

Section I

1. Dipan's Group Scores are as follows:

$$\text{PCB Group} = 98 \times \left(\frac{3}{3}\right) = 98$$

$$\text{Mathematics Group} = 95$$

$$\text{Social Science Group} = \frac{96 + 95}{2} = 95.5$$

$$\text{Vernacular Group} = \frac{96 + 94}{2} = 95$$

$$\text{English Group} = \frac{96 + x}{2} = 48 + \left(\frac{x}{2}\right)$$

$$\text{Dipan's final score} = 96$$

$$\therefore \text{Sum of Dipan's Group Scores} = 96 \times 5 = 480$$

$$\therefore 98 + 95 + 95.5 + 95 + 48 + \frac{x}{2} = 480$$

$$\therefore \frac{x}{2} = 48.5$$

$$\therefore x = 97$$

Dipan scored 97 marks in English Paper II.

Hence, option 3.

2. From the table we can observe that only Dipan is eligible to apply for the prize.
So Dipan gets the prize.
Hence, option 4.
3. Dipan was the only boy to score at least 95 in at least one paper from each of the groups.
Hence, option 1.
4. In order to maximize scores, each student would choose to improve score in the paper in which would affect the group score the most.
Consider the options.
Ram chooses Vernacular Paper I or II.
His original group score in Vernacular group = 94
- $$\text{His new score would change by } \frac{\frac{(94 + 100)}{2} - 94}{5} = 0.6$$
- His new score = 96.1 + 0.6 = 96.7

Agni chooses Vernacular Paper I.

His original group score in Vernacular group = 87.5

