REASONING APTITIUDE

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

Eight friends A, B, C, D, P, Q, R and S are sitting in two circles in such a manner that each member of the inner circle sits exactly opposite the member of the outer circle. The members sitting in the outer circle are P, Q, R and S and all of them are facing towards the centre while the members of the inner circle are A, B, C and D and they are facing away from the centre. Each of them likes a different colour, viz Red, Yellow, Blue, Green, White, Black, Orange and Purple, but not necessarily in the same order. 3

D likes neither Yellow nor White and faces R, who likes neither Black nor Purple. The person who likes orange faces the person who likes Red. A, who likes Green, faces the immediate neighbor of the person who likes Blue. R sits second to the left of S. The persons who like White and Red are in separate circles. The person who likes Black sits on the immediate left of S. Q, who does not like Blue, does not face A. The persons who like Black and Purple are immediate neighbours, and one of them faces B, who likes Yellow. The persons who like Orange and Green sit in the same circle but they are not immediate neighbour.

1. Who among the following likes White?
   1) R   2) P   3) C
   4) B   5) Can't be determined
2. The person who likes Black is facing who among the following persons?
   1) A   2) B   3) C
   4) D   5) Can't be determined
3. P likes which of the following colours?
   1) Red   2) White   3) Black
   4) Blue   5) Either Blue or Purple
4. If in a certain way 'P' is related to 'Green' and 'Q' is related to 'Orange' then which of the following is 'S' related to?
   1) Red   2) Black   3) Purple
   4) Yellow   5) None of these
5. Which of the following statements is true about the person who likes 'Purple"?
   1) He is on the immediate left of the person who likes Green.
   2) He faces the person who likes Green.
   3) He is not facing the person who likes Green.
   4) The person sitting opposite him likes Yellow.
   5) None of these

Directions (6-10) Some statements are given followed by some conclusions. You have to consider the statements to be true even if they seem to be at variance from commonly known facts. You have to decide which of the following conclusions follow from the given statements:

6. **Statements:** All boys are girls.

Some girls are men.   No men is a women.
Conclusion : (i) Some girls are not women
(ii) Some girls being women is a possibility
(iii) Some boys are not women
1) Only (i) follow   2) Only (ii) and (iii) follow
3) Only (i) and (ii) follow
4) All follow   5) None of these

7. **Statements:** Some birds are animals.
Some animals are idiots.   All idiots are humans.
No idiots is bat.   Some bats are Animals
Conclusion : (i) Some animals are not bats
(ii) some animals are humans
(iii) some humans are idiots
1) Only (i) follow   2) Only (ii) and (iii) follow
3) Only (i) and (ii) follow   4) All follow
5) None of these

8. **Statements:** All boys are girls.
Some girls are not men.   No men is a women.
Some women are girls.   No women is human.
Conclusion : (i) All boys are humans.
(ii) Some girls being men is a possibility.
(iii) All boys being men is a possibility.
1) Only (i) follow   2) Only (ii) and (iii) follow
3) Only (i) and (ii) follow   4) All follow
5) None of these

9. **Statements:** All beetels are nuts.
All nuts are leaves.   All leaves are trash.
Some trash is ball.   No leave is important.
Some important are trash.
Conclusion:
(i) All ball being important is a possibility
(ii) some leaves are ball.
(iii) Some important being beetel is a possibility
1) Only (i) follow   2) Only (ii) and (iii) follow
3) Only (i) and (iii) follow
4) All follow   5) None of these

10. **Statements:** All fun is revenge.
No fun is entertainment.
All entertainment is awesome.
Some awesome is revenge.
No revenge is heart.
Conclusion : (i) Some awesome is heart
(ii) Some awesome is not entertainment
(iii) Some awesome is not heart
1) Only (i) follow
2) Either (i) or (ii) and (iii) follow
3) Either (i) or (iii) and (ii) follow
4) All follow   5) None of these

Directions (11-15): Study the following information carefully and answer the questions asked:

When a word and number arrangement machine is given an input line words and number, it arranges them following a particular rule. The following is the illustration of input and re-arrangement-

Input : 48 245 182 26 99 542 378 297
Step I : 542 48 245 182 26 99 378 297
Step II: 542 26 48 245 182 99 378 297
Step III: 542 26 378 48 245 182 99 297
Step IV: 542 26 378 48 297 245 182 99
Step V: 542 26 378 48 297 99 245 182
This is the final arrangement and step V is the last step for this input

