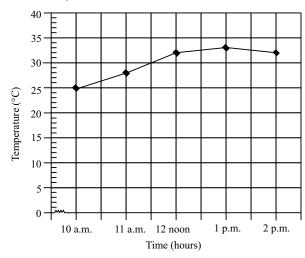


LEVEL - 2

Year 2015-16

MATHEMATICS

- 1. MMDCCI + DCCCI = .
 - A. MCLII
 - B. MMCII
 - C. MMMDII
 - D. MMMMMDII
- 2. In 449485, the sum of place values of 4's is _____ more than place value of 8 at the tens place.
 - A. 430240
 - B. 440320
 - C. 440230
 - D. 404230
- 3. The given graph shows the temperature taken on a certain day.



The increase in temperature is greatest from

- A. 10 a.m. to 11 a.m.
- B. 11 a.m. to 12 noon
- C. 12 noon to 1 p.m.
- D. 1 p.m. to 2 p.m.
- 4. Which of the following has the greatest value?
 - A. 21 hundredths
 - B. 109 thousandths
 - C. 25 thousandths
 - D. 15 hundredths
- 5. What is the value of

$$88888 \times 10 - 188888 + 4000000 \div 2?$$

- A. 2699992
- B. 2050000
- C. 1300008
- D. 1300080

- 6. Mr. Gupta has room 12 m wide and 24 m long. He wants to partition an area that measures 5 m wide and 7 m long for study room. Find the remaining area of the room.
 - A. 258 m^2
 - B. 253 m^2
 - C. 256 m^2
 - D. 250 m²
- 7. Four times of 96 is multiple of 12.
 - A. 12th
 - B. 24th
 - C. 32th
 - D. 28th
- 8. Kartik bought 189 trays of chocolates. Each tray contained 16 chocolates. What is the total number of chocolates he bought?
 - A. 3634
 - B. 3160
 - C. 3024
 - D. 4312
- 9. A rule for a function table is given below.

Multiply the input value by 2 and add that product to 10 to get the output value".

Which function table below has only values that follows the above rule?

| | Input | Output |
|------------|-------|--------|
| | 2 | 14 |
| 4 . | 0 | 10 |
| | 4 | 18 |
| | 3 | 16 |

| | Input | Output |
|----|-------|--------|
| | 2 | 14 |
| B. | 0 | 0 |
| | 4 | 4 |
| | 3 | 8 |

| | Input | Output |
|----|-------|--------|
| | 2 | 14 |
| C. | 0 | 10 |
| | 4 | 4 |
| | 3 | 6 |

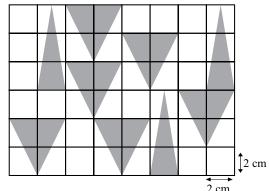
| | Input | Output |
|----|-------|--------|
| | 2 | 6 |
| D. | 0 | 10 |
| | 4 | 14 |
| | 3 | 16 |

10. The given line graph shows the number of puppies sold by Varun in the past 4 weeks.

| 2.50 | Number of puppies sold | | | | |
|------|------------------------|---------------|---------------|--------|---|
| 350 | | | | | ٦ |
| 300 | | | | | ┪ |
| 250 | $\overline{}$ | $\overline{}$ | | | ┪ |
| 200 | | $\overline{}$ | <u> </u> | | ┥ |
| 150 | | | $\overline{}$ | _ | ┥ |
| 100 | | | $\overline{}$ | | 4 |
| 50 | | | | | 4 |
| ان د | | | | | |
| U | Week 1 | Week 2 | Week 3 | Week 4 | |

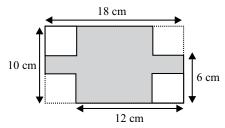
If the puppies were sold at ₹ 40 each, what was the total amount of money collected by Varun?

- A. ₹ 28000
- B. ₹ 30000
- C. ₹ 32000
- D. ₹ 10000
- 11. Find the unshaded area of the given figure.

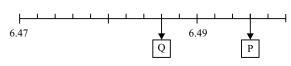


- A. 66 cm^2
- B. 176 cm^2
- C. 126 cm²
- D. 134 cm²
- 12. Garima has 204 stamps, Priya has $2\frac{3}{4}$ times as many stamps as Garima and Latika has 500 more stamps than Priya. How many stamps they have altogether?
 - A. 1189
 - B. 1765
 - C. 1926
 - D. 1826
- 13. Mohit spent $\frac{1}{4}$ of his salary on buying a watch and saved ₹ 1500. How much did he earn in a month?

