

MENTAL ABILITY TEST

CODE : 4101

PRELIMS





Max. Marks : 75

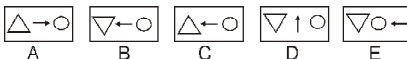
Duration : 75 Mins.

General Instructions :

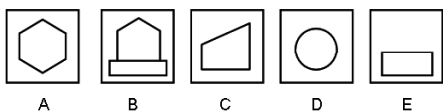
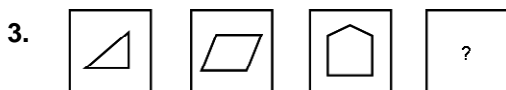
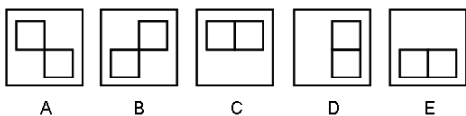
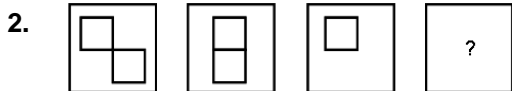
1. Please find the Answer Sheets (OMR) with in the envelop given to you.
2. Mention your Test Code, Student ID, Name, Class, Section and School Name on the OMR Sheet as per Question Paper and Hall Ticket.
3. This question paper contains 75 Questions, duration is 75 minutes.
4. Do rough work in the empty sheet provided along with this question paper.
5. Answer questions in OMR sheet only.
6. Don't write or tick anything on the question paper.
7. Use only Black or Blue Ball Point Pen or Dark Pencil to answer the question in OMR sheet.
8. Indicate the correct answer by darkening one of the 4 or 5 responses provided.
9. Submit only OMR sheet to the invigilator

Directions : Questions (1 to 3) contains four unmarked boxes followed by five marked ones. Three of the unmarked boxes are filled while the fourth one is empty. Select from amongst the marked boxes the one which should replace the empty one.

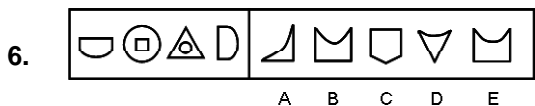
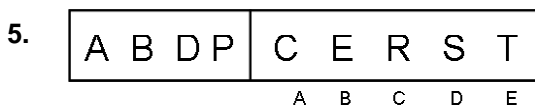
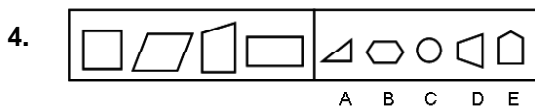
1.    



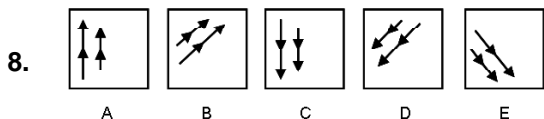
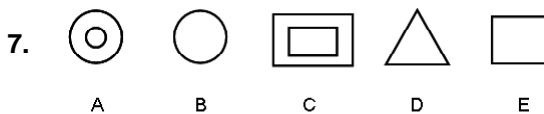
41. Analytical & Problem Solving Skills



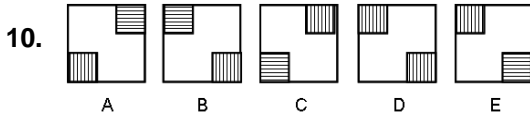
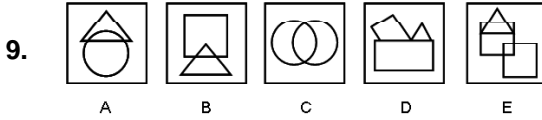
Direction (Q.4-6) Find the similar Figure in LHS & RHS:



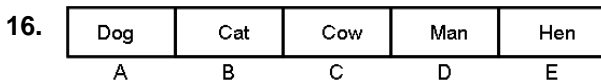
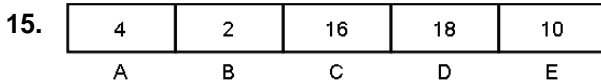
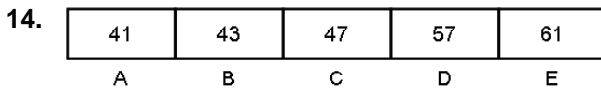
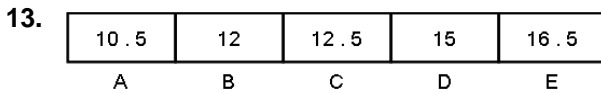
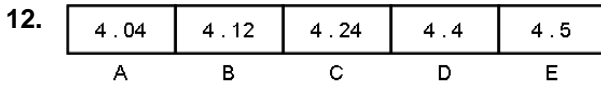
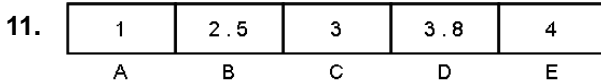
Direction (Q.7-10) Find the dissimilar Figure:



Mental Ability Test & Analytical Reasoning Test



Directions : Questions (11 to 17) : There are seven series of boxes containing five boxes in different numbers/objects are written. One of the numbers/objects is not similar to the rest in some way. You are required to locate it.



