



# MENTAL MATHS COMPETITION

: Organised by :

**GLOBAL MATHS SCIENCE EDUCATION®**

*in association with*

**Math Vision PTE Ltd., Singapore**

## MOCK TEST

Name : \_\_\_\_\_

School : \_\_\_\_\_ Std. : **4**

Mob.No. : (Mother) \_\_\_\_\_ (Father) \_\_\_\_\_

**Total Marks : 100**

**Total No.of questions : 50**

1. Time : 1 hr
2. Students can use HB Pencil for marking answers in OMR sheet.
3. Questions are arranged according to 3 difficulty level to provide pupils with optimum exposure to Mental Maths.
4. [Section 1] In this section, there are 20 questions help to build calculation skills. Each question carries 1 mark.
5. [Section 2] It is related with 20 questions to test fundamental concept covered in topic listed below. Each question carries 2 marks.
6. [Section 3] Here questions are challenging & required high order thinking skills. Each question carries 4 marks. Students are requested to practice extra question given alongwith given two Mock papers in this booklet. Any 10 questions will be asked from given question format in mock paper & extra practice questions.

### Topics

- |  |   |
|--|---|
| ◆ Addition & Subtraction                   | ◆ Angles (Acute, Obtuse, Straight, Right, Reflex) |
| ◆ Multiplication & Division                | ◆ Area & Perimeter (Square & rectangle)           |
| ◆ Tables from 2 to 20                      | ◆ Order of Operations DMAS (+, ×, +, -)           |
| ◆ Roman Numbers (1 to 2000)                | ◆ Divisibility (2, 3, 4, 5, 6, 8, 9, 10, 11)      |
| ◆ Metric Measurement (Kg, G, M, CM, L, ML) | ◆ Calender  |
| ◆ Fractions (+, -, ×, ÷), Reducing         | ◆ Number Bonds                                    |
| ◆ Time (hrs, Mins, Seconds, days)          |   |

**SECTION - 1 Mock Paper - 1**

1.  $6784 + 4308 = \underline{\hspace{2cm}}$

- (a) 11209 (b) 11902  
(c) 11092 (d) 10192

2.  $8367 - 3989 = \underline{\hspace{2cm}}$

- (a) 4178 (b) 4378  
(c) 4738 (d) 4278

3. 
$$\begin{array}{r} 7 \square 3 9 \\ + 1 9 8 3 \\ \hline 9 5 2 2 \end{array}$$

- (a) 4 (b) 3  
(c) 2 (d) 5

4. 
$$\begin{array}{r} 4 6 9 \square \\ - 3 7 8 4 \\ \hline 0 9 0 6 \end{array}$$

- (a) 0 (b) 1  
(c) 3 (d) 2

5.  $634 - \square = 179$   $\underline{\hspace{2cm}}$

- (a) 465 (b) 456  
(c) 445 (d) 455

6.  $\square + 726 = 1103$

- (a) 376 (b) 367  
(c) 377 (d) 378

7.  $698 \times 19 = \underline{\hspace{2cm}}$

- (a) 12262 (b) 13362  
(c) 12362 (d) 13262

8. Find two consecutive multiples of 17 among given options?

- (a) 153, 170 (b) 108, 119  
(c) 51, 70 (d) 136, 154

9.  $98 \div 14 = \underline{\hspace{2cm}}$

- (a) 6 (b) 5  
(c) 4 (d) 7

10. When 145 is divided by 15, remainder is  $\underline{\hspace{2cm}}$

- (a) 10 (b) 9  
(c) 11 (d) 8

11. Which of the below number is multiple of both 9 & 12 ?

- (a) 63 (b) 45  
(c) 90 (d) 72

12.  $(13 \times 9) + (19 \times 2) - (14 \times 11)$   
 $= \underline{\hspace{2cm}}$

- (a) 0 (b) 2  
(c) 1 (d) 3

13.  $\frac{3}{17} \times 119 = \underline{\hspace{2cm}}$

- (a) 21 (b) 7  
(c) 24 (d) 31

14. Eight thousand and Forty nine ones - Seventy tens and three units =  $\underline{\hspace{2cm}}$

- (a) 779 (b) 7246  
(c) 7346 (d) 7976

- 15.** The difference between  $(16 \times 7)$  and  $(15 \times 3)$  is \_\_\_\_\_  
(a) 66 (b) 57  
(c) 47 (d) 67
- 16.** The sum of  $(14 \times 9)$  and  $(17 \times 3)$  is \_\_\_\_\_  
(a) 176 (b) 177  
(c) 167 (d) 157
- 17.**  $(16 \times 3) \div (3 \times 4) =$  \_\_\_\_\_  
(a) 4 (b) 3  
(c) 6 (d) 1
- 18.** 36<sup>th</sup> even number after 263 is \_\_\_\_\_  
(a) 334 (b) 336  
(c) 332 (d) 335
- 19.** 29<sup>th</sup> odd number before 196 is \_\_\_\_\_  
(a) 138 (b) 139  
(c) 137 (d) 141
- 20.** How many days are together in April, June and December ?  
(a) 93 (b) 92  
(c) 90 (d) 91

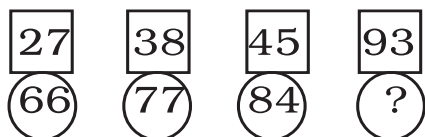
## SECTION - 2

- 21.** The difference between the place values of 8 in 8,085 is \_\_\_\_\_.  
(a) 8080 (b) 7920  
(c) 7880 (d) 7930
- 22.**  $60 + 59 + 58 + 57 + 53 + 52 + 50 + 49 + 48 + 46 =$  \_\_\_\_\_.  
(a) 534 (b) 522  
(c) 532 (d) 542
- 23.** The sum of  $(19 \times 9)$  and  $(13 \times 11)$  is \_\_\_\_\_.  
(a) CCCXIV (b) CCCXXIV  
(c) CCCXVI (d) CCCIV
- 24.** (XXXVIII less than DCXIV) + (XLIX more than CDXIV) = \_\_\_\_\_.  
(a) 1029 (b) 1139  
(c) 1309 (d) 1039
- 25.**  $8.05 \text{ kg} =$  \_\_\_\_ kg \_\_\_\_ gm  
(a) 8 kg 5 g (b) 8 kg 50 g  
(c) 8 kg 500 g (d) All correct
- 26.** 6 hrs 45 mins = \_\_\_\_\_ mins  
(a) 415 (b) 455  
(c) 410 (d) 405
- 27.**  $8\frac{1}{4}$  year = \_\_\_\_\_ months  
(a) 109 (b) 99  
(c) 89 (d) 79
- 28.**  $7\frac{1}{2} + 4\frac{1}{4} =$  \_\_\_\_\_ quarters  
(a) 47 (b) 57  
(c) 49 (d) 37
- 29.** 9, 13, 15, ★, 21, 25, 27  
value of ★ is \_\_\_\_\_.  
(a) 17 (b) 29  
(c) 19 (d) 9
- 30.**  $\frac{2}{5} = \frac{\square}{15}$ ,  $\therefore \square = ?$   
(a) 6 (b) 5  
(c) 7 (d) 30
- 31.**  $3 \times \frac{18}{81} =$  \_\_\_\_\_  
(a)  $\frac{1}{3}$  (b)  $\frac{3}{2}$   
(c)  $\frac{2}{3}$  (d)  $\frac{1}{2}$
- 32.** If  $\square\square\square\square\square\square = 42$ ; what is  $\square\square\square\square$  ?  
(a) 7 (b) 14  
(c) 28 (d) 35

