PRISM WORLD

Std.: 8 (English) **Mathematics** Marks: 20

Date: Time: 1 hour

Chapter: 10 to 13

Q.1 Choose the correct alternative. **(2)**

1) A subdivided bar graph which is drawn by converting the data into percentages is called a ..... graph.

a. pie chart
b. histogram
c. percentage bar graph
d. frequency polygon

2) If △PQR ≅ △EFD, then ∠E =

a. ∠P b. ∠Q c. ∠R d. None of these

Q.2 Answer the following questions (any two) **(6)**

1) A Cricket player scored 180 runs in the first match and 257 runs in the second match. Find the number of runs he should score in the third match so that the average of runs in the three matches be 230.

2)

Electricity used (Units) x_i	No. of families (frequency) f_i	$f_i \times x_i$
30	7	210
45	2	90
60	8	480
75	5	375
90	3	270
	N =	$\sum f_i x_i = 1425$

The following table shows the electricity (in units) used by 25 families of Eklara village in a month of May. Complete the table and answer the following questions.

i. How many families use 45 units electricity ?

ii. State the score, the frequency of which is 5.

iii. Find N, and $\sum f_i x_i$.

iv. Find the mean of electricity used by each family in the month of May.

3) Divide and write the quotient and the remainder.

$(4x^4 - 5x^3 - 7x + 1) \div (4x - 1)$

Q.3 Attempt the following questions. (Any three) **(12)**

1) The following data is collected in a survey of some students of 10^{th} standard from some schools. Draw the percentage bar graph of the data.

School	1^{st}	2^{nd}	3^{rd}	4^{th}
Inclination towards science stream	90	60	25	16
Inclination towards commerce stream	60	20	25	24

2) Show the following information by a percentage bar graph.

Division of standard 8	A	B	C	D
Number of students securring grade A	45	33	10	15
Total number of students	60	55	40	75

3) Check whether the given value of the variable makes the equation true

$\frac{3y+2}{11} = \frac{y+5}{8}$, y = 2, 4

4) In the following table, data of the transport means used by students in 8^{th} standard for commutation between home and school is given. Draw a subdivided bar diagram to show the data.

$\text{Mean of commutation} \setminus \text{Town}$	Paithan	Yeola	Shahapur
Cycle	3250	1500	1250
Bus and Auto	750	500	500
On foot	1000	1000	500