41. Analytical & Problem Solving Skills

Directions Questions (18 TO 24) : There is a question mark in a black space in each question in which only one of the five alternatives given under the question satisfies the same relationship as is found between the two terms to the left of sign : : given in the question. Find the correct alternative in each question.

18. LOM : NMK :: PKI : ?

- A) RIH B) SHG C) RIG
D) RHG E) SIG

19. LJH : KKI :: CIA : ?

- A) BJB B) BBB C) DBB
D) CBZ E) BBZ

20. CWFU : VeXb :: ? : OkNn

- A) PNLP B) ONNP C) PKLN
D) PNNN E) OMLN

21. HJLN : mMil :: ? : sTqP

- A) URSN B) ORST C) URST
D) ORSN E) USRN

22. 7 : 11 :: 31 : ?

- A) 36 B) 37 C) 39
D) 43 E) 45

23. 122 : 170 :: 290 : ?

- A) 299 B) 315 C) 332
D) 344 E) 362

24. 3 : 16 :: 7 : ?

- A) 49 B) 52 C) 64
D) 73 E) 81

Mental Ability Test & Analytical Reasoning Test

Directions Questions (Q 25 to Q29) : The below questions are based on the letter series. In each question some letters are missing. The missing letters are given in the proper sequence as one of the alternatives among the five given under each question. Find the correct alternative.

25. n - t n s - - s - n s t n - t n s

- A) s t n t s B) t s t s n C) s n t n s
D) t n s t s E) s n t s n

26. - n - h - n h n n - h n h - n h

- A) n h h n n B) h n h n h C) n n h n h
D) h n h h n E) n h n h n

27. - n m m - m m n - m n - m - m m n

- A) n m n m n B) m n m m n C) m n m n m
D) m m n n m E) m n n n m

28. - b a b - a a b - a a a b a b - a a b

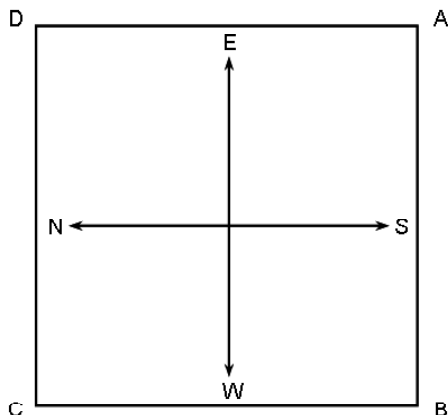
- A) a b a b b B) b a b a b C) b b a a b
D) a a b b b E) a a a b a

29. a a - b b - a - b b - a a a b b b - a a

- A) a a a a b B) b a b a b C) b a a b a
D) a b a b b E) b b a a b

Directions Questions (Q 30 to Q34) : A, B, C and D are standing on the four corners of a square field as shown in the figure given below.

41. Analytical & Problem Solving Skills



Now, read the statement in each of the question nos. (Q 30 to Q34) carefully and select the correct alternative from amongst the five given under each statement.

- 30. From the positions given above A and D go along the sides in the clockwise direction while B and C move in the anti clock wise direction. If all of them move with the same speed and stop after moving a distance equal to**

$1\frac{1}{2}$ side each, then

- A) A is South - East of D B) B is East of A
C) C is West of A D) C is North - East of B
E) A is North of D

- 31. From the positions in question no. 30, C and A move along the sides in anti clockwise direction distances of $1\frac{1}{2}$ sides and one side respectively while D goes right across to the other side, then**

- A) B is South - East of D B) B is South - West of A
C) D is East of C D) A is North of D
E) B is North of C

- 32. From the position in question no. 31, B goes right across to the opposite side and then moves a distance of one side along the side in the anti clock wise direction while C and D move the same distance along the sides in the clock wise direction, then**
- A) A and C are at the same point.
 - B) D and B are at the same point.
 - C) A and B are at the same point.
 - D) B and C are at the same point.
 - E) A and D are at the same point.
- 33. From the positions in question no. 32, A and D go right across and then move along the sides each in the clock wise direction while C moves in the anti clockwise direction along the sides a distance of two sides. If all of them move with the same speed and start at the same time, then**
- A) A meets D on the Northern side
 - B) A meets C on the Eastern side
 - C) C meets B on the Southern side
 - D) C meets D on the Northern side
 - E) D meets B on the Souther side
- 34. From the position in the question no. 33, A, B and D move the shortest distance while C moves in the anti clockwise direction along the sides with the same speed to reach positions diagonally opposite to the original ones. If they all start at the same time, then**
- A) C crosses both A and B on the way
 - B) D and A cross each other on the way
 - C) D and A cross each other on the way
 - D) B meets both C and D on the way
 - E) C crosses both A and D on the way

41. Analytical & Problem Solving Skills

Directions : In Questions (Q 35 to 38) : There are five groups of letter in each. Four of these groups are alike in each. Four of these groups are alike in some way while one is different. Find the one which is different.

