

FIITJEE COMMON TEST

Batches: NWCMLG122A1_PT-1

PHASE - I

Mental Ability Test (MAT)

QP CODE:

Time: 1:30 Hrs.

Maximum Marks: 90

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 **Blue/Black Ball Point Pen** 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 90 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 16): complete the following series:

- 1 3, 6, 5, 20, 7, 42, 9, (.....)
(A) 54 (B) 60 (C) 66 (D) 72

- 2 1, 3, 4, 8, 15, 27, (.....)
(A) 37 (B) 44 (C) 50 (D) 55

- 3 2, 15, 41, 80, (.....)
(A) 111 (B) 120 (C) 121 (D) 132

- 4 8, 10, 14, 18, (.....), 34, 50, 66
(A) 24 (B) 25 (C) 26 (D) 27

- 5 1, 2, 6, 24, (.....)
(A) 60 (B) 95 (C) 120 (D) 150

- 6 2, 3, 8, 63, (.....)
(A) 1038 (B) 1998 (C) 3008 (D) 3968

- 7 95, 115.5, 138, (.....), 189
(A) 154.5 (B) 162.5 (C) 164.5 (D) 166.5

- 8 4, 10, (.....), 82, 244, 730
(A) 24 (B) 28 (C) 77 (D) 218

- 9 4, 32, 128, (.....)
(A) 128 (B) 144 (C) 192 (D) 256

- 10 2, 5, 9, 19, 37, (.....)
(A) 76 (B) 75 (C) 74 (D) 72

- 11 24, 60, 120, 210, (.....)
(A) 300 (B) 336 (C) 420 (D) 525

- 12 165, 195, 255, 285, 345, (.....)
(A) 475 (B) 420 (C) 375 (D) 390

- 13 5, 17, 37, 65, (.....), 145
(A) 95 (B) 97 (C) 99 (D) 101

- 14 9, 11, 20, 31, (.....), 82
(A) 41 (B) 51 (C) 60 (D) 71

- 15 5, 16, 49, 104, (.....)
(A) 115 (B) 148 (C) 170 (D) 181

- 16 34, 18, 10, 6, 4, (.....)
 (A) 0 (B) 1 (C) 2 (D) 3

Directions : (for questions 17 to 23): In each of the following letter series, some of the letters are missing which are given in that order as one of the alternatives belows it. Choose the correct alternative.

- 17 _ bbca _ bcca _ ac _ a _ cb
 (A) abcba (B) acbab (C) bacab (D) bcaab
- 18 _ bcc _ ac _ aabb _ ab _ cc
 (A) aabca (B) abaca (C) bacab (D) bcaca
- 19 ab _ aa _ caab _ c _ abb _ c
 (A) bbcaa (B) bcbca (C) cabac (D) cbbac
- 20 c _ baa _ aca _ cacab _ acac _ bca
 (A) acbaa (B) bbcaa (C) bccab (D) cbaac
- 21 _ aba _ cabc _ dcba _ bab _ a
 (A) abdca (B) bcadc (C) abcdd (D) cbdaa
- 22 gfe _ ig _ eii_fei _ gf _ ii
 (A) eifgi (B) figie (C) ifgie (D) ifige
- 23 mnonopqopqrs _ _ _ _ _
 (A) mnopq (B) oqrst (C) pqrst (D) qrstu
- 24 If + means \times , - means + and \times means \div find the value of $5 + 4 - 18 \times 3 = ?$
 (A) 26 (B) 6 (C) 14 (D) 15
25. PASS is related to QBTT in the same way as FAIL is related to ...?
 (A) GBHA (B) GJBM (C) GBJM (D) MBJG
- 26 If 'a' means '+', 'b' means '-', 'c' means ' \div ' and 'd' means ' \times ' then the expression $16a 4b 3c 4d2 = ?$
 (A) 10 (B) 17 (C) 18.5 (D) $\frac{21}{2}$
- 27 Insert proper arithmetical signs between the figures in the following sum.
 $7 \dots\dots 3 \dots\dots 2 = 13$
 (A) -, \times (B) +, \times (C) \times , \div (D) -, +
- 28 If '+' means 'divided by', '-' means 'multiplied by', ' \times ' means 'minus' and ' \div ' means 'plus'; then
 $8 + 6 - 2 \div 4 \times 4 = ?$
 (A) 12 (B) $\frac{8}{3}$ (C) $-\frac{52}{9}$ (D) $1\frac{1}{2}$