11. What will be fourth step for an input whose second step is given below
Step II : 765 42 183 289 542 65 110 350
1) 765 42 542 350 183 289 65 110
2) 765 42 542 65 110 183 289 350
3) 765 42 542 65 183 289 110 350
4) 765 42 542 183 65 289 110 350
5) None of the above

12. What should be the third step of the following inputs?
Input : 239 123 58 361 495 37
1) 495 37 361 123 239 58
2) 495 37 58 361 123 239
3) 495 37 58 123 361 239
4) 495 37 361 239 123 58
5) None of the above

13. How many steps will be required to get the final output from the following input?
Input : 39 88 162 450 386 72 29
1) Three   2) Four   3) Six
4) None of these   5) Five

14. What should be the last step of the following input?
Input : 158 279 348 28 326 236
1)348 28 326 158 279 236
2) 348 28 326 236 158 279
3) 348 28 326 158 279 236
4) 348 28 158 326 236 279
5) None

15. If the first step of an input is "785 198 32 426 373 96 49" then which of the following step will be" 785 32 426 49 198 373 96 "?
1) Third   2) Fourth   3) Fifth
4) Second   5) None

Directions (16-20): In the following questions, the symbols @, #, %, $ and * are used with the following meaning as illustrated below.
'A @ B' means 'A is not smaller than B'
'A # B' means 'A is neither smaller than nor equal to B'
'A % B' means 'A is neither smaller than nor greater than B'
'A $ B' means 'A is not greater than B'
'A * B' means 'A is neither greater than nor equal to B'
Give answer 1) : If only conclusion 1 is true
Give answer 2) : If only conclusion 2 is true
Give answer 3) : If either conclusion 1 or 2 is true
Give answer 4) : If neither conclusion 1 nor 2 is true
Give answer 5) : If both conclusions 1 and 2 are true

16. Statements: C%D, E$F, D#F, A@B, B#C
    Conclusion : (i) E*A   (ii) C%F
17. Statements: R%S, P$Q, T*U, Q#R, S@T

Conclusion : (i) P#R (ii) R*U
18. Statements: E$F, A@B, B#C, D#F, C%D
    Conclusion : (i) D*A (ii) A#D
19. Statements: V$W, Y#Z, X*Y, U$V, W%X
    Conclusion : (i) X@U   (ii) U$Z
20. Statements: T*U, Q#R, S@T, R%S, P$Q
    Conclusion : (i) T*Q (ii) P@U

Directions (21-25): Study the following information answer the questions that follow. Seven institutes P, Q, R, S, T, U and V provide coaching for seven different competitive exams, viz. Engineering, NET,CAT," SSC, Banking, Medical and TET, but not necessarily in the same order. There is one day weekly, off in each institute from Monday to Sunday but not necessarily in the same order. No two institutes have the same weekly off day.
❖ Institute R provides coaching for NET and is not closed either on Friday or on Wednesday.
❖ Institute S provides coaching for Engineering, and Thursday is its weekly off day.
❖ Institute T and U do not provide coaching for Banking and neither of these has Wednesday as weekly off day
❖ Institute Q provides coaching for SSC and remains closed on Sunday.
❖ The one which provides coaching for Medical has Tuesday as weekly off day.
❖ Institute V provides coaching for TET and remains closed on Monday.
❖ Institute T does not provide coaching for CAT.

21. Institute R remains closed on which of the following days?
1) Sunday   2) Monday   3) Tuesday
4) Saturday 5) None of these

22. Which of the following institutes provides coaching for Banking?
1) P   2) T   3) U
4) T or U   5) None of these

23. Which of the following combinations is correct?
1) Wednesday — Q — SSC
2) Wednesday — Q — Banking
3) Friday — U — CAT
4) Thursday — S— Medical
5) None of these

24. Which institute provides coaching for Medical?
1) P   2) U   3) T
4) S   5) None of these

25. On which of the following days does Institute U remain closed?
1) Tuesday   2) Wednesday   3) Sunday
4) Can't be determined   5) None of these

Directions (26-30): In each question below is given a statement followed by two courses of action numbered I and II. A course of action is a step or administrative decision to be taken for improvement, follow-up or further action in regard to the problem, policy etc. on the basis of the information given in the statement. You have to assume everything in the statement to be true. Then decide which of the two given suggested courses of action logically follows for pursuing. Give answer
1) if only I follows.
2) if only II follows.