33.  $\uparrow \rightarrow \downarrow \leftarrow \uparrow \rightarrow \downarrow \leftarrow ?$  The missing pattern is \_\_\_\_\_

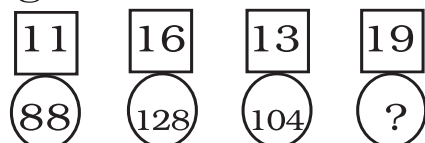
- (a)  $\uparrow \rightarrow \downarrow$  (b)  $\uparrow \uparrow \uparrow$   
(c)  $\downarrow \leftarrow \uparrow$  (d)  $\downarrow \rightarrow \uparrow$

34. Find missing number in given number bonds :



- (a) 135 (b) 142  
(c) 132 (d) 122

35. Find missing number in given number bonds

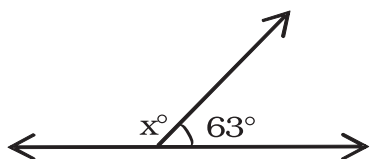


- (a) 152 (b) 132  
(c) 154 (d) 142

36.  $37 + M = 62 + 48$ , M is \_\_\_\_\_ less than 100.

- (a) 63 (b) 27  
(c) 73 (d) 37

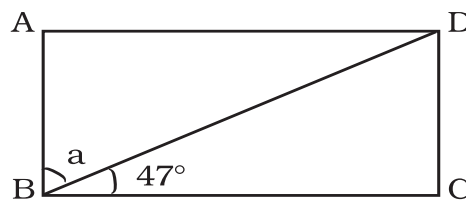
37.



value of  $x =$  \_\_\_\_\_

- (a)  $116^\circ$  (b)  $107^\circ$   
(c)  $127^\circ$  (d)  $117^\circ$

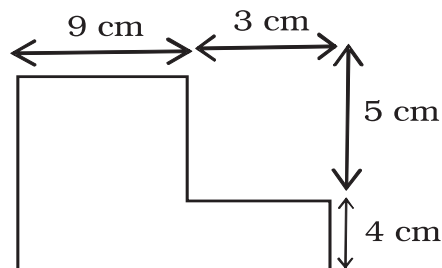
38.



ABCD is a rectangle,  $\angle a =$  \_\_\_\_\_  $+ 26^\circ$

- (a)  $43^\circ$  (b)  $27^\circ$   
(c)  $17^\circ$  (d)  $7^\circ$

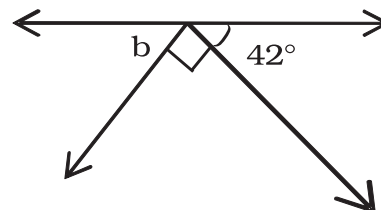
39.



The perimeter of figure is \_\_\_\_\_ cm

- (a) 32 (b) 42  
(c) 43 (d) 44

40.



Value of  $b =$  \_\_\_\_\_

- (a)  $38^\circ$  (b)  $58^\circ$   
(c)  $48^\circ$  (d)  $46^\circ$

## SECTION 3

41. Which of the below options becomes true when 4 is placed in the  $\square$  ?  
(a)  $40 \div \square = 8$       (b)  $24 \div \square = 8$       (c)  $16 \div \square = 8$       (d)  $32 \div \square = 8$
42. At your skating party you noticed 30 legs on the outdoor ring. How many people's and dogs are on the outdoor ring ?  
(a) 4 dogs, 7 peoples    (b) 5 dogs, 7 peoples    (c) 4 dogs, 8 peoples    (d) 5 dogs, 10 peoples
43. The teacher baked a batch of muffins. There are 16 muffins in a batch. She ate  $\frac{1}{4}$  of the batch, then she made two more batches. How many muffins does she has now ?  
(a) 45      (b) 44      (c) 48      (d) 46
44. If  $\diamond \times 4 = \star$  ;  $\star - \diamond = 330$ , then what is  $\star + \diamond$  ?  
(a) 110      (b) 440      (c) 550      (d) 990
45. If 25<sup>th</sup> February 2016 falls on Wednesday, then 19<sup>th</sup> May 2016. will fall on \_\_\_\_\_  
(a) Friday      (b) Tuesday      (c) Thursday      (d) Wednesday
46. 

A	6	B
---	---	---

 $\times 14 =$ 

8	6	8
---	---	---

  
 $\therefore A + B = ?$   
(a) 1      (b) 2      (c) 3      (d) 4
47. Add 550 to twenty five. How much should be added to this sum to get 100 tens ?  
(a) 375      (b) 475      (c) 325      (d) 425

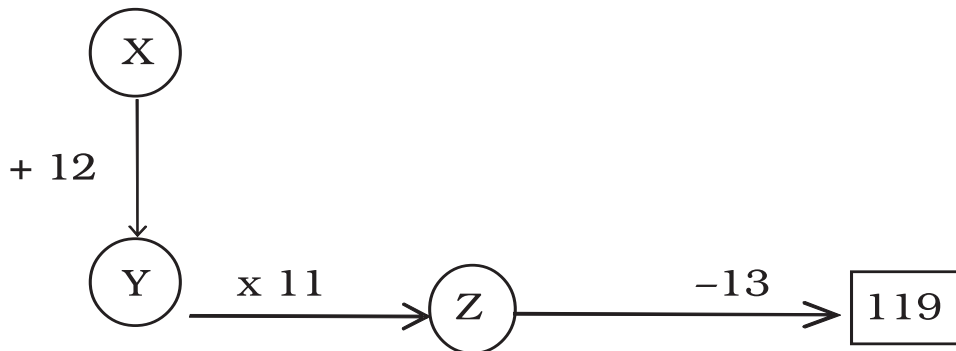
- 48.** Janvi took a flight at 8:45 from Singapore to Delhi. She then took a taxi to home. It took her 2 hrs 45 mins by taxi to reach home. If she reached home at 6:15, then how long was her flight ?

(a) 7 hrs 10 mins      (b) 6 hrs 45 mins      (c) 6 hrs      (d) 6 hrs 15 mins

- 49.** Divide the difference of 7051 and 2344 by 9 ?