35. A) LJH B) TRP C) YWU
D) SQO E) TVX
36. A) MKO B) QSO C) VTX
D) PNR E) DBF
37. A) TGF B) VED C) KOM
D) DWV E) PKJ
38. A) VDX B) PQJ C) LMN
D) HIR E) FGT

Directions : Questions below, the word 'CENTRAL' has been coded in five different ways by using five rules.

CENTRAL

- A) XVMGIZO B) DFOUSBM
C) KZQSMDB D) JYPR LCA
E) DDOSSZM

Make out the rules, and find out which one of these rules viz., (A), (B), (C), (D), or (E) has been applied in coding each of the following questions (Q 39 to Q 43).

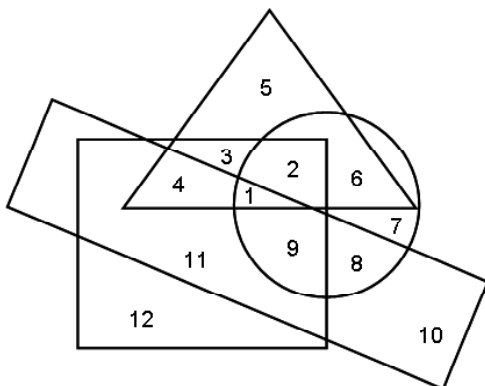
- | WORD | CODE |
|-------------|---------|
| 39. MAGNETA | ZSMDFZL |
| 40. JINGLE | KHOFMD |
| 41. SERMON | TFSNPO |
| 42. LENGTH | FRELCJ |
| 43. JOURNEY | QLFIMVB |

Mental Ability Test & Analytical Reasoning Test

Directions : Questions (Q 44 to Q 47) These questions are based on a code language. In each question, the capital letters in Column I are written in a code in small letters in Column II. Each small letter in Column II stands for some capital letter in Column I. The small letters are not arranged in the same order in which the capital letters (for which they stand in each group). Study the two columns carefully to find out the small letter or code which stands for the underlined capital letter in each question in Column I.

Column I	Column II
	(A) (B) (C) (D) (E)
44. N O <u>L</u> A I	m n t u z
45. R <u>K</u> E O W	a g n p r
46. B O R <u>U</u> A	i m n p w
47. <u>B</u> J A O E	i k m n r

Directions : Questions 48 to 52 are based on the following diagram in which the circle stands for educated, the square stand for hard working, the triangle stands for urban and the rectangle stands for honest. Different regions in the diagram are numbered from 1 through 12. Study the diagram carefully and answer each question.



41. Analytical & Problem Solving Skills

48. Non-urban people who are honest and hard working but not educated are indicated by

- A) 3 B) 4 C) 9
D) 10 E) 11

49. Non-urban, educated, hard working and honest people are indicated by

- A) 12 B) 11 C) 10
D) 9 E) 8

50. Urban, hard working people who are neither educated nor honest are indicated by

- A) 2 B) 3 C) 4
D) 5 E) 6

51. Uneducated, urban, hard working and honest are indicated by

- A) 5 B) 4 C) 3
D) 2 E) 1

52. Hard working non urban people who are neither educated nor honest are indicated by

- A) 6 B) 7 C) 8
D) 10 E) 12

Directions (Q 53 to 56) : A solid cube painted red on two adjacent sides and black on the sides opposite to the red sides and green on the remaining sides is cut into sixty four smaller cubes of equal size. Answer questions 53 to 56 based on the above statement.

53. How many cubes are there which are red on one side and black on the opposite side ?

- A) 0 B) 4 C) 8
D) 16 E) 24

Mental Ability Test & Analytical Reasoning Test

- 54. How many cubes are there with one side green and the adjacent side either red or black and painted on two sides only?**
- A) 8 B) 16 C) 24
D) 32 E) 48
- 55. How many cubes have two adjacent sides either red or black ?**
- A) 32 B) 16 C) 8
D) 4 E) 0
- 56. How many cubes have at least one side as red ?**
- A) 16 B) 24 C) 28
D) 32 E) 48

Directions (Q 57 to 60) : In the following set, given some number in the left hand column and some series in the right hand column are terms belonging to series in the right hand column. The terms in each series are not necessarily in the right sentence. Identify the correct series to which each number belongs.