Directions (for questions 29 to 33): In each of the following questions, one term in the number series is wrong. Find out the wrong term

- 29 380, 188, 92, 48, 20, 8, 2
 (A) 188 (B) 92 (C) 48 (D) 20
- 30 1, 3, 7, 15, 27, 63, 127

- 63 (A) 7 (B) 15 (C) 27 (D)
31. 1, 3, 9, 16, 25 (A) 6 (B) 3 (C) 1 (D) 9
32. 1, 3, 10, 21, 64, 129, 256, 777 (A) 10 (B) 21 (C) 129 (D) 256
33. 15, 16, 22, 29, 45, 70 (A) 16 (B) 22 (C) 45 (D) 70

Directions (for questions 34 to 45): In each question, a series of letters satisfying a certain pattern are given. Identify the pattern and then find the letter/letters that will come in place of the blank/blanks.

34. Y, W, U, S, Q, ?, ? (A) N, J (B) M, L (C) J, R (D) O, M
35. A, B, D, G, ? (A) M (B) L (C) K (D) H
36. A, C, F, H, ?, M (A) L (B) K (C) J (D) I
37. Z, L, X, J, V, H, T, F, ?, ? (A) R, D (B) R, E (C) S, E (D) Q, D
38. W, V, T, S, Q, P, N, M, ?, ? (A) I, J (B) J, I (C) J, K (D) K, J
39. CE, GI, KM, OQ, ? (A) TW (B) TV (C) SU (D) RT
40. BD, GI, LN, QS, ? (A) TV (B) UW (C) WX (D) VX
41. OTE, PUF, QVG, RWH, ? (A) SYJ (B) TXI (C) SXJ (D) SXI
42. ejo tyd ins xch ? (A) nrw (B) mrw (C) msx (D) nsx
43. AB, DEF, HIJK, ? , STUVWX (A) MNOPQ (B) LMNOP (C) LMNO (D) QRSTU
44. 2Z5, 7Y7, 14X9, 23W11, 34V13, ? (A) 27U24 (B) 47U15 (C) 45U15 (D) 47V14
45. P 3 C, R 5 F, T 8 I, V 12 L ? (A) Y 17 O (B) X 17 M (C) X 17 O (D) X 16 O

Directions (for questions 46 to 55): In each of the following questions, the first two words (given in *Italics*) have a definite relationship. Choose one word out of the given four alternatives which will fill in the blank space and show the same relationship with the third word as between the first two.

46. Pakistan : Moon & Star : : Canada : ____
 (A) stripes (B) stars (C) maple leaf (D) circle
47. Newspaper : Press : : Cloth : ____
 (A) Cotton (B) Mill (C) Tailor (D) Market
48. Cow : Calf : : Lion : ____
 (A) lioness (B) cub (C) calf (D) baby lion
49. Cobbler- Shoe; Barber-Hair; Carpenter- ____
 (A) Furniture (B) Butcher (C) Artist (D) Painting
50. Taka : Bangladesh : : Lira : ?
 (A) Kuwait (B) Italy (C) Sri Lanka (D) Kenya
51. Beef-Cow; Mutton-Goat; Pork- ____
 (A) Dog (B) Cat (C) Pig (D) Stag
52. Menu : Food : : Catalogue
 (A) Rack (B) Newspaper (C) Library (D) Books
53. Stammering : Speech : : Deafness : ____
 (A) Hearing (B) Ear (C) Dumb (D) Silence
54. Hot : Oven : : Cold : ____
 (A) Ice Cream (B) Air Conditioner (C) Snow (D) Refrigerator
55. Cataract-Eye; Jaundice-Liver; Pyorrhoea- ____
 (A) Breath (B) Nausea (C) Tongue (D) Tooth

Directions (for questions 56 to 65): In each of the following questions, consist of two words each that have a certain relationship to each other followed by lettered pairs of the words. Select the lettered paired that has the same relationship as the original pair of words.