- A. ₹ 2000
- B. ₹ 7200
- C. ₹ 3000
- D. ₹1600
- 14. Four small identical rectangles have been cut from a piece of rectangular paper as shown in the given figure. What is the area of the shaded part?

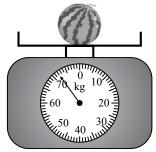


- A. 112 cm²
- B. 84 cm²
- C. 132 cm²
- D. 100 cm^2
- 15. What is the fractional value of P and Q?

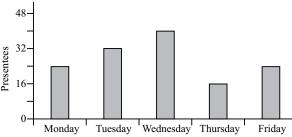


- P
- A. $\frac{6496}{1000}$
- $\frac{6482}{1000}$
- B. $\frac{6494}{1000}$
- $\frac{6478}{1000}$
- C. $\frac{6496}{1000}$
- $\frac{6486}{1000}$
- D. $\frac{6483}{1000}$
- $\frac{6483}{1000}$
- 16. The sum of $1\frac{1}{6}$ and $2\frac{1}{3}$ is _____ sum of $1\frac{1}{3}$ and $4\frac{3}{4}$.
 - A. Greater than
 - B. Less than
 - C. Equal to
 - D. Data Inadequate
- 17. What is the value of $82.24 2.24 \times 6 + 3.4 \div 5$ in fractions?
 - A. 6948/100
 - B. 6958/100
 - C. 9668/1000
 - D. 6812/1000

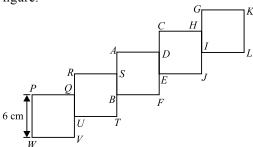
18. What is the weight of five such watermelons shown in the given figure?



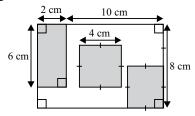
- A. 540 kg
- B. 240 kg
- C. 360 kg
- D. 72 kg
- 19. The given graph shows the daily number of presentees for five days in class V. What is the difference between the highest number of presentees and the lowest number of presentees in the class?



- A. 16
- B. 24
- C. 28
- D 32
- 20. 22 children were at a birthday party. Each girl drank 2 glasses of fruit punch and each boy drank 3 glasses of fruit punch. If the boys drank 31 more glasses of fruit punch than girls, then how many girls attended the party?
 - A. 7
 - B. 8
 - C. 16
 - D. 15
- 21. The given figure is made up of five identical squares and RQ = QU = UV = AS = SB = BT = CD = DE = EF = GH = HI = IJ. Find the perimeter and area of the figure.



- A. 95 cm, 300 cm²
- B. 90 cm, 240 cm²
- C. 110 cm, 300 cm²
- D. 96 cm, 180 cm²
- 22. Find the sum of area of the shaded part and area of whole figure.



- A. 190 cm^2
- B. 230 cm^2
- C. 140 cm^2
- D. 150 cm²
- 23. The given table shows the fare of travelling from two trains P and Q. Study it carefully and answer the following question.

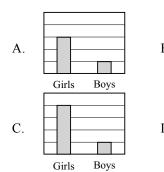
| | Fare (1st km) | Every additional (1/2) km or part thereof |
|---------|---------------|--|
| Train P | ₹ 7.50 | 50 paise |
| Train Q | ₹ 9.90 | 60 paise |

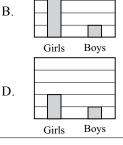
How much total money Mohit has to pay if he travels 2.5 km from Train P and 1.5 km from Train Q?

- A. ₹ 19.90
- B. ₹ 19.00
- C. ₹ 16.90
- D. ₹ 19.50
- 24. The given table shows the time taken by five friends to complete their lunch. Which friend had finished the lunch before Meetu?

| Name | Time taken |
|-------|------------------|
| Meetu | 2440 secs |
| Beena | 125 mins 40 secs |
| Komal | 123 mins 24 secs |
| Ankit | 24 mins 25 secs |
| Aarav | 44 mins 20 secs |

- A. Aarav
- B. Komal
- C. Ankit
- D. Beena
- 25. One third of the members of a badminton club are boys. Which of the following bar graphs is the correct representation of the members of the club?





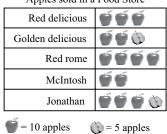
26. Nisha planned to list all the prime numbers from 60 to 100. Her list is shown below.

Her friend noticed that one prime number is missing. Which prime number is missing in Nisha's list?