(a) 523      (b) 532      (c) 325      (d) 352

**50.**



The value of X is \_\_\_\_\_

(a) 2      (b) 1      (c) 3      (d) 0

## SECTION - 1

## Mock Paper - 2

1.  $4374 + 3709 = \underline{\hspace{2cm}}$

- (a) 8093 (b) 8173  
(c) 8073 (d) 8083

2.  $7378 - 3994 = \underline{\hspace{2cm}}$

- (a) 3384 (b) 3374  
(c) 3394 (d) 3284

3. 
$$\begin{array}{r} 6\ 7\ 9\ 8 \\ +\ 2\ 0\ \square\ 9 \\ \hline 8\ 8\ 3\ 7 \end{array}$$

- (a) 2 (b) 1  
(c) 3 (d) 4

4. 
$$\begin{array}{r} 5\ 9\ 4\ 2 \\ -\ 1\ \square\ 7\ 4 \\ \hline 3\ 9\ 6\ 8 \end{array}$$

- (a) 9 (b) 7  
(c) 8 (d) 6

5.  $594 - \square = 278$   $\underline{\hspace{2cm}}$

- (a) 306 (b) 316  
(c) 326 (d) 216

6.  $394 + \square = 777$

- (a) 363 (b) 373  
(c) 393 (d) 383

7.  $729 \times 14 = \underline{\hspace{2cm}}$

- (a) 10106 (b) 12006  
(c) 10206 (d) 10216

8. Find two consecutive multiples of 13 among given options?

- (a) 91, 106 (b) 65, 76  
(c) 78, 91 (d) 107, 130

9.  $136 \div 17 = \underline{\hspace{2cm}}$

- (a) 7 (b) 8  
(c) 9 (d) 11

10. When 1279 is divided by 11, remainder is  $\underline{\hspace{2cm}}$ 

- (a) 3 (b) 4  
(c) 2 (d) 5

11. Which of the below number is multiple of both 7 &amp; 14 ?

- (a) 133 (b) 136  
(c) 126 (d) 130

12.  $(12 \times 7) - (13 \times 2) + (16 \times 3)$   
 $= \underline{\hspace{2cm}}$

- (a) 116 (b) 96  
(c) 126 (d) 106

13.  $\frac{4}{13} \times 91 = \underline{\hspace{2cm}}$

- (a) 18 (b) 28  
(c) 32 (d) 38

14. Seven thousand and Six tens – Three hundred and Thirty ones =  $\underline{\hspace{2cm}}$ 

- (a) 6630 (b) 6703  
(c) 6713 (d) 6730



- 15.** The difference between  $(14 \times 7)$  and  $(12 \times 3)$  is \_\_\_\_\_  
(a) 52 (b) 62  
(c) 72 (d) 64
- 16.** The sum of  $(16 \times 4)$  and  $(13 \times 11)$  is \_\_\_\_\_  
(a) 207 (b) 197  
(c) 209 (d) 217
- 17.**  $(14 \times 8) \div (4 \times 4) =$  \_\_\_\_\_  
(a) 5 (b) 6  
(c) 8 (d) 7
- 18.** 42<sup>nd</sup> even number before 137 is \_\_\_\_\_  
(a) 53 (b) 44  
(c) 54 (d) 52
- 19.** 31<sup>st</sup> odd number after 151 is \_\_\_\_\_  
(a) 203 (b) 213  
(c) 212 (d) 223
- 20.** How many days are together in June, September and November ?  
(a) 90 (b) 91  
(c) 93 (d) 92

## SECTION - 2

**21.** The difference between the place values of 7 in 3717 is \_\_\_\_\_

- (a) 693 (b) 694  
(c) 793 (d) 695

**22.**  $70 + 69 + 68 + 67 + 64 + 63 + 60 + 59 + 58 + 57 =$  \_\_\_\_\_

- (a) 637 (b) 535  
(c) 645 (d) 635

**23.** The sum of  $(13 \times 4)$  and  $(15 \times 9)$  is \_\_\_\_\_

- (a) CLXXXVI (b) CLXXXVIII  
(c) CLXXVII (d) CLXXXVII

**24.** (LXIX less than CCCXXVII) – (CIX more than XCVIII) = \_\_\_\_\_

- (a) L (b) XLI  
(c) LI (d) LXII

**25.**  $11.09 \text{ l} =$  \_\_\_\_\_  $\text{l}$  \_\_\_\_\_  $\text{ml}$

- (a) 11  $\text{l}$  9  $\text{ml}$  (b) 11  $\text{l}$  90  $\text{ml}$   
(c) 11  $\text{l}$  09  $\text{ml}$  (d) 11  $\text{l}$  19  $\text{ml}$

**26.** 9 hrs 39 mins = \_\_\_\_\_ mins

- (a) 589 (b) 569  
(c) 578 (d) 579

**27.**  $9\frac{3}{4}$  year = \_\_\_\_\_ months

- (a) 127 (b) 107  
(c) 117 (d) 116

**28.**  $6\frac{3}{4} + 2\frac{1}{2} =$  \_\_\_\_\_ quarters

- (a) 37 (b) 27  
(c) 47 (d) 39

**29.** 7, 14, 23, 30, 39, ★, 55  
value of ★ is \_\_\_\_\_.

- (a) 46 (b) 48  
(c) 47 (d) 45

**30.**  $\frac{102}{72} = \frac{\square}{12}$ ,  $\therefore \square = ?$



- (a) 16 (b) 18  
(c) 15 (d) 17


**31.**  $4 \times \frac{12}{64} =$  \_\_\_\_\_

- (a)  $\frac{1}{4}$  (b)  $\frac{3}{4}$   
(c) 4 (d)  $\frac{5}{4}$

**32.** If  $\square\square\square\square\square\square\square = 63$  ;  
what is  $\square\square\square$  ?

- (a) 17 (b) 21  
(c) 27 (d) 25

33.   
 \_\_\_\_ ? The missing pattern is \_\_\_\_

- (a)  (b)   
(c)  (d) 

34. Find missing number in given number bonds :

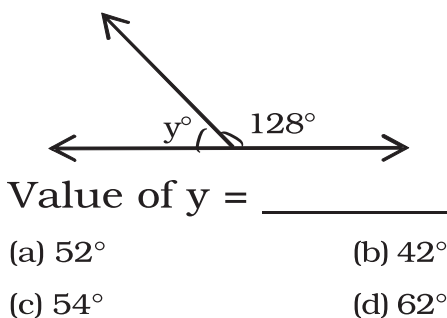
- |   |  |   |   |
|---|--|---|---|
| <div style="border: 1px solid black; padding: 2px; display: inline-block;">37</div>                     | <div style="border: 1px solid black; padding: 2px; display: inline-block;">59</div>                      | <div style="border: 1px solid black; padding: 2px; display: inline-block;">41</div>                     | <div style="border: 1px solid black; padding: 2px; display: inline-block;">12</div>                   |
| <div style="border: 1px solid black; border-radius: 50%; padding: 2px; display: inline-block;">90</div> | <div style="border: 1px solid black; border-radius: 50%; padding: 2px; display: inline-block;">112</div> | <div style="border: 1px solid black; border-radius: 50%; padding: 2px; display: inline-block;">94</div> | <div style="border: 1px solid black; border-radius: 50%; padding: 2px; display: inline-block;"></div> |
| (a) 75  |  | (b) 55  |   |
| (c) 65  |  | (d) 45  |   |

