**APSRTC OUT Reasoning Question Paper 2012 Sample Model Paper:**

1. ‘Captain’ is related to a ‘Team’ in the same way as ‘Director’ is related to  
(1) Supervisor (2) Employee  
(3) Organisation (4) Union  
(5) Customer

2. Find the odd one out of the following options  
(1) Aunt (2) Child  
(3) Father (4) Niece  
(5) Relation

3. Pointing to a photograph of Mahesh, Ram said. “The father of his sister is the husband of my wife’s mother”. How is Ram related to Mahesh?  
(1) Brother (2) Brother-in-law  
(3) Father-in-law (4) Data not sufficient  
(5) None of these

4. If ‘fork’ is called ‘plate’, ‘plate’ is called ‘knife’, ‘knife’ is called ‘jug’, ‘jug’ is called ‘glass’, ‘glass’ is called ‘cup’ and ‘cup’ is called ‘fork’, by what do we cut fruit?  
(1) spoon (2) jug  
(3) glass (4) saucer  
(5) none of these

5. If ‘a’ is substituted by 26,’B’ by 25 and so on up to ‘Z’ which is substituted by 1, what will be the sum of the numbers substituted for the word ‘XRAY’?  
(1) 33 (2) 40  
(3) 37 (4) 73  
(5) None of these

6. In a certain code COIMBATORE is written as DPJNCBUPSF. How is INDORE written in that code?  
(1) JOENQF (2) JMCPQD  
(3) JOEPSF (4) HMCNQD  
(5) None of these

7. Geeta is elder to Seeta but not to Deepa. Gayatri is younger than Deepa. No one is elder to Fatima. Who is youngest of them all?  
(1) Seeta (2) Geeta  
(3) Gayatri (4) Data not sufficient  
(5) None of these

8. Raman is sitting to the immediate left of Harry but not next to Kamal. Mahesh is sitting to the right of Kamal. If the four friends are sitting in a circle who is sitting to the immediate right of Harry?  
(1) Mahesh (2) Kamal  
(3) Raman (4) Harry  
(5) Cannot be determined

9. How many three letter meaningful English words can be formed from the word NOTE beginning with ‘T’ and without repeating any letter?  
(1) Three (2) One  
(3) Two (4) None  
(5) None of these

Directions (11-15): Answer question 11 to 15 based on the following sequence: A $ B # 9 G 3D K « M ? C Q 2 X 7 P 5 U 8 I 4 Y ? J

11. How many elements in the above arrangement are both immediately preceded and immediately followed by a number?  
(1) One (2) Two  
(3) Three (4) Five  
(5) None of these

12. Which of the following will be the fifteenth element from the left end if all the numbers are arranged in descending order from left to right, keeping the position of the other elements in arrangement un-changed?  
(1) 5 (2) 4  
(3) 7 (4) 8  
(5) None of these

13. How many letters in the above arrangement are immediately followed by a symbol?  
(1) Two (2) Five  
(3) Four (4) Three  
(5) None of these

14. Which of the following will be eighth to the left of the twelfth from the left end of the arrangement?  
(1) # (2) 7  
(3) U (4) 9  
(5) None of these

15. Four of the following five are alike in a certain way based on their position in the above arrangement and so form a group. Which is the one that does not belong to that group?  
(1) G$M (2) K9Q  
(3) ?D7 (4) 2MU  
(5) PCI

16. In a certain code language’ In ba pe’ means ‘he has won’,’le ki ba’ means ‘she has lost’ and ‘in se pe’ means ‘he always won’. Which word in that language means ‘he’?  
(1) in (2) pe  
(3) se (4) Data not sufficient  
(5) None of these

17. X is Y’s brother. S is T’s mother and X’s aunt. How is T related to X?  
(1) Sister (2) Cousin  
(3) Aunt (4) Cannot be determined  
(5) None of these

18. If the letters of the word OBSERVANT are interchanged, such that the first becomes ninth, second becomes eighth, and so on, and the position of the fifth letter remains unchanged then what will be the new arrangement of letters?  
(1) TNAVERSBO (2) TNVARESBO  
(3) NTAVERSBO (4) VANTRESBO  
(5) None of these

19. If 1 is coded as S, 5 is coded as %, 6 is coded as «, 3 is coded as +, 7 is coded as # and 4 is coded as ? What will be the correct form of the number 435671?  
(1) ? + % « # S (2) ? + % S # «  
(3) ? + « % # S (4) S # « % + ?  
(5) None of these