- A. 81
- B. 87
- C. 89
- D. 91

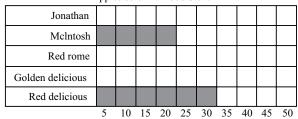
Direction (27-28): Students created a pictograph that shows the number of apples sold in a food store in one week. Answer the questions based on it.

Apples sold in a Food Store

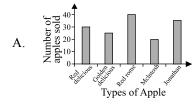


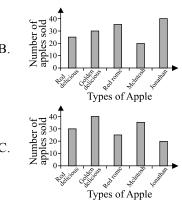
27. How many blocks should the students shade on the graph to represent the number of Jonathan apples sold?

Apples sold in a Food Store



- A. 7
- B. 6
- C. 5
- D. 4
- 28. Select the correct bar graph which represents the data shown in pictograph.





- D. None of these
- 29. Which of the following figures has the greatest shaded fraction?

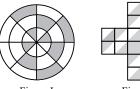
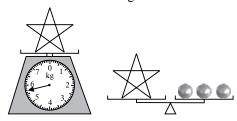






Figure I

- A. Figure I
- B. Figure II
- C. Figure III
- D. All have equal shaded part of a fraction
- 30. What is the weight of a ball shown in the figure, if all the balls have same weight?

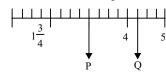


- A. 1.9 kg
- B. 3.8 kg
- C. 5.6 kg
- D. 5.7 kg
- 31. Find P, Q and P + Q + R.

$$\begin{array}{r}
 96 \\
 \times 89 \\
\hline
 \hline
 P64 \\
 +7 \hline
 080 \\
\hline
 854 \hline
 \end{array}$$

| | P | Q | P + Q + R |
|----|---|---|-----------|
| A. | 8 | 6 | 18 |
| B. | 4 | 6 | 12 |
| C. | 3 | 5 | 14 |
| D | 2 | 7 | 15 |

- 32. 3 shirts and 7 pairs of pants have a total of 55 buttons. Each pair of pants has 5 fewer buttons than each shirt. How many buttons are there on each shirt?
 - A.
 - 9 В.
 - C. 25
 - D. 30
- Which type of angle has a measure that is smaller than obtuse angle?
 - A. Acute
 - В. Right
 - C. Straight
 - D. Both A and B
- What is the sum of P and Q?



- 7.6 Α.
- 7.25 В.
- C. 7.75
- D. 7.5
- 35. Naman left the town P at time shown below. After 1 hour 50 minutes, he stopped at Town Q for rest. He then took another 2 hours 25 minutes to reach Town R. How long was his rest break?



Arrived at Town R

- Left Town P A. 2 hr 50 mins
- В. 1 hr 25 mins
- C. 1 hr 50 mins
- 2 hrs 10 mins
- Which of the following are symmetric figures?











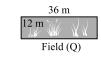
- Only (2) A.
- B. Both (3) and (4)
- C. (1), (2), (3) and (4)
- D. (1), (2) and (4)
- 37. 8348 people took part in a marathon. 926 people gave up after the first hour. One third of the remaining people gave up after the second hour. The rest

completed the marathon. How many people completed the marathon?

- 4945 Α.
- B. 4942
- C. 4940
- D. 4948
- 38. Ali bought three fields. He bought Field (P) at the rate of ₹ 95 for a square metre, Field (Q) at the rate of ₹ 110 for a square metre and Field (R) at the rate of ₹ 120 for a square metre. Find the total cost of all three fields.



A.

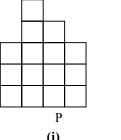


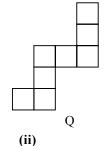


Field (P)

₹ 189000

- В. ₹ 180900
- C. ₹ 198000
- ₹ 981000 D.
- 39. The given figures are made up of identical squares. If each side of the square is 3 cm, then find:
 - the perimeter of figures P and Q respectively.
 - (ii) the difference in area of the figures P & Q.





- (i)
 - 54 cm^2 45 cm, 48 cm
- 54 cm, 54 cm В.
- 63 cm^2
- C. 48 cm, 45 cm
- 45 cm^2 54 cm^2
- D. 48 cm, 48 cm
- Select the INCORRECT match.
- A. 218 - CCXVIII
- 399 CCCXCIX В.
- C. 3249 - MMMCCXLX
- D. 1667 - MDCLXVII
- 41. The given table shows the height of a plant measured over five weeks. What is the rate of growth of the plant during the third week?

| At the end of | 1 st | 2 nd | 3 rd | 4 th | 5 th |
|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | week | week | week | week | week |
| Height (cm) | 3 | 10 | 31 | 50 | 65 |

- A. 11 times of height in 1st week
- B. 4 times the height in 2nd week
- C. $\frac{1}{5}$ times of height in 4th week
- D. None of these
- 42. A football team is planning a trip to the beach, where they will spend the night in tents.