35. Find missing number in given number bonds

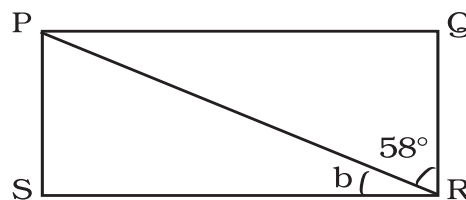
- |   |   |   |   |
|---|---|---|---|
| <div style="border: 1px solid black; padding: 2px; display: inline-block;">19</div>                     | <div style="border: 1px solid black; padding: 2px; display: inline-block;">17</div>                     | <div style="border: 1px solid black; padding: 2px; display: inline-block;">15</div>                     | <div style="border: 1px solid black; padding: 2px; display: inline-block;">13</div>                   |
| <div style="border: 1px solid black; border-radius: 50%; padding: 2px; display: inline-block;">76</div> | <div style="border: 1px solid black; border-radius: 50%; padding: 2px; display: inline-block;">68</div> | <div style="border: 1px solid black; border-radius: 50%; padding: 2px; display: inline-block;">60</div> | <div style="border: 1px solid black; border-radius: 50%; padding: 2px; display: inline-block;"></div> |
| (a) 32  |   | (b) 52  |   |
| (c) 65  |   | (d) 62  |   |

36.  $23 + 91 = P - 36$ , P is \_\_\_\_ less than 150.  
(a) 1 (b) 2  
(c) 0 (d) 3

37.



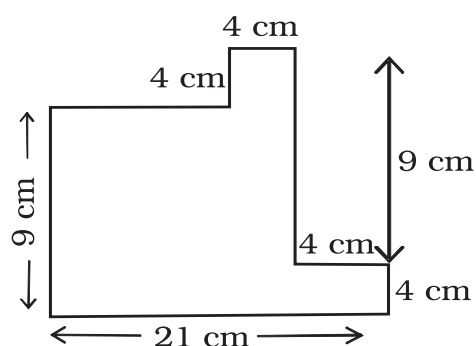
38.



PQRS is a rectangle,  $\angle b =$  \_\_\_\_ +  $18^\circ$

- (a)  $12^\circ$  (b)  $13^\circ$   
(c)  $11^\circ$  (d)  $14^\circ$

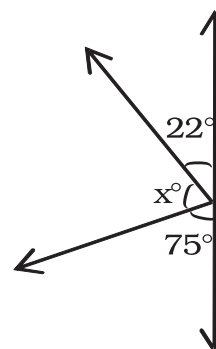
39.



The perimeter of figure is \_\_\_\_ cm

- (a) 74 (b) 66  
(c) 68 (d) 78

40.



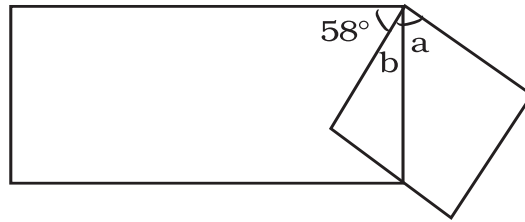
Value of x = \_\_\_\_

- (a)  $85^\circ$  (b)  $83^\circ$   
(c)  $73^\circ$  (d)  $93^\circ$

## SECTION 3

41.  $\frac{5}{8} = \frac{25}{\star} = \frac{\star}{64}$ , subtract  $\star$  from  $\star$  ?  
 (a) 2 (b) 40 (c) 0 (d) 1
42.  $35 \square 7 \square 5 \square 2 = 15$ , which of the below options is correct?  
 (a) +,  $\times$ ,  $\div$  (b)  $\div$ , -,  $\times$  (c)  $\div$ , +, - (d)  $\div$ , +,  $\times$
43. James works 9 hours a day. If he earns ₹6 in an hour and he work for 2 weeks every day in the week, how much does James earn ?  
 (a) ₹756 (b) ₹736 (c) ₹496 (d) ₹946
44. A bakery produces 780 loaves of bread in 6 days. It produces an equal number of loaves each day. How much loaves of bread the bakery produce each day ?  
 (a) 1120 (b) 130 (c) 1160 (d) 120
45. Reduce the fraction into smallest form and find the value of A + B.  
 $\frac{45}{30} = \frac{\square}{\square} \quad \left. \vphantom{\frac{45}{30}} \right\} A$        $\frac{16}{24} = \frac{\square}{\square} \quad \left. \vphantom{\frac{16}{24}} \right\} B$   
 (a)  $\frac{5}{6}$  (b)  $\frac{11}{6}$  (c)  $\frac{9}{6}$  (d)  $\frac{13}{6}$
46.  $P + 93 = 181$   
 $P = Q + 59$  ; Find sum of P and Q.  
 (a) 119 (b) 117 (c) 107 (d) 118
47. Divide the 5<sup>th</sup> multiple of 9 by the 2<sup>nd</sup> multiple of 3. The sum of the remainder and the quotient is \_\_\_\_\_ ?  
 (a) 3 (b) 4 (c) 7 (d) 10

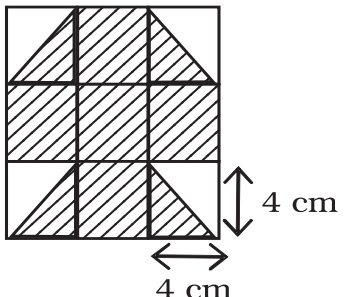
48. The figure below shows a rectangle and a square find  $\angle a$  ?