20. Which of the following have the same relationship as BREAD:DBARE?  
(1) SWORN: NSOWR (2) FUNDS: FSDUN  
(3) GLAZE : EGZAL (4) LOWER: RLEWO  
(5) None of these

Directions (21-25): Read the following information and attempt the given questions: Six executive Aman, Bindu, Deepa, Jitu, Kamal and Priyanka have to advertise four products i.e. soap, watches, computers and chocolates on 3 different channels, i.e. Go, Come and Fun either alone or in pairs. An executive can visit only one channel and advertise only one product. No more than two executives can advertise on a channel.

(i) Bindu and Jitu both visit the same channel but advertise different products.  
(ii) Aman who visits ‘Go’ advertises neither soap nor computers.  
(iii) Kamal does not advertise chocolates.  
(iv) No girl advertises soap.  
(v) The two executives who advertise chocolates visit Spice

21. Who advertises watches?  
(1) Deepa (2) Kamal  
(3) Aman (4) Priyanka  
(5) None of these

22. Which of the following Channel-product pairs in definitely incorrect?  
(1) Go-watch (2) Come-computer  
(3) Go-soap (4) Come-soap  
(5) Come-watch

23. Which channel does Kamal visit?  
(1) Go (2) Fun  
(3) Come (4) Cannot be determined  
(5) None of these

24. If Bipasha advertises computers which of the following must be true?  
(1) Jitu advertises soap (2) Jitu advertises watches  
(3) Kamal advertises computers (4) Kamal works for Fun  
(5) None of these

25. What will Jitu advertise?  
(1) Chocolates (2) Watches  
(3) Computers or watches (4) Cannot be determined  
(5) None of these

26. Swaroop and Simple want to attend a seminar together between 9 a.m. to 5 p.m. on Friday. Simple cannot leave till after her lunch break which begins at 1.30 p.m. Swaroop is free after her meeting which ends at noon. For how many hours can the two of them attend the seminar?  
(1) 3 ½ hours (2) 2 ½ hours  
(3) 4 ½ hours (4) Cannot be determined  
(5) None of these

27. How many pairs of letters are there in the word ANSWER each of which has as many letters between them in the word as there are in the English language?  
(1) One (2) Two  
(3) Four (4) Three  
(5) None of these

28. Find the odd one out  
(1) 2 (2) 7 (3) 11 (4) 13 (5) 9

29. If all the letters in the word MERCIFUL are rearranged in alphabetical order and substituted by the alphabet preceding them in the English alphabet what will be the new arrangement of letters?  
(1) BDHEKLQT (2) BDEHKLQT  
(3) BDEHLKQT (4) BDEJMLQT  
(5) None of these

30. Out of 38 families in a housing society 5 subscribe to Hindi news-papers alone, 12 subscribe to both Hindi and Marathi newspapers. Find the number of Maranthi news-paper subscribers.  
(1) 9 (2) 21  
(3) 17 (4) Cannot be determined  
(5) None of these

Directions (31-35): Below are given letters and their numeric codes. Below that are given some conditions to be followed while codifying the given letter groups in each question. Study them and find out the correct numeric coded form of the given letter group in each question. If none of the coded forms is correct, your answer will be (5) i.e. ‘None of these’.  
Letters M Q I N E Y U G R  
Numeric Codes 2 5 3 7 1 8 4 6 9

Conditions:  
(i) If the first and last letters are vowels both are to be coded as S.  
(ii) If the second letter is a vowel and the third letter is a consonant a single code is to be used and both are to be coded jointly as %.  
(iii) If the first letter is a consonant and the last letter is a vowel both are to be coded as?

31. ENIMY  
(1) 1%28 (2) ?732?  
(3) 17328 (4) ?7328  
(5) None of these

32. GENIR  
(1) ?173? (2) 6%39  
(3) 6%79 (4) 61739  
(5) None of these

33. QUERI  
(1) 5%93 (2) ?413?  
(3) ?4139 (4) ?419?  
(5) None of these

34. EINUM  
(1) 1%72 (2) 0%42  
(3) 1374? (4) 1%43  
(5) None of these

35. UNGRE  
(1) S769 S (2) 4769 S  
(3) 47691 (4) S7691  
(5) None of these

Directions (36-40): In each question below are two statements followed by two conclusions numbered I and II. You have to take the two given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the two statements disregarding commonly known facts.

