



Texas Instruments Aptitude Paper

Q1. It is 12.00 clock. Find how often the minute hand meets the hour hand.

Q2. If $9x-3y=12$ and $3x-5y=7$ then $6x-2y=?$

- a) -5
- b) 4
- c) 2
- d) 8

ANS: d

Q3. In a train Art is found dead. Hours later, 4 people are queried,
Blonde says I am innocent, I did not speak with Art
White says I am innocent, Blonde spoke with Art
Old says I am innocent, the brunette killed Art
Brunette says I am innocent, one of the men killed Art
The inspector says simple, 4 true statements, 4 false statements.
Find out the killer.

Q4. If the date is written as MMDDYYYY, and then 10022001, ie., Oct 2 2001 is a palindrome. Which is the immediate palindrome before that date?

Q5. Find the maximum product using positive integers the sum of which is 100.

Q6. There are 200 questions on a 3 hr examination. Among these questions, 50 questions are mathematics problem. It is suggested that twice as much time be spent on each maths problem as for each other question. How many minutes should be spent on mathematics problems?

- a) 36



- b) 72
- c) 60
- d) 100

ANS: b

Q7. 2 hours after a freight train leaves Delhi, a passenger train leaves the same station travelling in the same direction at an average speed of 16 km/hr. After travelling 4 hrs the passenger train overtakes the freight train. The average speed of the freight train was?

- a) 30
- b) 40
- c) 58
- d) 60

ANS: b

Q8. There are 2 trains travelling at 100 MPH each. There is a 200 Mile tunnel. The trains travel in opposite directions. When the trains enter, a supersonic bee starts at the tunnel, touches the other train, comes back touches the first train, turns again and touches the other train and so on until the trains collide. Find the distance travelled by the bee.

Q9. A company contracts to paint 3 houses. Mr.Brown can paint a house in 6 days while Mr.Black would take 8 days and Mr.Blue 12 days. After 8 days Mr.Brown goes on vacation and Mr. Black begins to work for a period of 6 days. How many days will it take Mr.Blue to complete the contract?

- a) 7
- b) 8
- c) 11
- d) 12



ANS: c

Q10. 5 sea pirates have 100 gold coins and want to share it. They propose a plan. The senior most one has to propose an idea, if at least 50 % agree, the coins are shared accordingly. Else the senior is killed and the next senior most is asked to present a plan and so on. Note, all the guys are very clever and very greedy and do not want to lose the coins, and do not want to die. Form a way to share the money.

Q11. 2 Maths geniuses meet after 20 years. One says I am married and have 3 daughters. The product of their ages is 72. The sum is the same as the house number. The other says, my eldest daughter has just started the piano classes. Find their ages.

Direction for Q12 - 15:

- I. All Gs are Hs
- II. All Gs are Js or Ks
- III. All Js and Ks are Gs
- IV. All Ls are Ks
- V. All Ns are Ms
- VI. No Ms are Gs

Q12. Which of the following is inconsistent with one or more conditions?

- a) All Hs are Gs
- b) All Hs are Ms
- c) Some Hs are both Ms and Gs
- d) No Ms are Hs

ANS: c

Q13. If no Ps are Ks which of the following must be true?

- a) No P is a G
- b) No P is an H



- c) If any P is an H it is a G
- d) If any P is a G it is a J

ANS: d

Q14. Which of the following can be logically deduced from the stated conditions?

- a) No Ms are Hs
- b) No Hs are Ms
- c) Some Ms are Hs
- d) No Ns are Gs

ANS: d

Q15. The statement No Ls are Js is

I. Logically deducible from the conditions stated

II Consistent with but not deducible from the conditions stated

III. Deducible from the stated conditions together with the additional statements No Js are Ks

- a) I only
- b) II only
- c) III only
- d) II and III only

ANS: d

Direction for Q 16 - 19:

After months of talent searching for an administrative assistant to the president of the college the field of applicants has been narrowed down to 5--A, B, C, D, E. It was announced that the finalist would be chosen after a series of all-day group personal interviews were held. The examining committee agreed upon the following procedure:

- I. The interviews will be held once a week
- II. 3 candidates will appear at any all-day interview session



- III. Each candidate will appear at least once
- IV. If it becomes necessary to call applicants for additional interviews, no more 1 such applicant should be asked to appear the next week
- V. Because of a detail in the written applications, it was agreed that whenever candidate B appears, A should also be present.
- VI. Because of travel difficulties it was agreed that C will appear for only 1 interview.

