NTSE STAGE–I (2015)
CLASS–10th

MENTAL ABILITY TEST (MAT)

Time: 45 Minutes   *Maximum Marks: 50*

Please read the instructions carefully.

INSTRUCTIONS

A: General :

1. Immediately fill in the particulars on this page of the Test Booklet with Blue/Black Ball point pen.

2. Use ***Blue/Black Ball Point Pen only*** for writing particulars on **Side-1** and **Side-2** of the Answer Sheet. ***Use of pencil is strictly prohibited.***

3. Darken the appropriate bubbles with **HB Pencil** only.

4. Blank papers, clipboards, log tables, slide rules, calculators, cellular phones, pagers and electronic gadgets in any form are not allowed.

5. The answer sheet, a machine-gradable Objective Response Sheet (ORS) is provided separately.

6. Do not Tamper/mutilate the **ORS** or this booklet.

7. No additional sheets will be provided for rough work

8. On completion of this test, the candidate must hand over the Answer Sheet to the Invigilator on duty in the Room/Hall. ***However, the candidates are allowed to take away this Test Booklet with them.***

B: Questions paper format and **Marking Scheme :**

1. The question paper consists of *50 questions.*

2. For each question you will be **awarded 1 marks** if you darken the bubble corresponding to the correct answer and zero mark if no bubbles is darkened. No Negative Mark will be awarded.

Enrollment No. : ☐☐☐☐☐ ☐☐ ☐☐☐ ☐☐☐   **Batch :** _____

Name : _____

Candidate's Signature _____   **Invigilator's Signature:** _____

Directions for Questions 1 to 5:

Find the odd one out

1. 13, 61, 97, 117
    (A) 13
    (B) 61
    (C) 97
    (D) 117

2. 2−3, 3−7, 4−15, 5−24
    (A) 2−3
    (B) 3−7
    (C) 4−15
    (D) 5−24

3. 3175, 7531, 1357, 7315
    (A) 3175
    (B) 7531
    (C) 1357
    (D) 7315

4. MQT, ADG, HKN, RUX
    (A) MQT
    (B) ADG
    (C) HKN
    (D) RUX

5. BDF, CHK, LDO, RFX
    (A) BDF
    (B) CHK
    (C) LDO
    (D) RFX

6. If in a certain code '64391' is written as '73482' then how will '218759' be coded?
    (A) 320860
    (B) 309688
    (C) 127840
    (D) 309668

7. If in a certain code '24631' is written as 'GREAT' and '5897' as 'MONK' then how will '84712' be coded?
    (A) OGKAE
    (B) ORKTG
    (C) ORATG
    (D) OGRTK

8. If 3rd of the month falls on Wednesday then what day will be on 27th of that month?
    (A) Saturday
    (B) Sunday
    (C) Friday
    (D) Monday

9. If Thursday falls on 1st January 2015, what day of the week will be on 1st January 2016?
    (A) Monday
    (B) Tuesday
    (C) Friday
    (D) Sunday

10. If the following series is written in reverse order, then which will be 12th letter to the left of 10th letter from your right?
    A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
    (A) X
    (B) U
    (C) V
    (D) W

11. If the first and 11th letters of the word 'DISTURBANCE' were interchanged, also the second and 10th letters and so on, which would be the 7th letter from your right.
    (A) R
    (B) B
    (C) A
    (D) U

12. BYVE : GTQJ :: CXUF:?
    (A) HSQJ
    (B) IROL
    (C) HSPK
    (D) GTRI

13. ARM : ESN : : OWL : ?
    (A) SXN
    (B) KXT
    (C) UXM
    (D) UXN

Directions for Questions 14 and 15:

Find out the missing letters

14. ab _ abcbcdb _ d _ decdedefde
    (A) cccf
    (B) bcdf
    (C) bcde
    (D) bded

15. babc _ abbccc _ cdbbc _ dddc _ eccddee
    (A) adcd
    (B) abcd
    (C) bcdc
    (D) babd

16. A person goes 30 km towards North from a fixed point and then after turning to his right he goes 15 km. After this he goes 30 km after turning to his right. How far and in what direction is he from his starting point?
(A) 40 km, East   (B) 15 km, East
(C) 45 km, West   (D) 45 km, North

17. A person is at a fixed point, from where he goes 20 metres towards West. From there he goes 10 metres towards North. Then he goes 35 metres towards East and after this he goes 5 metres towards South and in the end he goes 15 metres West. How far is he from the fixed point?
(A) 5 metres   (B) 0 metres
(C) 13 metres   (D) 15 metres

18. If the following words are arranged according to the dictionary order then which will be the second word in that order?
(A) Export   (B) Exposure
(C) Expulsion   (D) Expose

Directions for Questions 19 and 20:

Six people P, Q, R, S, T and U are sitting in a circular path are facing the centre. R is third from P in the right. Q is third from T in the left. U is between P and T and S is third from U from the left and from right.