56. Colour : Eyes
 (A) Vision : Spectacles (B) Print : Newspaper
 (C) Medicine : Ailment (D) Fragrance : Nose
57. Straws : Nest
 (A) Water : Stream (B) Animals : Zoo
 (C) Threads : Cloth (D) Wood : Paper
58. West : North – East : : South : ?
 (A) North west (B) South east (C) North (D) East
59. Fly : Walk
 (A) Sit : Sleep (B) Roast : Bake
 (C) Sky : Earth (D) Pilot : Captain
60. Water : Oxygen
 (A) Helium : Nitrogen (B) Salt : Sodium
 (C) Tree : Plant (D) Food : Hunger
61. Russia : Moscow

- (A) India : Mumbai (B) Norway : Oslo
 (C) China : Shanghai (D) Pakistan : Faislabad
62. Spider : Web
 (A) Ink : Pen (B) Cock : Hen
 (C) Teacher : Student (D) Poet : Poetry
63. Error : Mistake
 (A) Connection : Retaliation (B) Literature : Poetry
 (C) Music : Art (D) Doubt : Suspicion
64. Fan : Air
 (A) Parents : Bring up (B) Bed : Sleep
 (C) Food : Hunger (D) Clouds : Rain
65. Money : Transaction
 (A) Life : Death (B) Water : Drink
 (C) Ideas: Exchange (D) Language : Conversation
66. If '+' means 'x', '-' means '÷', 'x' means '+' and '÷' means '-', then
 $14 \times 5 \div 18 - 9 + 2$ is equal to
 (A) 15 (B) 0
 (C) 43 (D) 4

Directions (Questions 67 – 71): In a certain code language '+' means '-', '-' means 'x', 'x' means '÷', '÷' means 'x'. Answer the following questions using the data.

67. $14 \times 2 - 6 + 10 + 4 \times 2$
 (A) 30 (B) 40 (C) 1 (D) 16
68. $15 \div 5 + 15 \div 10 \times 2$
 (A) 54 (B) 20 (C) 0 (D) 225
69. $11 \div 15 \times 3 + 6 - 5$
 (A) 55 (B) 35 (C) 165 (D) 25
70. $13 + 3 - 5 - 20 + 25$
 (A) - 314 (B) 313 (C) - 312 (D) 6
71. $196 \times 14 \div 25 \times 5 + 225 \times 15$
 (A) 70 (B) 105 (C) 85 (D) 55
72. If '+' means 'minus', 'x' means 'divided by', '÷' means 'plus' and '-' means 'multiplied by', then the value of expression $252 \times 9 - 5 + 32 \div 92$?
 (A) 95 (B) 168 (C) 192 (D) 200
73. If '+' means 'x', 'x' means '-', '÷' means '+' and '-' means '÷', then the value of expression $175 - 25 \div 5 + 20 \times 3 + 10$?
 (A) 77 (B) 160 (C) 240 (D) 2370
74. If 'L' stands for '+', 'M' stands for '-', 'N' stands for 'x', 'P' stands for '÷', then $14 N 10 L 42 P 2 M 8 = ?$
 (A) 153 (B) 216 (C) 248 (D) 251
75. If 'P' denotes '÷', 'Q' denotes 'x', 'R' denotes '+' and 'S' denotes '-', then $18 Q 12 P 4 R 5 S 6 = ?$
 (A) 53 (B) 59 (C) 63 (D) 65
76. If 'Q' means 'add to', 'J' means 'Multiply by', 'T' means 'subtract from' and 'K' means 'divide by' then $30 K 2 Q 3 J 6 T 5 = ?$
 (A) 18 (B) 28 (C) 31 (D) 103