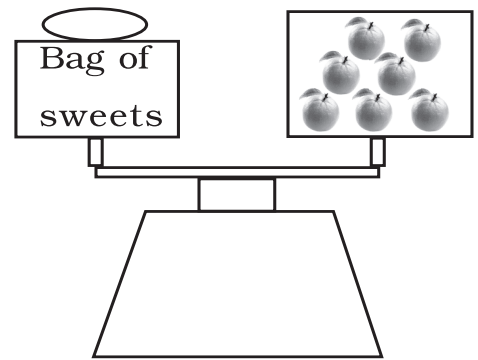
- (a)  $32^\circ$                       (b)  $42^\circ$                       (c)  $58^\circ$                       (d)  $122^\circ$
49. The area of a rectangle is  $32 \text{ cm}^2$  and its length is 8 cm. Find its perimeter ?
- (a) 24 cm                      (b) 12 cm                      (c) 4 cm                      (d) 14 cm
50. Rani went to a movie. The movie was 2 hrs 15 mins long. If the movie ended at 4:30 pm, at what time did the movie start ?
- (a) 2:15 am                      (b) 2:30 pm                      (c) 2:15 pm                      (d) 2:05 pm

**(Extra practise question) - (Section - 3)**

1. Arjun is 24 years old today. He is elder to his brother by 6 years. What will be the sum of ages of two, 7 years hence ?  
(a) 49 (b) 42 (c) 56 (d) 38
2.  $4 \square 3 \square$  is a number divisible by 11 and the digits in the  $\square$  place are the same. Find the digit from the following.  
(a) 5 (b) 2 (c) 3 (d) 9
3. The total cost of 7 books and 13 notebooks is ₹234. If the cost of each note book is ₹11, what is the cost of each book ?  
(a) 13 (b) 12 (c) 11 (d) 14
4. Priya started study in the morning exactly at 8:30 am. She studied for 50 minutes. Then took rest for 20 mins. Then she looked at the watch what time was it?  
(a) 9 : 30 pm (b) 9 : 40 pm (c) 9 : 30 am (d) 9 : 40 am
5.  $\frac{XLVI + XXVIII + XVI}{XIV + VIII - VII} = ?$   
(a) 4 (b) 6 (c) 5 (d) 8
6. In the given example of division, the remainder is 0. Find the value of  $\square + \star$   
$$\begin{array}{r} 3\square \\ 17 \overline{) 5\star 8} \end{array}$$
  
(a) 7 (b) 4 (c) 5 (d) 11
7. A water tank of capacity 56 litre is filled with 35 litre of water. What part of tank is empty?  
(a)  $\frac{5}{8}$  (b)  $\frac{3}{7}$  (c)  $\frac{3}{8}$  (d)  $\frac{5}{7}$

8. In January a company sold 873 cycles, in February it sold 395 less than January. In March it sold 117 more cycles than that sold in February. What is the total sale of cycles in those three months.
- (a) 1946 (b) 1948 (c) 1949 (d) 1945
9. The perimeter of a rectangle is 42 cm. Which one of the following cannot be its length & breadth ?
- (a) L = 17 cm, B = 4 cm (b) L = 18 cm, B = 7 cm  
(c) L = 15 cm, B = 6 cm (d) L = 13 cm, B = 8 cm
10. Misha and Nisha were asked to multiply a same number by 12 and 18 respectively. What could be the difference between their answers ?
- (a) 42 (b) 27 (c) 64 (d) 81
11. Find the area of shaded part is \_\_\_\_\_ cm<sup>2</sup>
- (a) 128  
(b) 102  
(c) 122  
(d) 112
- 
12. Multiply the sum of  $\frac{2}{3}$  and  $\frac{1}{9}$  by 27. The answer is \_\_\_\_\_.
- (a) 24 (b) 21 (c) 18 (d) 27
13. Sachin had 54 marbles. His brother has  $\frac{5}{6}$  as many marbles as Sachin. How many marbles did they have altogether ?
- (a) 89 (b) 109 (c) 45 (d) 99
14. Divide the product of 7 and 96 by 8. The answer is \_\_\_\_\_
- (a) 14 (b) 32 (c) 84 (d) 109

15. In the figure, the total weight of Bag of sweets and seven oranges is 3 kg 208 g. If the bag of sweets weight is 632 g. Find the weight of each orange.



- (a) 368 g (b) 386 g  
(c) 378 g (d) 2576 g
16. Raju is younger than Ravi by 4 years. Wasim's age is half of Ravi's. Wasim is 12 years old. How old was Raju two years ago?
- (a) 17 (b) 19 (c) 18 (d) 16
17. 1<sup>st</sup> of January is on Wednesday. If 2<sup>nd</sup> and 4<sup>th</sup> Saturdays are holidays, what dates will there be on these days ?
- (a) 1, 15 (b) 11, 25 (c) 15, 29 (d) 8, 29
18. Salina gets a scholarship worth ₹150 per month, she saves  $\frac{1}{5}$  part of it in the school bank. How much does she save in a year.
- (a) ₹316 (b) ₹240 (c) ₹480 (d) ₹360
19. Points A, B, C, D ..... indicate equal distances on the below line.
- 0 7 14 42 56 84
- ←| | | | | | | | | |→
- P A B C D E F
- Gopal rode on a bicycle from 'A' to 'F'. He came back to 'D'. How many kilometres did he travel ?  
(marks on the line indicate kilometers)
- (a) 119 km (b) 98 km (c) 56 km (d) 105 km
20. In a school, 250 children go by bus, twice that number goes by bicycle. The children going on foot is equal to the sum of children going by bus and by bicycle. How many children are there in the school ?
- (a) 1500 (b) 1400 (c) 1350 (d) 1250



- 21.** In the adjoining division problem, the same digit is there in place of the 5 stars. Which digit is that ?

(a) 2 (b) 4  
(c) 3 (d) 0

$$\begin{array}{r}
 \star 7 \\
 1\star \overline{) 48\star} \\
 \underline{- \star 9} \phantom{0} \\
 09\star \\
 \underline{- 91} \\
 02
 \end{array}$$

- 22.** Sum of the numbers in each row and in each column is the same. Which numbers will come in place of x and y respectively.

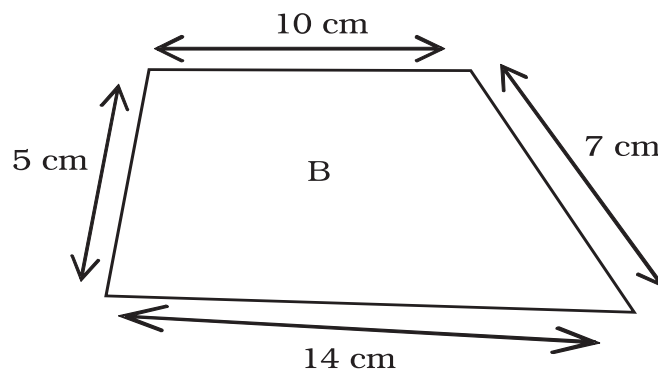
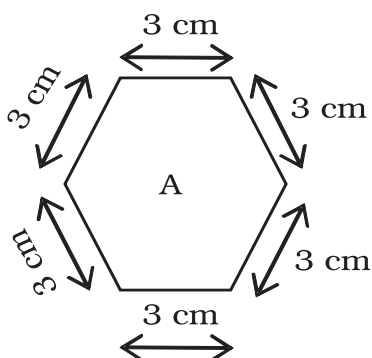
(a) 3, 9 (b) 2, 9  
(c) 9, 3 (d) 4, 10

14	x	10
5	y	13
8	15	4

- 23.** Madan bought a compass-box for ₹130, a notebook for ₹22.50 and a ruler for ₹14.50. If he gives the shopkeeper a note of ₹200, how many rupees will he get back ?