Q16. If A ,B and D appear for the interview and D is called for additional interview the following week, which 2 candidates may be asked to appear with D?

- I. A
- II. B
- III. C
- IV. E

- a) I and II
- b) I and III only
- c) II and III only
- d) III and IV only

ANS: d

Q17. At the first interview the following candidates appear A,B,D. Which of the following combinations can be called for the interview to be held next week?

- a) BCD
- b) CDE
- c) ABE
- d) ABC

ANS: b

Q18. Which of the following correctly state(s) the procedure followed by the search committee?



- I. After the second interview all applicants have appeared at least once
- II. The committee sees each applicant a second time
- III. If a third session, it is possible for all applicants to appear at least twice

- a) I only
- b) II only
- c) III only
- d) Both I and II

ANS: a

Q19. Which of the following is a possible sequence of combinations for interviews in 2 successive weeks?

- a) ABC; BDE
- b) ABD; ABE
- c) ADE; ABC
- d) BDE; ACD

ANS: c

Direction for Q 20- 23:

In a certain society, there are two marriage groups, red and brown. No marriage is permitted within a group. On marriage, males become part of their wives groups; women remain in their own group. Children belong to the same group as their parents. Widowers and divorced males revert to the group of their birth. Marriage to more than one person at the same time and marriage to a direct descendant are forbidden.

Q20. A male born into the brown group may have

- a) An uncle in either group
- b) A brown daughter
- c) A brown son
- d) A son-in-law born into red group

ANS: a



Q21. If widowers and divorced males retained their group they had upon marrying which of the following would be permissible? (Assume that no previous marriage occurred)

- a) A woman marrying her dead sisters husband
- b) A woman marrying her divorced daughters ex-husband
- c) A widower marrying his brothers daughter
- d) A woman marrying her mothers brother who is a widower.

ANS: d

Q22. A brown female could have had

- I. A grandfather born Red
- II. A grandmother born Red
- III. Two grandfathers born Brown

- a) I only
- b) III only
- c) I, II and III
- d) I and II only

ANS: d

Q23. Which of the following is not permitted under the rules as stated?

- a) A brown male marrying his fathers sister
- b) A red female marrying her mothers brother
- c) A widower marrying his wifes sister
- d) A widow marrying her divorced daughters ex-husband

ANS: b

Direction for Q 24 - 26:

A certain city is served by subway lines A,B and C and numbers 1,2 and 3.



When it snows , morning service on B is delayed.

When it rains or snows , service on A, 2 and 3 are delayed both in the morning and afternoon.

When temperature falls below 30 degrees fahrenheit afternoon service is cancelled in either the A line or the 3 line, but not both.

When the temperature rises over 90 degrees fahrenheit, the afternoon service is cancelled in either the line C or the 3 line but not both. When the service on the A line is delayed or cancelled, service on the C line which connects the A line, is delayed. When service on the 3 line is cancelled, service on the B line which connects the 3 line is delayed.

Q24. On Aug 15th with the temperature at 97 degrees fahrenheit it begins to rain at 1 PM. What is the minimum number of lines on which service will be affected?

- a) 2
- b) 3
- c) 4
- d) 5

ANS: c

Q25. On which of the following occasions would service be on the greatest number of lines disrupted?

- a) A snowy afternoon with the temperature at 45 degree fahrenheit
- b) A snowy morning with the temperature at 45 degree fahrenheit
- c) A rainy afternoon with the temperature at 45 degree fahrenheit
- d) A rainy afternoon with the temperature at 95 degree fahrenheit

ANS: b