19. Who is opposite to T?
(A) S   (B) Q
(C) P   (D) U

20. What is the order of the six people from the right?
(A) SQRUTP   (B) TSRQUP
(C) SRTUPQ   (D) SQPTUR

21. Shyam is older than Ram. Ram is younger than Mohan who is not olde that Shyam. Shyam is younger than Krishna. Who is the eldest among all?
(A) Mohan   (B) Krishna
(C) Shyam   (D) Ram

22. If in a class of 37 students the places of Anuradha and Saroj are 10th and 16th respectively, what are their placed from the last?
(A) 28th and 22nd (B) 27th and 21st
(C) 28th and 20th (D) 27th and 22nd

23. How many 2's are there in the following number series which are preceded by 5 but not followed by an odd number?
13523545245226245267823527524
(A) One   (B) Two
(C) Three   (D) Four

24. How many 3's are there in the following number series which are preceded by an odd number but followed by 4?
153234653478349234456344534
(A) None   (B) Two
(C) Four   (D) One

25. If the numbers from 4 to 55 which are divisible by 3 and also the numbers which contain 3 as one of the digits, are removed, then how many numbers will be left?
(A) 24   (B) 23
(C) 22   (D) 25

26. A doctor said to his nurse, "I go to see the patients at their residence after every 3.30 hours. I have already gone to the patient 1.20 hours ago and next time I shall go at 1:40 p.m." At what time this information was given to the nurse by the doctor?
(A) 10:10   (B) 11:30
(C) 8:50   (D) 11:20

Directions for Question 27 to 30:

If according to a certain code 'mar tar gar zar' means 'Can we start immediately ' har zar par dar' means 'No you start tomorrow' 'dar sar kar tar' means 'Can you come here'. 'yar par mar sar' means 'No we stay here'.

27. What is the code for 'stay'?
    (A) yar   (B) par
    (C) mar   (D) sar

28. What does 'dar' mean?
    (A) No   (B) Can
    (C) You   (D) Start

29. What does 'mar' mean?
    (A) Can   (B) We
    (C) start   (D) Here

30. What is the code for 'immediately'?
    (A) yar   (B) har
    (C) sar   (D) gar

Directions for Questions 31 and 32:

In the figure given below, triangle represents girls, square represents sport person and circle represents coaches.
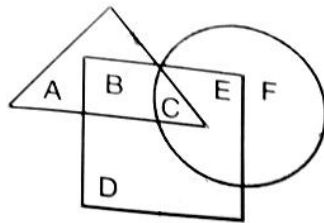
31. Which portion of the figure represent girls who are sports-persons but not coaches?
    (A) A   (B) B
    (C) C   (D) D

32. Which portion represents girls who are sports-person and coaches?
    (A) D   (B) C
    (C) B   (D) A

Directions for Questions 33 and 34:
A figure is given. A mirror is placed at one side of it. The mirror is denoted by AB. Which one of answer figure will be its image.
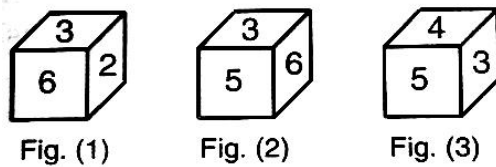
33.

    (A) A   (B) B
    (C) C   (D) D

34.
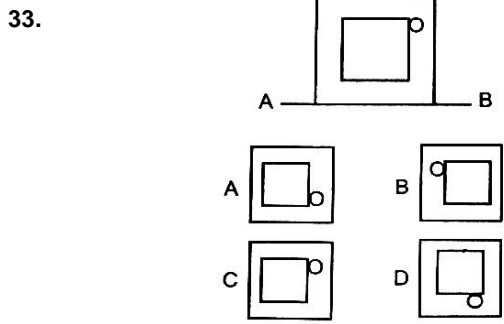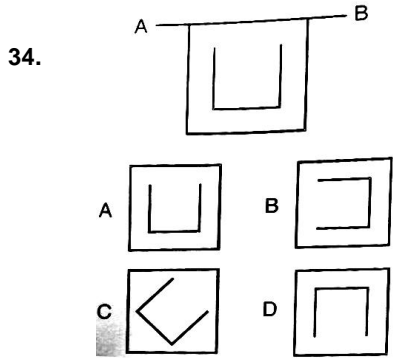
(A) A   (B) B
(C) C   (D) D

Directions for Questions 35 to 37:

Study the three different positions of a dice given below and answer the questions.
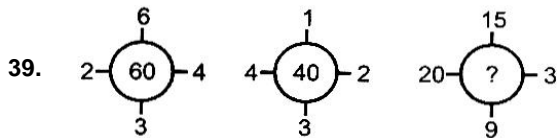

Fig. (1) Fig. (2) Fig. (3)

35. Which number occurs on the face opposite to 2?
(A) 1   (B) 4
(C) 5   (D) Can not be determined

36. The number on the bottom face of figure (1) is
(A) 1   (B) 4
(C) 5   (D) None of these

37. The number on the face opposite to 6 is:
(A) 1   (B) 5
(C) 4   (D) Can not be determined

Directions for Questions 38 and 39:

38.