Set	
Column - I	Column - II
57. 10	A) 6, 13, 22, 33, 46
58. 13	B) 24, 1, 2, 6, 3
59. 12	C) 5, 8, 10, 7, 2
60. 1	D) 8, 5, 3, 8, 3 E) 8, 18, 72, 98, 50

DIRECTIONS : In Questions (61 to 66), there are nine cells in each square. For each question there is a different rule according to which eight of the cells have been filled and one left vacant. What you have to do is first to understand the rule applied for filling in the entries in a particular square and then find out from the five

41. Analytical & Problem Solving Skills

alternatives given against the square the one which correctly fills in the empty cell in the square.

61.

4	8	1
19	2	
7	20	16

A) 40

B) 41

C) 42

D) 43

E) 44

62.

2	72	56
	0	42
12	20	30

A) 4

B) 6

C) 8

D) 10

E) 14

63.

2	0	8
13	5	15
7	10	

A) 14

B) 15

C) 16

D) 17

E) 18

Mental Ability Test & Analytical Reasoning Test

64.

8	128	2
4	1	64
	32	256

A) 14

B) 15

C) 16

D) 17

E) 18

65.

11		5
89	29	1
41	19	71

A) 47

B) 49

C) 51

D) 53

E) 55

66.

14	10	8
11	13	12
10		9

A) 9

B) 10

C) 11

D) 12

E) 13

DIRECTIONS (Q 67 to 70) : In the following Set, it is given some groups of letters in the left hand column and some letter series in

41. Analytical & Problem Solving Skills

the right hand column. The group in the left hand column are terms in the right hand column. The terms in each series are not necessarily in the right sequence. Identify the correct series to which each group belongs.

Set	
Column I	Column II
67. PTVK	A) CNLX, EPNV, KVTP, GRPT, ALJZ
68. PZWN	B) LVSR, NXUP, JTQT, RBYL, TDAJ
69. IUTO	C) QSUJ, RRTI, OUWL, NWYN, NVXM
70. ITRR	D) OAZI, LXWL, RDCF, FRQR, UGFC E) VNPE, WMOD, UOQF TPRG, SQSH

DIRECTIONS : In Questions (71 to 75), some relationship have been expressed through symbols which are explained below :

× = Greater than

□ = Not less than

θ = Not equal to

ϕ = Equal to

+ = Not greater than

∧ = Less than

In each question find the correct Answer.

71. If $x \wedge y \wedge z$, it imply that

- A) $x \phi y \square z$ B) $x + y \phi z$
C) $x + y \theta z$ D) $x \phi y \theta z$
E) $x \square y \times z$

72. If $x \wedge y \theta z$, it does not imply that

- A) $x \theta y \phi z$ B) $x + y \times z$
C) $x \theta y \times z$ D) $x \wedge y \square z$
E) $x \theta y \theta z$

73. If $x \square y \square z$, it does not imply that

- A) $x \phi y \theta z$ B) $x \theta y + z$
C) $x + y \square z$ D) $x + y \wedge z$
E) $x \square y \theta z$

74. If $x \phi y \times z$, it imply that

- A) $x \wedge y \wedge z$ B) $x \times y \wedge z$
C) $x \phi y + z$ D) $x \wedge y \theta z$
E) $x \phi y \square z$

75. If $x \theta y \wedge z$, it does not imply that

- A) $x \times y + z$ B) $x \theta y \times z$
C) $x \square y \theta z$ D) $x + y + z$
E) $x \wedge y \theta z$

41. Analytical & Problem Solving Skills

KEY TO MODEL PAPER - I

- | | | | | | |
|-------|-------|-------|-------|-------|-------|
| 1. B | 2. C | 3. A | 4. D | 5. C | 6. C |
| 7. D | 8. C | 9. D | 10. D | 11. D | 12. E |
| 13. C | 14. D | 15. C | 16. D | 17. A | 18. C |
| 19. A | 20. E | 21. B | 22. B | 23. E | 24. C |
| 25. A | 26. D | 27. B | 28. E | 29. C | 30. B |
| 31. A | 32. B | 33. B | 34. E | 35. E | 36. B |
| 37. C | 38. A | 39. C | 40. E | 41. B | 42. E |
| 43. A | 44. D | 45. A | 46. E | 47. A | 48. E |
| 49. D | 50. B | 51. B | 52. E | 53. A | 54. B |
| 55. C | 56. C | 57. B | 58. C | 59. D | 60. A |
| 61. A | 62. B | 63. C | 64. C | 65. B | 66. D |
| 67. E | 68. B | 69. E | 70. A | 71. C | 72. A |
| 73. B | 74. E | 75. B | | | |