If each tent hold 3 players, which of the following table in the options correctly shows the number of tents needed for different numbers of players?

В.

D.

| | Number | Number |
|----|---------|--------|
| | of | of |
| | players | tents |
| 4. | 12 | 36 |
| | 18 | 54 |
| | 21 | 63 |
| | 33 | 99 |
| | | |

| Number | Number |
|---------|--------|
| of | of |
| players | tents |
| 12 | 4 |
| 18 | 6 |
| 21 | 7 |
| 33 | 11 |

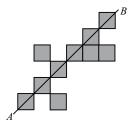
| Number | Number |
|---------|--------|
| of | of |
| players | tents |
| 12 | 4 |
| 18 | 2 |
| 21 | 1 |
| 33 | 4 |

| Number | Number |
|---------|--------|
| of | of |
| players | tents |
| 12 | 6 |
| 18 | 9 |
| 21 | 11 |
| 33 | 17 |
| | |

43. The given table shows the price of rice in four different markets. Which market offers the lowest price for rice per kg?

| | Market P | Market Q | Market R | Market S |
|----------------|-------------|-------------|-------------|-------------|
| Weight of rice | 5 kg | 10 kg | 20 kg | 15 kg |
| Price | ₹ 22.50 | ₹ 45 | ₹ 52.50 | ₹ 36.50 |

- A. Market P B. Market Q C. Market R D. Market S
- 44. What is the least number of squares that must be added, so that the line *AB* becomes a line of symmetry?



A. 1 C. 3

- B. 2
- D. 4
- 45. Harsha is decorating her bedroom. She has the following choices of wall colour, curtain and bedsheet.

| Wall colour | Curtain | Bedsheet |
|-------------|-----------|-----------|
| Blue | Spotted | Flowers |
| Green | Striped | Plain |
| Yellow | Checkered | Checkered |

What is the total number of combinations of 1 wall colour, 1 curtain, and 1 bedsheet that are possible?

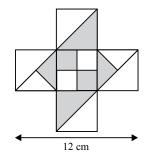
- A. 27
- B. 8
- C. 12
- D. 18

ACHIEVERS SECTION

- 46. If X + X + X + X + X + X = 116 and X + X + X = 64, then the value of $X \times X = 64$
 - A. 364

C.

- B. 264
- C. 226
- D. 494
- 47. The given figure is made up of 5 identical squares. What is the area of the unshaded part?



- A. 43 cm^2
- B. 48 cm²
- C. 12 cm^2
- D. 20 cm^2
- 48. Match the columns:

Column-I

Column-II

- (i) Subtract 2885.3 from product (P) 27.276 of 341.6 and 9
- (ii) Sum of 8.015, 15.001, 0.06, (Q) 189.1 4.2
- (iii) 18.7 more than 24 thousandths (R) 0.724 is ____ more 18.
- (iv) $14 + \frac{8}{10} + \frac{108}{100} + \frac{345}{1000}$
- (S) 16.225
- A. (i) (P), (ii) (R), (iii) (Q), (iv) (S)
- B. (i) (S), (ii) (R), (iii) (P), (iv) (Q)
- C. (i) (S), (ii) (P), (iii) (R), (iv) (Q)
- D. (i) (Q), (ii) (P), (iii) (R), (iv) (S)

49. Find the value of P + Q - R + S.

| J 1 | . ~ | | - | \sim |
|-----|----------------|------------|---|--------|
| | 8 | 9 <u>S</u> | | |
| 96) | 8 5 5 | P 6 | C | |
| _ | $7\mathbb{Q}8$ | | | |
| | 8 7 | 3 | | |
| | -86 | R | | |
| | | 96 | | |
| | _ | 96 | | |
| | | 00 | | |

B. 9

D. 6

- A. 4
- C. 5

- smallest perimeter?
 - (i) A square of side 6 cm.
 - (ii) A rectangle of length 9 cm and breadth 5 cm.

50. Which of the following has the largest area and

- (iii) A square of side 8 cm.
- (iv) A rectangle of length 7 cm and breadth 8 cm.

| | Largest area | Smallest perimeter |
|----|--------------|--------------------|
| A. | (i) | (iii) |
| В. | (ii) | (iii) |
| C. | (iii) | (i) |
| D. | (i) | (i) |

SPACE FOR ROUGH WORK