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Mid-Term Examination Revision worksheet (2023-24)
Class: VII Sub: MATHEMATICS

## Instructions:

Section A: Multiple Choice Question (Q.1 to Q.15) \& Source based Question (Q.16)
Section B: Short Answer Questions of 2 marks each (Q. 17 to Q.21)
Section C: Long Answer Questions (Type -1) of 3 marks each (Q. 22 to Q .26 )
Section D: Long Answer Questions (Type - 2) of 4 marks each (Q. 27 to Q.31)
\& Case study Question (Q. 32 \& Q.34) of 5 marks each.
Section A: Multiple Choice Question (Q. 1 to Q .15 ) of $\mathbf{1}$ mark each

1. Amal has 81 marbles. He gave $\frac{1}{9}$ of them to his friend. How many marbles left with him?
A
9
B
18
C
72

|  | D | 27 |
| :--- | :--- | :--- |

2. The property used in $(25 \times-8) \times 45=25 \times(-8 \times 45)$

| A | Associativity | B | Distributivity | C | Commutativity | D | Identity |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

3. Which of the following pairs of angles do not form complementary angles?

| A | $72^{\circ}$ and $38^{0}$ | B | $45^{0}$ and $45^{0}$ | C | $53^{\circ}$ and $37^{0}$ | D | $51^{0}$ and $39^{\circ}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

4. The mode of $13,12,11,13,17,12,16,12,13, x, 16$ is 13 , then the value of $x$ is

| A | 12 | B | 13 | C | 16 | D | 17 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

5. The value of $[(-36) \div 9] \times[(-15) \div(-5)]$

|  | $\mathbf{A}$ | 12 | $\mathbf{B}$ | 15 | $\mathbf{C}$ | -12 | $\mathbf{D}$ | -15 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

6. The value of $x$ if $3 x-8=13$
A
$\frac{7}{3}$
B
7

| $\mathbf{C}$ | -7 |
| :--- | :--- |

D
63
7. The product of $1000 \times 5.2 \times 0.04$
A
0.208
B
20.8
C $\quad 2080$

|  | D | 208 |
| :--- | :--- | :--- |

8. If $A O B$ is a straight line, the value of $x$

A
$123^{0}$
B
$60^{\circ}$
C $\quad 57^{0}$
D $\quad 67^{0}$
9. Which of the following gives a negative integer?

| A | $(-12+18)$ | $\mathbf{B}$ | $(-7) \times(-5)$ | $\mathbf{C}$ | $7-(-13)$ | D | $25 \div(-5)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

10. Naina painted on cloth piece of length $1 \frac{4}{5} \mathrm{~m}$ long and $3 \frac{1}{3} \mathrm{~m}$ wide. Then area covered by the cloth
A
$12 m^{2}$
B
10 m
C
$8 \mathrm{~m}^{2}$
D $\quad 6 \mathrm{~m}^{2}$
11. Based on the figure which of the are not adjacent angles?


| A | $\angle P O R, \angle S O R$ |
| :--- | :--- |

B $\quad \angle P O T, \angle Q O T$

| $\mathbf{C}$ | $\angle R O S, \angle P O T$ |
| :--- | :--- |


| D | $\angle T O P, \angle P O R$ |
| :--- | :--- |

12. The range of the data $35,45,89,45,52,31,27,63,87,31$

|  | A | 62 | B | 60 | C | 45 | D | 57 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13. | If ( -1 ) multiplied 199 times, we will get |  |  |  |  |  |  |  |
|  | A | -99 | B | -1 | C | 1 | D | 99 |

14. The product of two numbers is 20.44 , if one of the numbers is 7.3 . find the other number

| $\mathbf{A}$ | 1.28 | $\mathbf{B}$ | 2.8 | $\mathbf{C}$ | 0.82 | $\mathbf{D}$ | 0.29 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