3) if either I or II follows.
4) if neither I nor II follows.
5) if both I and II follow.

26. **Statement:** According to a report, energy-guzzling technologies that we use at home, destroy the environment.
    Courses of action:
    I. An effort should be made to discourage use of energy-guzzling technologies.
    II. A special tax should be imposed on the use of such technologies.

27. **Statement:** Militants are now attacking the police in several states of India in a bid to demoralise them and to choke the intelligence network.
    Courses of action:
    I. Government should formulate a plan to equip its policemen with sophisticated weapons and equipment besides making an effort to end militancy in a peaceful way.
    II. The police department should send strict instructions to all the police officers concerned that every policeman on duty should have proper gear like a bullet- proof vest and automatic weapons to counter any sudden attack.

28. **Statement:** With more airlines crossing the Indian skies and air travelling become more affordable, the infrastructure facilities at airports have remained grossly inadequate.
    Courses of action:
    I. All airports in India should be privatised.
    II. A committee should be made to look into the matter and their recommendation should be sought to deal with the situation.

29. **Statement:** A number of travel agents in cities continue to harass and fleece the hapless travellers and cause damage to tourism industry.
    Courses of action:
    I. An effort should be made to punish all such travel agents and an instruction should be given to all travel agents to provide good services and treatment to travellers.
    II. An effort should be made to implement the rules and regulations effectively.

30. **Statement:** Large areas in several towns of the state XYZ lay under waist-deep water as heavy rain lashed coastal areas of the XYZ state for the fourth day.
    Courses of action:
    I. The government should review the situation and the authorities should be asked to undertake enumeration of losses immediately to enable disbursement of relief.
    II. Efforts should be made to ferry people to safer places.

Directions (31-35): Read the following information carefully and answer the questions that follow.

Ten persons are sitting in two parallel rows containing five persons each. In row 1, Amitabh, Rakesh , Akshay, Arti and Ritesh are sitting and all of them are facing south. In row 2, Jaya, Poonam, Twinkle, Gaurav and Jenelia are sitting and all of them are facing north. In the given seating arrangement, each member seated in a row faces another member of the other row. Moreover, each of them belongs to different cities — Meerut, Gurgaon, Begusarai, Hajipur, Noida, Cuttack, Banaras, Haridwar, Allahabad and Mednipur but not necessarily in the same order.

There are only two persons sitting between the person from Merrut, who sits at an extreme end, and Ritesh. Jaya, who sits in the middle of the row, is not an immediate neighbour of Poonam, who is not from Mednipur. Jenelia is sitting at an extreme end. Ritesh, from Noida , sits on the immediate right of the person from Gurgaon and faces the immediate neighhour of Poonam. Rakesh is not sitting at the extreme left end. Jaya is not from Allahabad. There is only one person between Akshay and Arti, who is from Meerut. Gaurav, from Cuttack, is an immediate neighbour of the person from Mednipur and does not face the person from Begusarai. Twinkle, who is from Hajipur, is an immediate neighbour of the person from Allahabad, who in turn faces the immediate neighbour of the person from Noida. There are two persons between the person from Banaras and the person from Begusarai. Rakesh is not from Banaras. Jenelia is not from Haridwar.

31. Amitabh belongs to which of the following cities?
    1) Haridwar 2) Banaras   3) Begusarai
    4) None of these   5) Can't be determined

32. Who is from Haridwar?
    1) Twinkle   2) Rakesh   3) Jenelia
    4) Jaya   5) Can't be determined

33. 'Merrut' is related to 'Banaras' in a certain way, based on their seating positions. Then Mednipur is related to whom, following the same seating positions?
    1) Haridwar   2) Allahabad   3) Gurgaon
    4) Cuttack   5) Hajipur

34. Four of the following five are alike in a certain way based on their seating positions and so form a group. Which of the following is different from the group?
    1) Noida   2) Banaras   3) Mednipur
    4) Hajipur   5) Cuttack

35. Which of the following statements is/are definitely false?
    1) Rakesh is from Begusarai.
    2) There are two persons sitting between the person from cuttack and the person from Allahabad.
    3) The person from Gurgaon faces the person from Haridwar .
    4) The person who is from Allahabad sits opposite the person from Merrut.
    5) All are true

Directions (36-40): In making decisions about important questions, it is desirable to be able to distinguish between 'strong' arguments and 'weak' arguments. 'Strong' arguments are those which are both important and directly related to the question. 'Weak' arguments are those which are of minor importance and also may not be directly related to the question or may be related to a trivial aspect of the question.