(a) ₹23 (b) ₹34 (c) ₹33 (d) ₹43

**24.**



Study the above two figures. How many times is the perimeter of 'B' to that of 'A' ?

(a) half (b) quarter (c) 4 times (d) 2 times

- 25.** How many coins of ₹5 will you get in exchange by giving 60 coins each worth 50 paise?

(a) 5 (b) 6 (c) 30 (d) 16

26.  $(\text{MDCCLXXXIV} - \text{CDLXIII}) + (\text{DCXXVI} + \text{XLVIII}) = \underline{\hspace{2cm}}$

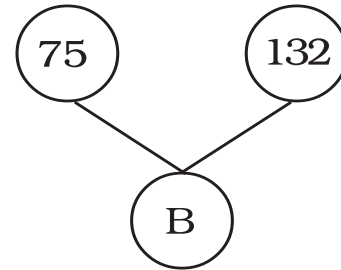
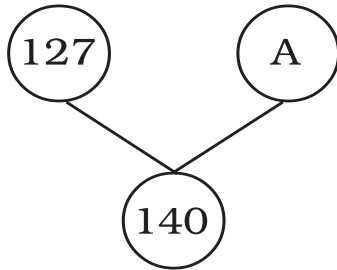
(a) MCMXCV

(b) MCDXV

(c) MCXCV

(d) MDXCV

27. Look at the number bonds below \_\_\_\_\_



Subtract A from B. The answer is \_\_\_\_\_

(a) 13

(b) 207

(c) 194

(d) 196

28. Chetan is taller than Samir by 4cm. Milan is shorter than Chetan by 4cm. Samir is 1 metre and 47 cm tall. What is the height of Milan ?

(a) 1.51 m

(b) 1.46 m

(c) 1.41 m

(d) 1.47 m

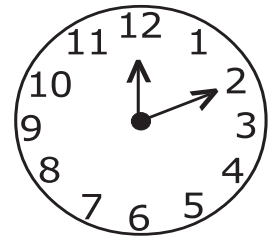
29. The clock is fast by 6 minutes. If the examination is to begin at 1 O'clock, how much time is actually left for the exam to start.

(a) 50 mins

(b) 54 mins

(c) 56 mins

(d) 66 mins



30. Ten rupee notes are arranged in serial order in a bundle form number 12356 to 12406. How much is the total amount if none of the serial number is missing ?

(a) ₹400

(b) ₹410

(c) ₹510

(d) ₹500

**Answer Sheet****Mock paper - 1**

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

**Mock paper - 2**

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

**Extra Practice Question Paper**  
**(Section - 3)**

1	c	2	d	3	a	4	d	5	b	6	d	7	c	8	a	9	b	10	a
11	d	12	b	13	d	14	c	15	a	16	c	17	b	18	d	19	b	20	a
21	c	22	a	23	c	24	d	25	b	26	a	27	c	28	d	29	c	30	c

## SECTION 3 (Solutions)

## Mock Paper - 1

- 41) Option (d) is correct as

$$32 \div \boxed{4} = 8$$

- 42) Total legs = 30  
 4 dogs =  $4 \times 4$  legs = 16  
 7 people =  $7 \times 2$  legs = 14  
 Total = 30  
 $\therefore$  its 4 dogs and 7 peoples

- 43) Muffins in one batch = 16  
 Muffins ate = 4  
 Muffins left =  $16 - 4 = 12$   
 Made 2 more batches  
 $= 2 \times 16 = 32$   
 (+) Muffins left over 12  
44

- 44)
- $\diamond \times 4 = \star \rightarrow \textcircled{1}$

$$\star - \diamond = 330 \rightarrow \textcircled{2}$$

$$\therefore \star = 300 + \diamond$$

Substitute value of  $\star$  in  $\textcircled{1}$ 

$$\diamond \times 4 = \star$$

$$\diamond \times 4 = 300 + \diamond$$

$$4 \diamond - \diamond = 330$$

$$3 \diamond = 330$$

$$\diamond = 330 \div 3 = 110$$

$$\text{Now, } \star - \diamond = 330$$

$$\star - 110 = 330$$

$$\star = 330 + 110$$

$$= 440$$

$$\therefore \star + \diamond = 440 + 110 = 550$$

- 45) 

Month	No. of days
Feb (29 - 25)	4
March	31
April	+ 30
May	+ <u>19</u>
Total days	<u>84</u>

  
 Now, divide 84 by 7, as in a week there are 7 days  $84 \div 7$ , Don't see the quotient, see the remainder, as remainder is zero, it will remain the same day, Wednesday.

- 46) Divide 868 by 14, Quotient is 62, So,

A	6	B
---	---	---

$$0 \quad 6 \quad 2$$

$$\text{Now } A + B = 0 + 2 = 2$$

- 47)  $550 + 25 = 575$   
 Now,  $575 + \underline{\quad} = 1000$   
 $\therefore 1000 - 575 = 425$

- 48) Flight boarding time = 8 : 45  
 Time taken by Taxi to reach Home = 2 hrs 45 mins  
 Reached home at 6 : 15  
 Count time back ward,  
 From 6 : 15, 2 hrs 45 mins back = 3 : 30  
 Now, for duration of flight  
 Count time from 8 : 45 to 3 : 30 = 6 hrs 45 mins

- 49)  $7051 - 2344 = 4707$   
 Now  $4707 \div 9 = 523$

- 50) Do, working backwards ....  
 So,  $Z = 119 + 13 = 132$   
 $Y = 132 \div 11 = 12$   
 $X = 12 - 12 = 0$

## Mock Paper - 2

- 41)  $\frac{5}{8} \times \frac{5}{5} = \frac{25}{\star} \therefore \star = 40$

$$\frac{5}{8} \times \frac{8}{8} = \frac{\star}{64}, \star = 40$$

Now, subtract  $\star$  from  $\star$   
 $\star - \star = 40 - 40 = 0$

- 42)  $35 \div 7 \div 5 \times 2 = 15$  Use, DMAS  
 $5 + 5 \times 2 = 15$   
 $5 + 10 = 15$   
 $15 = 15$   
 Option (d),  $\div$ ,  $+$ ,  $\times$

- 43) James works 9 hours a day  
 He earns ₹6 in an hour  
 Works for 2 weeks every day = 14 days  
 Total number of hours =  $14 \times 9 = 126$   
 Total earnings in 2 weeks =  $126 \times 6 = ₹ 756$

- 44) 780 loaves of bread in 6 days  
 $\therefore$  Each day =  $780 \div 6 = 130$

- 45)  $A = \frac{45}{30} = \frac{3}{2}$  (Reduced form)

$$B = \frac{16}{24} = \frac{2}{3} \quad (\text{Reduced form})$$

$$\text{Now, } A + B = \frac{3}{2} + \frac{2}{3}$$

Make denominators common

$$\text{So, } \frac{3 \times 3}{2 \times 3} + \frac{2 \times 2}{3 \times 2} = \frac{9 + 4}{6} = \frac{13}{6}$$

