

## INDIAN SCHOOL AL WADI AL KABIR

Class VII, Mathematics (2024-25)<br>Worksheet (DTQ) -DATA HANDLING

## SHORT ANSWER TYPE QUESTIONS- 7 QUESTIONS. (2 Marks each)

Q1. Find the median of the following: $28,17,22,35,20,10,13$
Q2. Find mean of prime numbers between 10 and 20.
Q3. The number of books arranged in different shelves in the school library are 33, 38, 48, 33, $34,34,33$ and 24 . Find the mode of this data.

Q4. FILL IN THE BLANKS:

1) Data arranged in a tabular form using tally marks is called table.
2) ---------- is the value, which lies in the middle of the data when they are arranged in ascending or descending order.
3) The difference between the highest and the lowest observation of the data is $\qquad$
4) The most common representative value of a group of data is $\qquad$

Q5. The ages of workers in a factory are given as follows:

$$
32,41,28,54,35,26,23,33,38,40
$$

1. What is the age of the oldest worker?
2. What is the age of the youngest worker?
3. What is the range of the ages of the workers?

Q6. Raj wrote the following integers on the board. What is the range of these data?

| -5, | 0, |  |
| :---: | :---: | :---: |
| 15, | -1, | 10, |
| 6, | 12, | -3 |

Q7. Find the median and the range of the following data:
$20,14,6,25,18,13,19,10,9$

## SHORT ANSWER TYPE- 5 QUESTIONS. (3 Marks each)

Q8. $\quad$ The data given below shows the production of motorbikes in a factory for some months of two consecutive years. Draw a double bar graph to represent the data
(Take scale as 1 unit = 1000 bikes)

| Months | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 7}$ |
| :--- | :---: | :---: |
| February | 2700 | 2800 |
| May | 3200 | 4500 |
| August | 6000 | 4800 |
| October | 5000 | 4800 |
| December | 4200 | 5200 |

Q9. The weights (in kg.) of 15 students of a class are:

$$
38,42,35,37,45,50,32,43,43,40,36,38,43,38,47
$$

(i) Find the mode and median of this data.
(ii) Is there more than one mode?

Q10. The runs scored in a cricket match by 11 players is as follows:
$7,16,121,51,101,81,1,16,9,11,16$
Find the mean, mode, median.
Q11. The following double bar graph shows the number of books sold by a bookstore during the four consecutive weeks in July \& August. Read the graph and answer the following questions:
(i) In which month were the maximum number of books sold?
(ii) In which two weeks the book sale was same in the month of August?
(iii) In which week the minimum number of books sold in July?

Number of books sold by a bookstore


Q12. Find the Mode by preparing a frequency table for the following data:

$$
\begin{aligned}
& 4,5,7,5,3,5,4,5,2,6 \\
& 2,5,1,9,6,5,8,4,5,7
\end{aligned}
$$

## LONG ANSWER TYPE- 3 QUESTIONS. (4 Marks each)

Q. 13 Sale of English and Hindi books in four consecutive years are given. Draw a bar graph and answer the following questions

| Year | 2006 | 2007 | 2008 | 2009 |
| :--- | :--- | :--- | :--- | :--- |
| English | 350 | 400 | 450 | 620 |
| Hindi | 500 | 550 | 600 | 650 |

1. In which year was the difference in sale of two language books least?
2. Can you say that demand for English books rise faster? Justify?

Q14. The heights of 8 students were measured in cm and the results are as follows: $135,150,139,128,151,132,148,145$
(i) What is the height of the tallest student?
(ii) What is the height of the shortest student?
(iii) What is the range of the data?
(iv) What is the mean height of the students?
(v) How many students have heights more than
the mean height.
Q15. Following table shows the points of each player scored in three games:
Now answer the following questions:

| Player | Game 1 | Game 2 | Game 3 |
| :--- | :--- | :--- | :--- |
| A | 20 | 25 | 30 |
| B | 0 | 20 | 40 |
| C | 18 | 11 | 16 |

(i) Find the mean to determine A's average number of points scored per game.
(ii) B played in all the three games. Find the mean of player B?
(iii)Which player's average score is the best among the three players?

| ANSWERS |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | 20 | 2. | 15 | 3. | 33 | 4. | 1. Frequency |
| 5. | $\begin{aligned} & \text { i) } 54 \\ & \text { ii) } 23 \\ & \text { iii) } 31 \end{aligned}$ | 6. | 20 | 7. | $\begin{array}{\|l\|} \hline \text { i) } 14 \\ \text { ii) } 19 \end{array}$ |  | 2. Median <br> 3. Range <br> 4. Mode |
| 9. | i) 42 <br> ii) 43,38 , yes two mode | 10. | $\begin{aligned} & \text { i)39.09 } \\ & \text { ii)16 } \\ & \text { ii)16 } \end{aligned}$ | 11 | i)August <br> ii)week 1 \& 4 <br> iii)week 1 | 12 | 5 |
| 13 | 1) 2009 <br> 2) YES | 14 | $\begin{array}{ll}\text { i) } & 151 \\ \text { ii) } & 128\end{array}$ <br> iii) 23 <br> iv) 141 <br> v) 4 girls | 15 | i) 25 <br> ii) 20 <br> iii) Player A |  |  |

