

## Chandigarh NTSE Stage-1 2016

### **MENTAL ABILITY TEST**

**Time: 45 minute**

**Maximum Marks: 50**

#### **Instructions to the Candidates**

**Read the following instructions carefully before you answer the questions:**

1. Answer are to be given on a SEPRATE ANSWER SHEET.
2. Please write your twelve digits Roll Number very clearly on the Test-booklet and Answer Sheet as given in your admission card.
3. Please note and follow the instructions given on the answer sheet for writing the answers.
4. Darken the CIRCLE with pen for answering the question in the appropriate space against the number corresponding to the question you are answering.
5. There are 50 question in the test.
6. Since all questions are compulsory, do not try read the whole question paper before beginning to answer it.
7. If you do not know the answer to any question, do not spend much time on it and pass on to the next one. Time permitting, you can come back to the question, which you have left in the first instance and try them again.
8. Since the time allotted for this question paper is very limited you should make the best use of it by not spending too much time on any one question.
9. Rough work can be done anywhere in the booklet but not on Answer sheet/loose paper.
10. Every correct answer will be awarded one mark.
11. Please return the answer sheet to the invigilator after the test.

1. If the following words are arranged according to the dictionary order then which will be the second word in that order?  
 (1) Expound (2) Exposure  
 (3) Expulsion (4) Expose
2. If it is possible to make a meaningful word from first, fifth, seventh and eleventh letters of the word ECCENTRICITY then which will be the third letter of the word? If it is possible to make more than one word then answer will be M and if the word formation is not possible then the answer will be X.  
 (1) X (2) R  
 (3) N (4) M
3. How many such letter-pairs are there in the word FRONTIER having same no. of letters left between them as they have in the series?  
 (1) 2 (2) 4  
 (3) 1 (4) None of these
4. If UDOMETER is coded as DUMOTERE then how will SUBLEASE be coded?  
 (1) USLBESAE (2) USLBAEES  
 (3) USBAELES (4) None of these
5. If RASCAL is coded as QZRBZK then how will SOLDER be coded?  
 (1) RNMEDQ (2) RPKEDS  
 (3) TPMEFS (4) RNKCDQ
6. If Sand is coded as Brick, Brick as House, House as Temple, Temple as Palace then where do you worship?  
 (1) Palace (2) Temple  
 (3) Brick (4) House
7. In a certain code language '123' means- 'Mahendra is Able', '345' means-'Sunita is unlucky', '526' means-'Mahendra was unlucky', then what is the code used for unlucky?  
 (1) 2 (2) 3  
 (3) 1 (4) None of these
8. If '678' means-'Society Family Husbandry', '574' means- 'Husbandry Health Control', '342' means-'Health Census shop', then-  
 (1) Which code has been used for 'Health'?  
 (1) 7 (2) 4  
 (3) 2 (4) None of these
9. Directions -In the following question one word is different from the rest. Find out the word which does not belong to the group  
 (1) KMNO (2) ABDE  
 (3) PRST (4) UWXY
10. As 'Magazine' is related to 'Editor' in the same way 'Drama' is related to what?  
 (1) Hero (2) Heroine  
 (3) Co-actor (4) None of these
11. Directions-In the following question a series is given. Which one of the alternative will replace the question-mark (?) ?  
 Z15A, W13C, ?, Q9G, N7I.  
 (1) T12F (2) R11F  
 (3) T11E (4) R13D
12. Direction - In the following question one number-series is given in which one term is wrong. Find out the wrong term.  
 5, 12, 19, 33, 47, 75, 104.  
 (1) 33 (2) 47  
 (3) 75 (4) 104
13. Directions - In the following question a letter-series is given, in which some letters are missing. The missing letters are given in the proper sequence as one of the alternatives. Find the correct alternative.  
 —acca—ccca—acccc—aaa.  
 (1) caac (2) ccaa  
 (3) caaa (4) None of these

