DABEC
5) ABECD

13. A. The comic act on Gandhi was also brought to the notice of the government by the same set of self-styled tattlers.

B. But for the government to get that is as difficult as it is to explain a dirty joke to a group of nuns.
C. It's easy and correct to lambast the government for its mai-baap attitude.
D. If Mallika Sherawat dances wearing whatever she wants to at a New year's Eve show, the televisions channels put it on a constant loop for the next several days almost waiting for some poor 'offended soul to file a case for obscenity against Sherawat.
E. But a large chunk of the blame for making Himalayas out of road bumps should lie on the media, especially the increasingly self-righteous television media.
F. A joke is a joke is a joke — risque or otherwise.

1) DAFBCE
2) FBCEDA
3) CEDAFB
4) DBFEAC
5) CEFBDA

14. A. Making landowners permanent beneficiaries will nip the incipient unrest in the bud.
B. By far the easiest way to do this is announce the change in land use and leave it to the market to decide its price.
C. However, where titles are customary and therefore clouded, and the 'owners' of the land, in the modern sense, are hard to identify, the State may feel it necessary to play an intermediary role.
D. It must then ensure that the owners are compensated in ways that make them partners in, and beneficiaries of, all the development.
E. This has the inestimable advantage of being transparent and even-handed.

1) ABCDE
2) ACEBD
3) ADECB
4) ABECD
5) AECDB

15. A. They are equally at sea regarding rules and procedures of Parliament or legislatures and thus their interest is limited.
B. An alert legislature can always keep the executive on its toes.
C. For instance, there are MPs and MLAs who are unaware of the history and ideology of their respective parties.
D. More and more people are entering public life without being fully armed to handle competitive politics.
E. This lack often allows the executive to have free play since it is the bureaucracy which largely calls the shots while parroting "yes, Minister"

1) BDCAE
2) DCAEB
3) BCADE
4) DECAB
5) BCEAD

16. N is natural number such that when it is successively divided by 8, 6 and 7, leaves remainders 3,1 and 5 respectively. If the natural number is divided by 42 the quotient is 40 more than that when the same natural number is divided by 168. Find the value of N.

1) 2267

2) 1957
3) 4463
4) 5524
5) Can't say

17. Each of the numbers x1, x2, x3, x4,.... xn, n ? 7 is equal to either 1 or 0. Two numbers x and y are defined as given:
X= x1x2x3 + x2x3x4 + ...+ xn-2xn-1xn
Y = x1x2x3x4 + x2x3x4x5 + ... + xn-3xn-2xn-1xn
What is the minimum number of xi's (i = 1, 2, 3, ...) that should be equal to 1 in order that X and Y have minimum values of 4 and 3 respectively?
1) 4
2) 5
3) 6
4) 7
5) None of these

18. For which of the following set of values of x is the inequality > 0 satisfied?
1) {-7 < x< 2}
2) {1 < x <5/2}
3) {-6 <x <3/2}
4) {-2 < x < 1}
5) None of these

19. 465 coins consist of one-rupee, 50-paise and 25 paise coins. Their values are in the ratio 5:3:1. Find the number of 50- paise coins.
1) 155
2) 124
3) 186
4) 310
5) None of these

20. Find the number of different ways in which 7^11can be expressed as the product of three factors.
1) 14
2) 16
3) 18
4) 20
5) 22

Direction(Q 21-22): In the following questions two equations are provided. On the basis of these you have to find the relation between p and q.
Give answer (1) if p = q
Give answer (2) if p > q
Give answer (3) if q > p
Give answer (4) if p ? q, and
Give answer (5) if q ? p.

21. I. 5p2 - 8p + 3 = 0
II. 2q2 - 7q + 5 = 0

22. I. $12p^2 - p - 1 = 0$
II. $18q^2 - 9q + 1 = 0$

23. Consider a triangle drawn on x-y plane with its three vertices (21, 0), (0, 21) and (0, 0), each vertex being represented by its (x-y) coordinates. The number of points with integral coordinates inside the triangle (excluding all the points on the boundary) is
1) 211
2) 169
3) 191
4) 170
5) 190

24. There are two alloys of zinc and copper. Alloy-I contains zinc and copper in the ratio 5:4 and Alloy-II contains zinc copper in the ratio 27:13. Two alloys are mixed in a certain proportion such that zinc and copper are in the ratio 483:309 in the resulting alloy. 10Gm of the resulting alloy is taken for testing. What is the contribution of the first alloy (in gm)?
1) 5 gm
2) 6 gm
3) 6 gm
4) 5 gm
5) 6 gm

25. There are K number of points on a line ι and 2K number of points outside the line. The points outside the line are non-collinear. The maximum number of straight lines that can be drawn with the help of these 3K points are 190, including ι. Find the value of K.
1) 5
2) 6
3) 7
4) 8
5) 9

ANSWERS: 1. (5) 2. (4) 3. (3) 4. (2) 5. (5) 6. (5) 7. (5) 8. (1) 9. (1) 10. (2) 11. (3) 12. (4) 13. (3) 14. (4) 15. (2) 16. (1) 17. (3) 18. (4) 19.(3) 20. (2) 21. (5) 22. (5) 23. (1) 24. (3) 25. (2)