Give answer (1) if only conclusion I follows.  
Give answer (2) if only conclusion II follows.  
Give answer (3) if either conclusion I or II follows.  
Give answer (4) if neither conclusion I nor II follows.  
Give answer (5) if both conclusions I or II follow.

36. Statements: Some pencils are lead. All lead are ink  
Conclusions:  
I. Some ink are pencils.  
II. All ink are lead.

37. Statements: Some ovens are refrigerator. Some refrigerators are ACs.  
Conclusions:  
I. Some ACs are ovens.  
II. No. AC is oven.

38. Statements: All planes are birds. All birds are clouds.  
Conclusions:  
I. Some planes are clouds.  
II. Some clouds are birds.

39. Statements: Some sweets are salt. No salt in spice.  
Conclusions:  
I.. Some sweets are spice.  
II. No spice is salt.

40. Statements: Some papers are plastics. All papers are clothes.  
Conclusions:  
I. Some plastics are clothes.  
II. Some plastics are papers.

Directions (41-45): Each of the following questions below consists a question and two statements numbered I and II given below it. You have to decide if the data provided in the statements are sufficient to answer the question. Read both statements and:

Give answer (1) if the data in statements I alone is sufficient to answer the question while the data in statement II is not sufficient to answer the question.  
Give answer (2) if the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.  
Give answer (3) if the data either in statement I alone or in statement II alone is sufficient to answer the question.  
Give answer (4) if the data in both the statements I and II are not sufficient to answer the question.  
Give answer (5) if the data in both the statements I and II together are necessary to answer the question.

41. How is ‘cricket’ written in a code language?  
I. ‘Dinesh play cricket’ is written as ‘do si ha’.  
II. ‘play cricket now’ is written as ‘ha si ma’.

42. Who is the oldest among L, M, N, O,P?  
I. P is older than M and N but not O.  
II. L is older than O.

43. When is Rahul’s birthday?  
I. Rahul and Shivani are twins.  
II. Rahul was born on the last day of February in a leap year.

44. What is the strength of the class?  
I. Shekhar stood 28 ranks below the top ranker and Mahesh who stood 5 ranks below him stood last.  
II. Jayesh was 9 ranks below Ramesh who stood 27th from the top.

45. How far does Shruti live from the school?  
I. Shruti has to cycle 3 kms. To her friend Mina’s house which is 4 kms. From thee school.  
II. Gitanjali lives exactly opposite the school and walks 2 kms. to reach Shruti’s house.

Directions (46-50): The following questions are based on the five three digit numbers given below: 972 526 487 359 251

46. If the positions of the firs and second digits are interchanged which of the following will be third if they are arranged in ascending order?  
(1) 359 (2) 972  
(3) 526 (4) 487  
(5) 251

47. If 2 is added to the sum of the digits of each of the above numbers how many will be multiples of 5?  
(1) None (2) One  
(3) Two (4) Three  
(5) None of these

48. If 1 is subtracted from the last digit of each of the above numbers the sum of the digits of how many of them are prime numbers?  
(1) None (2) Two  
(3) One (4) Three  
(5) All five

49. If the digits in each of the above numbers are written in reverse order which will be the second highest number?  
(1) 251 (2) 359  
(3) 487 (4) 526  
(5) 972

50. If the positions of the digits of each of the numbers are interchanged such that the first becomes second, second becomes third and third becomes firs, which, of the following will be the highest?  
(1) 972 (2) 526  
(3) 487 (4) 251  
(5) 359

Answer Key for Mental Aptitude Reasoning  
1. (3) 2. (5) 3. (2) 4. (2) 5. (2)  
6. (3) 7. (4) 8. (2) 9. (1) 10. (1)  
11. (4) 12. (3) 13. (2) 14. (1) 15. (5)  
16. (4) 17. (2) 18. (5) 19. (1) 20. (5)  
21. (3) 22. (4) 23. (1) 24. (2) 25. (3)  
26. (1) 27. (2) 28. (5) 29. (2) 30. (5)  
31. (3) 32. (2) 33. (4) 34. (5) 35. (1)  
36. (1) 37. (3) 38. (5) 39. (2) 40. (5)  
41. (4) 42. (5) 43. (2) 44. (1) 45. (3)  
46. (1) 47. (4) 48. (3) 49. (3) 50. (5)