14. Five members of a family, Rakesh, Mukesh, Roopesh, Vipul and Umesh take food in a definite order–  
 (1) Umesh was next to first man.  
 (2) Roophesh took food after the man who was before Vipul  
 (3) Rakesh was the last man to the food
- (a) Who was the first and last men to take food?  
 (1) Mukesh and Roopesh (2) Roopesh and Rakesh  
 (3) Umesh and Mukesh (4) Mukesh and Rakesh
15. In a clock, the time is 7: 30 am. The clock is so placed that its hour hand is facing North West. In which direction will be minute hand facing?  
 (1) South (2) East  
 (3) North East (4) West
16. Five boys Mahedra, Anjani, Anil, Anand and Alok and sitting in a row. Neither Anil is neighbour of Anand nor of Anjani. Mahedra is not the neighbour of Anjani. Anil is the neighbour of Alok. If Alok is just in the middle, who is neighbour of Mahendra?  
 (1) Anand (2) Alok  
 (3) Anil (4) Can not be determined
17. Manish goes 7 km towards South–East from his house, then the goes 14 km turning to West. After this he goes 7 km towards North West and in the end he goes 9 km towards East. How far is he from his house?  
 (1) 14 km (2) 7 km  
 (3) 2 km (4) 5 km
18. Ranjan goes 5 km towards North from a fixed point. Then he goes 3 km after turning to his right. After this he goes 5 km turning to his right. In the end he goes 4 km after turning to his left. How far and in what direction is he now from the fixed point?  
 (1) 4 km, West (2) 7 km, East  
 (3) 9 km, East (4) 7 km, West
19. How many 3,s are there in the following number series, which are preceded by an odd number but not followed by an even number?  
 3425315213673182785391345235435  
 (1) One (2) Two  
 (3) Three (4) Four
20. How many 4's are there in the following number-series which are preceded by 5 but not followed by 7?  
 23423425473243192547547234529546  
 (1) One (2) Two  
 (3) Three (4) Four
21. A bus for Bombay leaves after every forty minutes from a but stand. An enquiry clerk told a passenger that the bus had already left ten minutes ago and the next bus will leave at 10.45 a.m. At what time did the enquiry clerk given the information to the passenger?  
 (1) 10.05 a.m. (2) 9.55 a.m.  
 (3) 10. 35 a.m. (4) 10.15 a.m.
22. How many D's are there in the following letter-series, which are preceded by K and followed by Q?  
 KDRMBSKDQKRBLKDQMMDKEFQDK  
 (1) 4 (2) 2  
 (3) 1 (4) 3
23. Shri Parkash walked 40 metres facing towards North.From there he walked 50 metres after turning to his left. After this he walked 40 metres after turning to his left. How far and in what direction is he now from his starting point?  
 (1) 40 m, North (2) 50 m, West  
 (3) 10 m, East (4) 10 m, West
24. Raman walks 100 m from his house towards North. From there he goes 100 m towards West. Here is the house of Shyam. From there they both goes to the market which is in the South-West direction from Shyam's house. If the market is in the West of Raman's house, then how far is the market form Raman's house?  
 (1) 100 m (2) 150 m  
 (3) 300 m (4) None of these

25. In each question of the following two statements are given and four conclusion I, II, III and IV are given under them. The given statements may be contrary to the universal opinion, even then you have to assume them as true. Then decide which conclusion on the basis of given statement is logically valid.  
Statements: All sages are kind.  
All artists are kind.  
**Conclusions:**  
I. All sages are artists.  
II. All artists are sages.  
III. Some kind (persons) are sages.  
IV. Some kind (persons) are artists.  
(1) Only III and IV (2) Only II and III  
(3) Only IV (4) None of these
26. In the following each question there are two statements and two conclusion I and II there-after are given. Accept the given statements as true even if they are inconsistent with known facts and ignoring the universally known facts find out which conclusion follows logically from the given statements.  
Give answer (1) if only the conclusion I follows.  
Give answer (2) if only the conclusion II follows.  
Give answer (3) if either the conclusion I or the II follows.  
Given answer (4) if neither the conclusion I nor the II follows.  
Statements: No man is crippled.  
All crippled (things) are beasts. Conclusions:  
I. Some beasts are crippled.  
II. Some men are beasts.
27. Pointing to a lady in the photograph Kaushal said, "She is the daughter of the daughter of the only son of my ground father. " How is the lady related to Kaushal ?  
(1) Sister (2) Maternal aunt  
(3) Niece (4) Cousin
28. If  $P \times Q$  means – 'P is the brother of Q',  $P \div Q$  means 'P is the son of Q' and ' $P - Q$ ' means 'P is the sister of Q', then which of the following relations will shown that Q is the maternal uncle of P?  
(1)  $Q \times R \div P$  (2)  $Q \div R - P$   
(3)  $P \times R - Q$  (4)  $P \div R - Q$
29. If + means  $\times$ ,  $\times$  means +, – means  $\div$  and  $\div$  means –, then –  
 $16 \times 2 \div 4 + 7 - 8 = ?$   
(1) 31 (2) 29/2  
(3) 43/2 (4) 15
30. If 'p' means '-', 'q' means '+', 'r' means ' $\div$ ' and 's' means ' $\times$ ', then –  
 $16 p 4 q 5 s 8 r 2 = ?$   
(1) -8 (2) 32  
(3) 20 (4) 12

**Directions: (31-32)** In each of the following questions one statement or advertisement is followed by two or three assumptions. One the basis of the statement choose which is/are implicit.