- 46)  $P + 93 = 181$   
 $\therefore P = 181 - 93 = 88$   
 Now,  $P = Q + 59$   
 $\therefore 88 = Q + 59$   
 $\therefore Q = 88 - 59 = 29$   
 $P + Q = 88 + 29$   
 $= 117$
- 47) 5<sup>th</sup> Multiple of 9 =  $9 \times 5 = 45$   
 2<sup>nd</sup> Multiple of 3 =  $2 \times 3 = 6$   
 Now, divide 45 by 6, the quotient is 7 and Remainder is 3.  
 $\therefore$  Quotient + Remainder  
 $= 7 + 3 = 10$
- 48) Each angle of a rectangle is  $90^\circ$   
 $\therefore 58^\circ + b = 90^\circ$   
 $\therefore b = 90^\circ - 58^\circ = 32^\circ$   
 Each angle of a square is also  $90^\circ$   
 $\therefore b + a = 90^\circ$   
 $\therefore 58^\circ + a = 90^\circ$   
 $\therefore a = 90^\circ - 32^\circ$   
 $a = 58^\circ$
- 49) Area of rectangle =  $32\text{cm}^2$   
 Length = 8 cm  
 $\therefore$  Area =  $L \times b$   
 $32 = 8 \times b$   
 $\therefore b = \frac{32}{8} = 4\text{ cm}$   
 Now, perimeter = sum of all sides  
 $= 8 + 8 + 4 + 4$   
 $= 24\text{ cm}$
- 50) Duration of movie = 2 hours 15 mins  
 Movie ended at 4 : 30 pm  
 Now, from 4.30 pm go backward 2 hrs 15 mins  
 $= 2 : 15\text{ pm}$

### Extra Practice Questions

- 1) Present age of Arjun = 24 yrs  
 Present age of his brother =  $24 - 6$   
 $= 18\text{ yrs}$   
 Age after 7 years,  
 Arjun =  $24 + 7 = 31\text{ years}$   
 His Brother =  $18 + 7 = 25\text{ years}$   
 their sum of ages = 56 years
- 2) 4 9 3 9  
 Divisibility of 11 is do sum of alternate placed digits, if the difference of the sum should be 0 or multiple of 11.  
 So,  $4 + 3 = 7$   
 $9 + 9 = 18$   
 Now  $18 - 7 = 11$   
 So, '9' should be the digit in the   .
- 3) Cost of 7 books and 13 notebooks = ₹234  
 cost of each notebook = ₹11  
 $\therefore$  cost of 13 notebooks =  $13 \times 11 = ₹143$   
 cost of 7 books =  $234 - 143 = ₹91$   
 $\therefore$  cost of each book =  $91 \div 7 = ₹13$

- 4) Study start time = 8 : 30  
 Studied for 50 mins, took rest for 20 mins  
 From 8 : 30 am, go 70 mins ahead, it will be 9 : 40 am
- 5) 
$$\frac{46+28+16}{14+8-7}$$
  

$$\frac{90}{15} = 6$$
- 6) Remainder is 0,  
 $\square = 4$   
 $\star = 7$   
 $\therefore \square + \star$   
 $4 + 7 = 11$
- 7) Capacity of water tank = 56 l  
 35 l is filled  
 $\therefore$  Empty =  $56 - 35 = 21\text{ l}$   
 $\therefore$  fraction part empty  
 $= \frac{21}{56} = \frac{3}{8}$
- 8) Sale in January = 873  
 Sale in February =  $873 - 395 = 478$   
 Sale in March =  $478 + 117 = 595$   
 Total cycle sold =  $876 + 478 + 595$   
 $= 1949\text{ cycles}$
- 9) Perimeter = 42 cm  
 Option (b) is the correct answer as,  
 $L = 18\text{ cm}, B = 7\text{ cm}$   
 Perimeters =  $18 + 18 + 7 + 7$   
 $= 50\text{ cm}$
- 10) Misha multiplied it by 12  
 Nisha multiplied it by 18  

Table of 12	Difference	Table of 18
12	6	18
24	12	36
36	18	54
48	24	72

 Now, the difference is table of 6, option (a) 42
- 11) Full shaded squares = 5  
 Half shaded square = 4  
 $\therefore$  4 half shaded means 2 full shaded squares  
 Means 7 full shaded squares  
 Area of 1 square = side  $\times$  side  
 $= 4 \times 4 = 16$   
 $\therefore$  Area of 6 square =  $16 \times 7$   
 $= 112\text{ cm}^2$
- 12) Sum of  $\frac{2}{3}$  and  $\frac{1}{9}$  (make denominators common)  

$$= \frac{2 \times 3}{3 \times 3} + \frac{1 \times 1}{9 \times 1} = \frac{6+1}{9}$$
  

$$= \frac{7}{9} \times \frac{3}{1} = \frac{7}{3}$$

- 13) Total marbles with sachin = 54  
 Marbles with his brother =  $\frac{5}{8} \times 54$   
 $= \frac{5 \times 54}{8}$   
 $= \frac{5 \times 9 \times 6}{2 \times 2 \times 2}$   
 $= \frac{5 \times 9}{2} = 45$   
 Altogether =  $54 + 45 = 99$
- 14)  $96 \times 7 = 672$   
 Now,  $672 \div 8 = 84$
- 15) weight of bag of sweets and 7 oranges together = 3 kg 208 g = 3208 g  
 weight of bag of sweet = 632 g  
 $\therefore$  weight of 7 oranges =  $3208 - 632 = 2576$  g  
 weight of each orange =  $2576 \div 7 = 368$  g
- 16) Wasim's age = 12 yrs  
 $\therefore$  Wasim's age is half of Ravi's age means,  
 Ravi's age is double of wasim's age.  
 $\therefore$  Ravi's age = 24 yrs  
 $\therefore$  Raju's age =  $24 - 4 = 20$  yrs  
 Raju's age 2 yrs ago =  $20 - 2 = 18$  yrs
- 17) 31st December is on Tuesday  
 January 1, 2, 3, 4 will fall on days from Wednesday to Saturday.  
 So the dates falling on Saturdays in the month of January is 4, 11, 18, 25  
 So, the correct answer is option (b)
- 18) Per month scholarship = ₹150  
 Amount saved per month =  $\frac{1}{5} \times 150$   
 $= ₹30$   
 $\therefore$  Amount saved in the year =  $30 \times 12$  months  
 $= ₹360$
- 19) Distance between two points = 7 kilo metres  
 The line is marked at equal distance. From A to F there are 10 equal distances and from F to D there are 4 points. In all distance covered =  $14 \times 7 = 98$  km
- 20) Children go by bus = 250  
 Children go by bycycle =  $250 \times 2 = 500$   
 Children go by foot =  $250 + 500 = 750$   
 Total number of students =  $250 + 500 + 750 = 1500$
- 21) The remainder is 2, hence digit '3' will be there in place of the bottom star. So, correct answer is option (c) 3.
- 22) Sum of each row = sum of each column = 27  
 $\therefore x = 27 - (14 + 10) = 27 - 24 = 3$   
 $\therefore y = 27 - (5 + 13) = 27 - 18 = 9$   
 option (a) is correct.
- 23) Total amount Madan spent =  $130 + 22.50 + 14.50 = ₹167$   
 Amount he gets back =  $200 - 167 = ₹33$
- 24) Perimeter of 'A' = 18 cm  
 Perimeter of 'B' = 36 cm  
 so, perimeter of 'B' is 2 times perimeter of 'A'.
- 25) 60 coins  $\times ₹0.50 = ₹30$   
 $\therefore$  you will get 6, ₹5 coins in exchange of 60 coins each worth 50 paise
- 26)  $1784 - 463 = 1321$   
 $626 + 48 = 674$   
 Now,  $1321 + 674 = 1995$   
 option (a), MCMXCV
- 27)  $A = 140 - 127 = 13$   
 $B = 132 + 75 = 207$   
 Now,  $B - A = 207 - 13 = 194$
- 28) Samir's height = 1 m 47 cm  
 $= 147$  cm  
 Chetan's height =  $147 + 4 = 151$  cm  
 Milan's height =  $151 - 4 = 147$  cm  
 $= 1.47$  m
- 29) It's 12 : 10 O' clock in the clock. It is 6 mins fast, the correct time should be 12 : 04.  
 $\therefore$  There is 56 mins left for one O' clock.
- 30) Bundles are from number 12356 to 12406, means 51 notes of ₹10 each  
 $\therefore$  Total amount =  $51 \times 10 = ₹510$