15. The age of Amit's father is 3 more than 4 times his age and he is 49 years old. Which of the following equations represents the situation
A
$4(x+3)=49$
B $\quad 3(x+4)=49$
C $\quad 4 x+3=49$
D $3 x+4=49$

Q16. Source based Question -5 Marks
Avani and Maya want to prepare fruit salad for food stall during children's day celebrations. As they are staying in different cities, they checked the prices of fruits in both cities. The double graph shows cost of different fruits.
Observe the double graph and answer the following questions


I Avani bought 3kg mango from city I, how much she has to pay?

|  | A | ₹96 | B | ₹ 225 | C | ₹ 135 | D | ₹ 114 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| II | For ₹104, how many kilograms of watermelon can be bought from city II? |  |  |  |  |  |  |  |
|  | A | 4 | B | 5 | C | 7 | D | 8 |


| III | Maya bought apple and cherry 4 kilograms each from city I. How much she has to pay? |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | ₹418 | B | ₹458 | C | ₹408 | D | ₹480 |
| IV | What is the ratio of cost of mango per kilogram in city I and city II? |  |  |  |  |  |  |  |
|  | A | 4:5 | B | 5:4 | C | 2:3 | D | 2:5 |
| V | Which is the cheapest fruit in both cities ? |  |  |  |  |  |  |  |
|  | A | Banana | B | Cherry | C | Mango | D | Water melon |
| Section B: Short Answer Questions (Type - 1) of 2 marks each (Q. 17 to Q.21) |  |  |  |  |  |  |  |  |
| 17. | Find the Median and mode of the following data: $13,16,12,14,19,12,14,13,14$. |  |  |  |  |  |  |  |
| 18. | Simplify: $\left[\frac{2}{3} \times \frac{12}{8}\right] \div \frac{5}{8}$ |  |  |  |  |  |  |  |
| 19. | Find $x$ and $y$ (give reasons) |  |  |  |  |  |  |  |
| 20. | Write as equation: (a)Half of number added 7 gives 23 <br> (b) 6 taken away from 5times y gives 60 |  |  |  |  |  |  |  |
| 21. | Find: (1)2.113 $\times 100$ (2)3.65 $\div 10$ (3) $2.87 \times 1000$ (4) $6.78 \div 1000$ |  |  |  |  |  |  |  |
| Section C: Long Answer Questions (Type - 1) of 3 marks each (Q. 22 to Q.26) |  |  |  |  |  |  |  |  |
| 22. | The temperature in a city at noon was $10^{\circ} \mathrm{c}$. If it decreases at the rate of $2^{\circ} \mathrm{C}$ per hour till mid night. <br> (a) What would be the temperature at mid night? <br> (b)At what time the temperature would be $2^{\circ} \mathrm{c}$ ? |  |  |  |  |  |  |  |



|  | (2) How many participated in basket ball? <br> (3) How many participated in cricket? <br> (4) What fraction of them participated in in foot ball? |
| :---: | :---: |
| 30. | A car covers 6.2 km by using 2.5 litres of petrol. How much distance will it cover by using 1 litre petrol? (2) How much distance will it cover in 6 litres of petrol? |
| 31. | In a school the number of girls is 50 more than the number of boys. If total number of students is 1070 .find the number of boys and girls. |
| 32. | Case Study-1 <br> A farmer has field ABCD formed by the parallel roads as shown in figure in which lines <br> $m \\| n$ and $p \\| q$. His four cows are suffering from "mad cow disease". So, he tied the at the corners of ABCD <br> Observe the figure and answer the following questions <br> 1. If $\angle B A D=132^{\circ}$, find $\angle A D C$ and $\angle A B C$ <br> 2. Find the values of $x$ and $y$. <br> 3. Find the measures of angles which are complementary and vertically opposite angles. |
| 33. | Case Study-2 <br> A street fruit vendor has mangoes, apples and oranges in his fruit baskets. The number of mangoes is 5 less three times the number of oranges. The number of apples is 3 more than twice the number of oranges. <br> 1) If the number of oranges is 73 , find the number of mangoes. <br> 2) How many apples are there? <br> 3) Vendor sold the apples at a profit of ₹ 2 each and oranges at a loss of ₹ 3 each and mangoes at a profit of ₹1each, find overall profit or loss. |

## 34. Case Study-3

Manu and friends went to a carnival during their holidays

1) Manu and Syam participated in balloon dart game in which 5 points for bursting balloon and deduction of 2 points for missing shot.