31. Statement— "We are feeling pleasure in extending the working hours of our office to 7.30 p.m." A general notice by a working office.  
**Assumptions:**  
I. It would have been done inspite of workers' opposition.  
II. It was needed to extend the working hours.  
(1) Only I is implicit (2) Only II is implicit  
(3) Either I or II is implicit (4) Neither I nor II is implicit
32. Statement –The residents of the locality wrote a letter to the Corporation requesting to restore normalcy in the supply of drinking water immediately as the supply at present is just not adequate.  
**Assumptions:**  
I. The Corporation may not take any action on the letter.  
II. The municipality has enough water to meet the demand.  
III. The water supply to the area was adequate in the past.  
(1) Only II is implicit (2) Only III is implicit  
(3) Only I and III are implicit (4) Only I and II are implicit
33. Directions –In the question a statement followed by two arguments is given. You have to decide which of the given statements is a strong argument and which is weak argument. Give answer (1) if only first argument is strong, given answer (2) if only second argument is strong, given answer (3) if either first or second argument is strong, given answer (4) if neither first nor second argument is strong and given answer.  
Statement — should competitive examination for selecting candidates for jobs, be of objective test only?

**Arguments:**

- I. Yes, the assessment of objective test is reliable.
- II. No, the number of questions to be answered is always very large.

**Directions (34-36): Read the following information carefully and answer the questions given below:**

- (i) There are five buildings –A, B, C, D and E in a row facing towards East but not necessarily in the same order. Five other buildings – P, Q, R, S and T are in another row facing towards West. The buildings in each row are arranged in front of one another.
- (ii) B is at one of the end. There is only C between B and D. A is to the immediate left of D.
- (iii) R is just opposite to C and is between P and Q. S is to the immediate right of P.

34. Which of the following pairs is at both the ends in any of the two rows?  
 (1) B and A (2) Q and S  
 (3) P and T (4) B and E

35. A is in front of which of following buildings?  
 (1) S (2) P  
 (3) T (4) Q

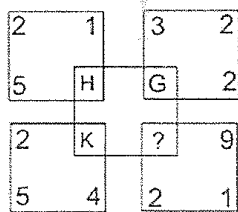
36. Which of the following buildings is in front of building E?  
 (1) S (2) R  
 (3) T (4) None of these

37. **Directions :** Out of nine cells of the a square one cell is left blank, and in the rest of the cells numbers are written which follow some rule. Get the rule and find out the proper option for the blank cell(?)

4	9	20
8	5	14
10	3	?

- (1) 8 (2) 11
- (3) 14 (4) 15

38.



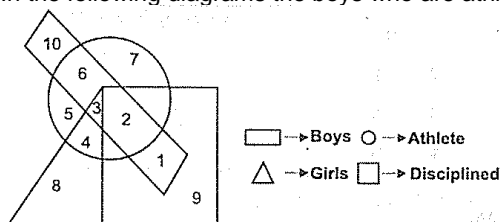
- (1) O (2) L
- (3) M (4) Q

39. OQNEDRRNQ is a code for PROFESSOR, DMSDQDC is a code for  
 (1) ENTERED (2) ARRIVED  
 (3) SLIPPED (4) RETURNED

40. Which of the following diagrams indicates the best relation between Women, Mothers and Engineers?

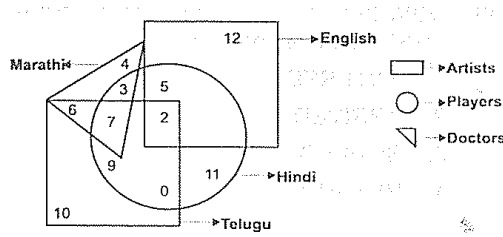


41. In the following diagrams the boys who are athlete are disciplined are indicated by the which number?



- (1) 1 (2) 2
- (3) 10 (4) None of these

**Directions:** In the following figure small square represents the persons who know English, triangle to those who know Marathi, big square to those who know Telugu and circle to those who know Hindi. In the different regions of the figures from 42 to 45 are given.



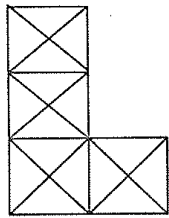
42. How many persons can speak English and Hindi both the languages only?  
 (1) 5 (2) 8  
 (3) 7 (4) 18
43. How many persons can speak Marathi and Telugu both?  
 (1) 10 (2) 11  
 (3) 13 (4) 15
44. How many person can speak only English?  
 (1) 9 (2) 12  
 (3) 7 (4) 19
45. How many persons can speak English, Hindi and Telugh?  
 (1) 8 (2) 2  
 (3) 7 (4) 10

**Directions: -(45-50)** Seven students A, B, C, D, E, F, G are standing in a straight line as follows

1. C is standing between A and G
2. B is standing to the left of E
3. G is standing between C and E
4. D and F are the right of C

46. Who is standing exactly in the middle?  
 (1) C (2) A  
 (3) E (4) D
47. Who is standing to the extreme left?  
 (1) G (2) C  
 (3) B (4) E

**Directions : - Answer the questions ( 48-50) based upon the figure**



48. How many squares are there in the given figure.  
 (1) 5 (2) 6  
 (3) 7 (4) 8
49. How many rectangles (excluding squares) are there in the given figure.  
 (1) 3 (2) 5  
 (3) 8 (4) 13
50. How many triangles are there in the given figure.  
 (1) 32 (2) 41  
 (3) 37 (4) 39

## ANSWERS

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