77. Given interchanges : signs + and – and numbers 4 and 8
 (A) $8 - 4 \div 12 = 8$ (B) $8 \div 4 - 12 = 24$ (C) $4 - 8 + 12 = 0$ (D) $4 \div 8 - 12 = 16$
78. If + means \div , \div means –, – means \times and \times means + then $12 + 6 \div 3 - 22 \times 8 = ?$
 (A) -56 (B) -46 (C) -24 (D) -88

Directions (From Que. 79 and 88): In each of the following question, there is a certain relationship between two given number on one side of :: and one number is given on the another side of :: while another number to be found from the given alternatives, having the same relation with this number as the number of the given pair bear. Choose the correct alternatives -

79. $3 : 9 :: 8 : ?$
 (A) 81 (B) 49 (C) 64 (D) 14
80. $9 : 28 :: 1 : ?$
 (A) 4 (B) 5 (C) 6 (D) 7
81. $3 : 27 :: 4 : ?$
 (A) 50 (B) 49 (C) 8 (D) 64
82. $14 : 2 :: 49 : ?$
 (A) 7 (B) 8 (C) 3 (D) 4
83. $2 : 16 :: 3 : ?$
 (A) 81 (B) 49 (C) 343 (D) 64
84. $7 : 56 :: 9 : ?$
 (A) 63 (B) 81 (C) 90 (D) 99
85. $25 : 37 :: 49 : ?$
 (A) 41 (B) 56 (C) 60 (D) 65
86. $121 : 12 :: 25 : ?$
 (A) 1 (B) 2 (C) 6 (D) 7
87. $16 : 56 :: 32 : ?$
 (A) 96 (B) 112 (C) 118 (D) 128
88. $6 : 18 :: 4 : ?$
 (A) 2 (B) 6 (C) 8 (D) 16
89. If $3 \times 6 = 18$; $4 \times 7 = 22$; $9 \times 1 = 20$, then $5 \times 2 = ?$ Find the value of ? from the following
 (A) 7 (B) 10 (C) 14 (D) 3
90. If 'P' means '+'; 'R' means ' \times '; 'S' means '-'; 'T' means ' \div ' then what is the value of
 $5 R 9 P 7 S 9 T 3 P 6 = ?$
 (A) 54 (B) 128 (C) 59 (D) 52

ANSWERS

- | | | | | | | | |
|-----|---|-----|---|-----|---|-----|---|
| 1. | D | 2. | C | 3. | D | 4. | C |
| 5. | C | 6. | D | 7. | B | 8. | B |
| 9. | D | 10. | B | 11. | B | 12. | C |
| 13. | D | 14. | B | 15. | D | 16. | D |
| 17. | B | 18. | C | 19. | A | 20. | A |
| 21. | A | 22. | C | 23. | C | 24. | A |
| 25. | C | 26. | C | 27. | B | 28. | B |
| 29. | C | 30. | C | 31. | B | 32. | D |
| 33. | B | 34. | D | 35. | C | 36. | B |
| 37. | A | 38. | D | 39. | C | 40. | D |
| 41. | D | 42. | B | 43. | A | 44. | B |
| 45. | C | 46. | C | 47. | B | 48. | B |
| 49. | A | 50. | B | 51. | C | 52. | D |
| 53. | A | 54. | D | 55. | D | 56. | D |
| 57. | C | 58. | A | 59. | C | 60. | B |
| 61. | B | 62. | D | 63. | D | 63. | D |
| 65. | D | 66. | A | 67. | A | 68. | C |
| 69. | D | 70. | C | 71. | D | 72. | D |
| 73. | A | 74. | A | 75. | A | 76. | B |
| 77. | C | 78. | A | 79. | C | 80. | A |
| 81. | D | 82. | A | 83. | A | 84. | C |
| 85. | D | 86. | C | 87. | B | 88. | C |
| 89. | C | 90. | D | | | | |