Instructions: In each of the following a question is followed by two arguments numbered I and II. You have to decide which argument is strong and which argument is weak. Give answer

(1) if only argument I is strong.
(2) if only argument II is strong.

(3) if either argument I or II is strong.
(4) if neither argument I nor II is strong.
(5) if both the arguments I and II are strong.

36. Statement: Should India develop a national water grid by connecting all the rivers in the country?
   Arguments:
   I. No, this is just not possible as we do not have the technical knowledge.
   II. Yes, this will greatly help the entire country by effectively channelizing the excess water to the areas having shortage.

37. Statement: Should there be Board examination at the end of Std. IV for all the students in India?
   Arguments:
   I. No, this will unnecessarily burden the children at their tender age and hamper normal growth,
   II. Yes, in today's competitive world the children need to be prepared right from the beginning to face such difficult examinations.

38. Statement: Should India create a huge oil reserve like some western countries to face difficult situations in future?
   Arguments:
   I. No, there is no need to block huge amount of foreign exchange and keep the money idle.
   II. Yes, this will help India withstand shocks of sudden rise in oil prices due to unforeseen circumstances.

39. Statement: Should the parents of career children who do not send their wards to school be fined?
   Arguments:
   I. Yes, this is the only way to eradicate illiteracy.
   II. No, why should the parents be fined?

40. Statement: Should there be a total ban on all tobacco products in India?
   Arguments:
   I. No, this will render a large number of people jobless.
   II. No, the government will lose huge amount of money as it will not earn by way of taxes on these products.

Directions (41-45): Study the following information to answer the given question:
In a certain code,
'always create new ideas' is written as "ba ri sha gi".
'ideas and new thoughts' is written as 'fa gi ma ri'.
'Create thoughts and Insights' is written as 'ma jo ba fa'
and 'new and better solutions' is written as 'ki ri to fa'.

41. What is the code for 'ideas'?
   (1) sha   (2) ba   (3) gi
   (4) ma   (5) Cannot be determined

42. What does 'fa' stand for?
   (1) thoughts   (2) insights   (3) new

(4) and   -   (5) solutions

43. 'fa lo ba' could be a code for which of the following ?
   (1) thoughts and action   (2) create and innovate
   (3) ideas and thoughts   (4)create new solutions
   (5) always better ideas

44. What is the code for 'new'?
   (1) ki   (2) ri   (3) to
   (4) fa   (5) ba

45. Which of the following may represent 'insights thoughts always'?
   (1) jo ki to   (2) ki to ri   (3) sha jo ri
   (4) ma sha jo   (5) sha to ba

Directions (46-50): Study the following information carefully and answer the questions given below:
John, Mathew, Shakira, Wasim, David, Serena, Maria and Rafel are going to three destinations, viz Begusarai, Banaras and Jaipur, in three vehicles— Honda -City, Swift and Ford Ikon. There are three females among them and not more than three persons can sit in a car. Shakira is the sister of David and is going to Jaipur. Maria is travelling with her brothers only. John is neither travelling in Swift nor is he going to Jaipur. Mathew is travelling with David and may be accompanied with somebody, except John. Serena is not travelling with Rafel and she is going to Banaras. Wasim is travelling in Honda City but neither with David nor with Shakira. Those who are travelling in Swift are going to Begusarai.

46. Members of which of the following cars are going to Jaipur?
   1) None   2) Ford Ikon   3) Honda City
   4) Swift   5) Either Ford Ikon or Honda City

47. In which of the following cars are only two members travelling?
   1) Swift   2) Ford Ikon   3) Honda City
   4) Either Ford Ikon or Honda City
   5) Either Swift or Honda City

48. Members of which of the following groups are going to Begusarai?
   1) Shakira Rafel Maria   2) Maria David Mathew
   3) Rafel Mathew Shakira
   4) John Serena Wasim   5) None of these

49. Who is travelling with Serena?
   1) Only John   2) Only Wasim
   3) Both John and Wasim
   4) Can't be determined   5) None of these

50. Which of the following combinations is true?
   1) Shakira—Honda City- Jaipur
   2) Serena—Swift —Begusarai
   3) Wasim—Ford Ikon —Banaras
   4) Maria—Swift—Begusarai
   5) Mathew—Ford Ikon —Jaipur