# MENTAL MATHS COMPETITION<sup>®</sup>

Name of Student in Full (IN CAPITAL LETTERS) :-

Name

Father's Name

Surname

School Name

Std. Mobile No.

Examination Centre Date :

## INSTRUCTIONS

1. Use HB Pencil only on this sheet
2. Darken the ovals fully.
3. Erase completely to change responses.
4. Do not make any stray mark on this sheet.

Incorrect way of shading

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

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

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

Correct way of shading

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

## ANSWERS

### Section - I

1. (A) (B) (C) (D)
2. (A) (B) (C) (D)
3. (A) (B) (C) (D)
4. (A) (B) (C) (D)
5. (A) (B) (C) (D)
6. (A) (B) (C) (D)
7. (A) (B) (C) (D)
8. (A) (B) (C) (D)
9. (A) (B) (C) (D)
10. (A) (B) (C) (D)
11. (A) (B) (C) (D)
12. (A) (B) (C) (D)
13. (A) (B) (C) (D)
14. (A) (B) (C) (D)
15. (A) (B) (C) (D)
16. (A) (B) (C) (D)
17. (A) (B) (C) (D)
18. (A) (B) (C) (D)
19. (A) (B) (C) (D)
20. (A) (B) (C) (D)

### Section - II

21. (A) (B) (C) (D)
22. (A) (B) (C) (D)
23. (A) (B) (C) (D)
24. (A) (B) (C) (D)
25. (A) (B) (C) (D)
26. (A) (B) (C) (D)
27. (A) (B) (C) (D)
28. (A) (B) (C) (D)
29. (A) (B) (C) (D)
30. (A) (B) (C) (D)
31. (A) (B) (C) (D)
32. (A) (B) (C) (D)
33. (A) (B) (C) (D)
34. (A) (B) (C) (D)
35. (A) (B) (C) (D)
36. (A) (B) (C) (D)
37. (A) (B) (C) (D)
38. (A) (B) (C) (D)
39. (A) (B) (C) (D)
40. (A) (B) (C) (D)

### Section - III

41. (A) (B) (C) (D)
42. (A) (B) (C) (D)
43. (A) (B) (C) (D)
44. (A) (B) (C) (D)
45. (A) (B) (C) (D)
46. (A) (B) (C) (D)
47. (A) (B) (C) (D)
48. (A) (B) (C) (D)
49. (A) (B) (C) (D)
50. (A) (B) (C) (D)

For Office Use Only

Section			Mark	Marks Scored
1			x1	
2			x2	
3			x4	
Total				

Remark :



# MENTAL MATHS COMPETITION<sup>®</sup>

Name of Student in Full (IN CAPITAL LETTERS) :-

Name

Father's Name

Surname

School Name

Std. Mobile No.

Examination Centre Date :

## INSTRUCTIONS

1. Use HB Pencil only on this sheet
2. Darken the ovals fully.
3. Erase completely to change responses.
4. Do not make any stray mark on this sheet.

Incorrect way of shading

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

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

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

Correct way of shading

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

## ANSWERS

### Section - I

1. (A) (B) (C) (D)
2. (A) (B) (C) (D)
3. (A) (B) (C) (D)
4. (A) (B) (C) (D)
5. (A) (B) (C) (D)
6. (A) (B) (C) (D)
7. (A) (B) (C) (D)
8. (A) (B) (C) (D)
9. (A) (B) (C) (D)
10. (A) (B) (C) (D)
11. (A) (B) (C) (D)
12. (A) (B) (C) (D)
13. (A) (B) (C) (D)
14. (A) (B) (C) (D)
15. (A) (B) (C) (D)
16. (A) (B) (C) (D)
17. (A) (B) (C) (D)
18. (A) (B) (C) (D)
19. (A) (B) (C) (D)
20. (A) (B) (C) (D)

### Section - II

21. (A) (B) (C) (D)
22. (A) (B) (C) (D)
23. (A) (B) (C) (D)
24. (A) (B) (C) (D)
25. (A) (B) (C) (D)
26. (A) (B) (C) (D)
27. (A) (B) (C) (D)
28. (A) (B) (C) (D)
29. (A) (B) (C) (D)
30. (A) (B) (C) (D)
31. (A) (B) (C) (D)
32. (A) (B) (C) (D)
33. (A) (B) (C) (D)
34. (A) (B) (C) (D)
35. (A) (B) (C) (D)
36. (A) (B) (C) (D)
37. (A) (B) (C) (D)
38. (A) (B) (C) (D)
39. (A) (B) (C) (D)
40. (A) (B) (C) (D)

### Section - III

41. (A) (B) (C) (D)
42. (A) (B) (C) (D)
43. (A) (B) (C) (D)
44. (A) (B) (C) (D)
45. (A) (B) (C) (D)
46. (A) (B) (C) (D)
47. (A) (B) (C) (D)
48. (A) (B) (C) (D)
49. (A) (B) (C) (D)
50. (A) (B) (C) (D)

For Office Use Only

Section			Mark	Marks Scored
1			x1	
2			x2	
3			x4	
Total				

Remark :