2	1	6
3	7	?
4	8	2
24	56	48

(A) 4   (B) 3
(C) 2   (D) 5

39.

(A) 235   (B) 141
(C) 144   (D) 188

40. The first term in a sequence is 1 and the second term is 5. From the third term on each term is the average (arithmetic mean) of all preceding terms. What is the 25th term in the sequence?
(A) 2.5   (B) 3
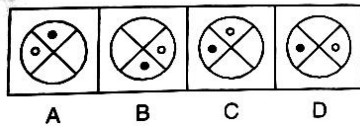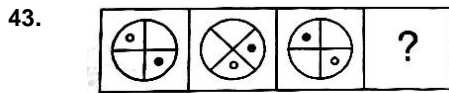(C) 5   (D) 2.5

Directions for Questions 41 and 43:

In each question there are two sets of figures. One is 'Problem Figure' while the other is 'Answer Figure'. The four problem figures make a series. Find out which one of the answer figures would occupy the forth position in the problem figures if they continue to change in the same order.
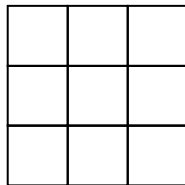
41.

(A) A   (B) B
(C) C   (D) D

42.

(A) A   (B) B
(C) C   (D) D

43.
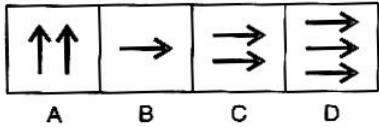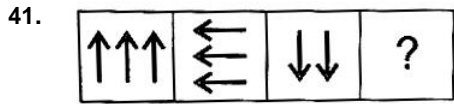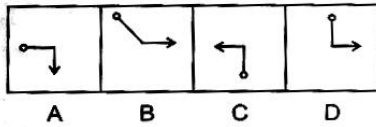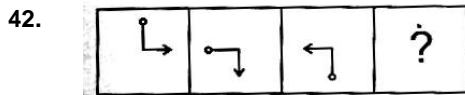
(A) A   (B) B
(C) C   (D) D

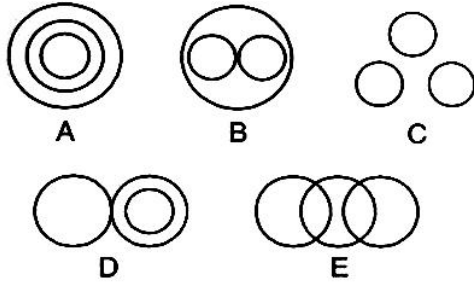**44.** How many squares are there in the following figure?

(A) 12   (B) 13
(C) 14   (D) 15

Directions for Questions 45 and 47:

The questions represents certain relationship. The same relationship has been represented by the figures A, B, C, D and E but not in the same order. You have to choose the right choice.
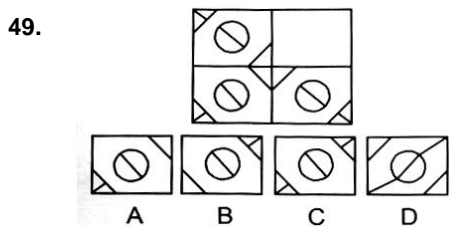

45. hospital : bed : patient
(A) B
(B) A
(C) C
(D) D

46. suitcase : shirts : trousers
(A) B
(B) E
(C) D
(D) C

47. light : dusk : dark
(A) C
(B) A
(C) E
(D) D

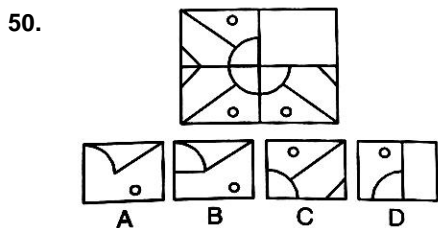**Directions for Questions 48 and 50:**

Which answer figure will complete the incomplete figure?

48.

(A) A
(B) B
(C) C
(D) D

49.

(A) A
(B) B
(C) C
(D) D

50.
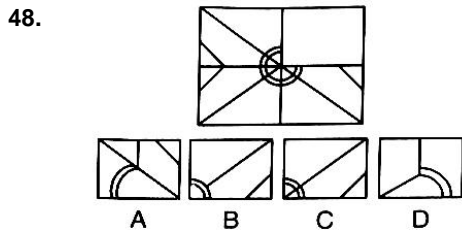
(A) A
(B) B
(C) C
(D) D

NTSE STAGE–I (2015)
CLASS–10th

MENTAL ABILITY TEST (MAT)

ANSWERS

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