They paid for 10 shoots each. Manu burst 7 balloons and Syam burst 6 balloons. Find their scores.
2) Nitin lost 5 points to Mini while playing a card game. Mini then lost 20 points to Nitin in the second round. How many points did Mini lose in total?
3) Ryan was playing a game where catching a fish in the basket adds 10 points to his score. If he catches an octopus instead, he loses 5 points. What is his total if he catches 3 fish and 5 octopus.

ANSWERS

| 1 | C) 72 | 2 | A) Associativity | 3 | $\begin{aligned} & \text { A) } 72^{0} \text { and } \\ & 38^{0} \end{aligned}$ | 4 | B) 13 | 5 | C) -12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | B)7 | 7 | D)208 | 8 | C) $57{ }^{0}$ | 9 | $\begin{aligned} & \text { D) } 25 \div \\ & (-5) \end{aligned}$ | 10 | D) $6 \mathrm{~m}^{2}$ |
| 11 | $\angle R O S, \angle P O T$ | 12 | A)62 | 13 | B) -1 | 14 | B)2.8 | 15 | $\begin{aligned} & \text { C) } 4 x+3= \\ & 49 \end{aligned}$ |
| 16 | $\begin{aligned} & \text { I)₹225 } \\ & \text { II) } 4 \\ & \text { III) } 5: 4 \end{aligned}$ | 17 | Both mode and median $=14$ | 18 | $1 \frac{3}{5}$ | 19 | $\begin{aligned} & x=120^{\circ} \\ & y=60^{\circ} \end{aligned}$ | 20 | a) $\frac{x}{2}+7=23$ <br> b) $5 y-6=60$ |
| 21 | 1)2113 <br> 2) 0.365 <br> 3)2870 <br> 4)0.00678 | 22 | a) $-14^{0} \mathrm{C}$ <br> b) 4 pm <br> c) $-4^{\circ} \mathrm{C}$ | 23 | 1)3\&5,4\&6 <br> 2) $3 \& 6,4 \& 5$ <br> 3) $1 \& 3,2 \& 4$ <br> 5\&7,6\&8 | 25 | $\begin{array}{\|l\|} \hline 13 \\ \text { years } \end{array}$ | 25 | $\text { Mean }=39$ <br> 4 players |
| 26 | 23 | 27 | $\begin{aligned} & a=60^{\circ} \\ & b=120^{\circ} \\ & c=60^{\circ} \\ & d=120^{\circ} \end{aligned}$ | 28 | - | 29 | $\begin{aligned} & \text { 1)30 } \\ & \text { 2)10 } \\ & \text { 3)25 } \\ & \text { 4) } \frac{7}{20} \end{aligned}$ | 30 | a) 2.48 km <br> 2) 14.88 km |


| 31 | $\begin{aligned} \text { Boys } & =510 \\ \text { Girls } & =560 \end{aligned}$ | 32 | 1. $\begin{aligned} & A D C=48^{0} \\ & \angle A B C=48^{0} \end{aligned}$ <br> 2. $\begin{aligned} & x=132^{0} \\ & y=48^{0} \\ & 3.45^{\circ} \& 45^{0} \end{aligned}$ | 33 | 1)26 <br> 2) 35 <br> 3) ₹ 123 <br> loss | 34 | 1)Manu 29 points Syam 22 points <br> 2) 15 points 3$) 5$ points |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

