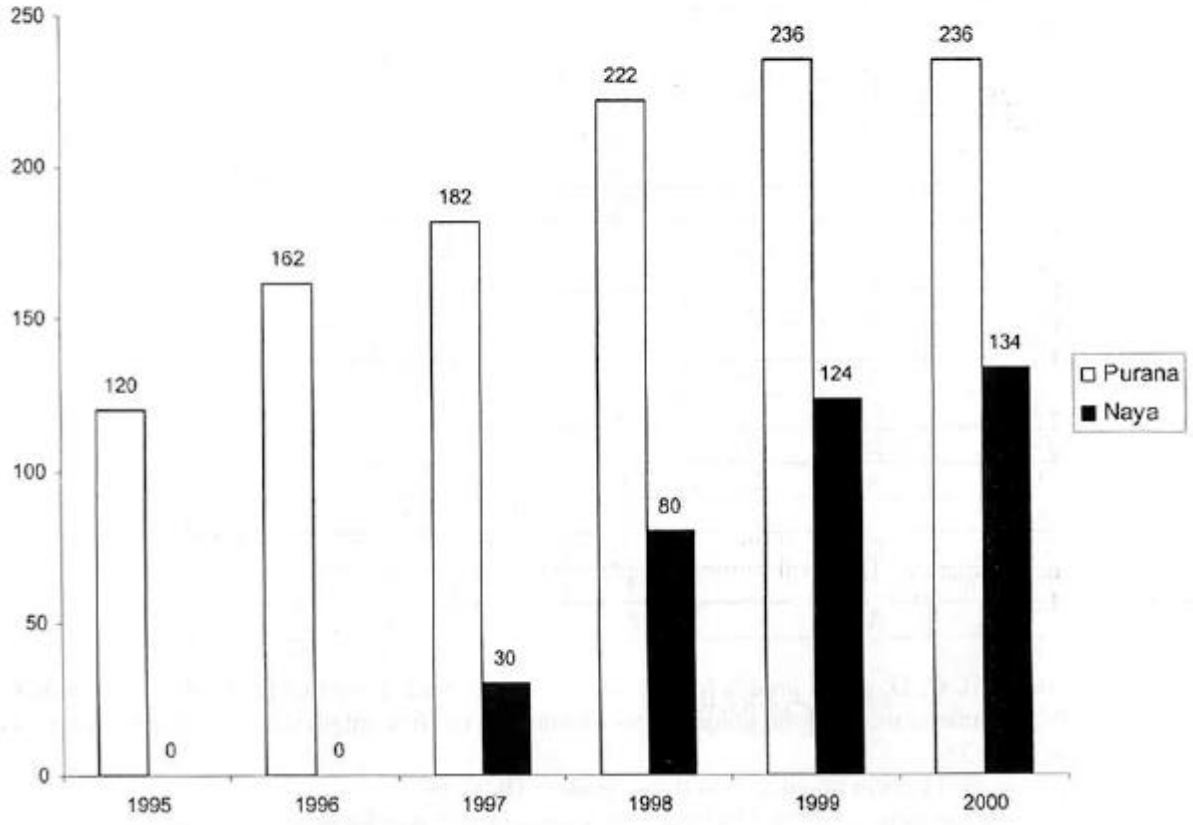
**Directions for Questions 17 to 20:** Answer the questions on the basis of the information given below.
Purana and Naya are two brands of kitchen mixer-grinders available in the local market. Purana is an old brand that was introduced in 1990, while Naya was introduced in 1997. For both these brands, 20% of the mixer-grinders bought in a particular year are disposed off as junk exactly two years later. It is known that 10 Purana mixer-grinders were disposed off in 1997. The following figures show the number of Purana and Naya mixer-grinders in operation from 1995 to 2000, as at the end of the year.




**17.** How many Naya mixer-grinders were disposed off by the end of 2000?

1. 10
2. 16
3. 22
4. Cannot be determined from the data

**Sol.** As obvious the bars for both the Mixer grinders Naya & Purana are CUMULATIVE.
The Naya MG disposed off by the end of 2000

$$=\frac{30\times 20}{100}+\frac{50\times 20}{100}=16.$$ **Ans.(2)**

**18.** How many Naya mixer-grinders were purchased in 1999?

1. 44
2. 50
3. 55
4. 64

**Sol.** Total Naya - Mixer Grinders working in 1999 = 124
Naya MG disposed off in 1999

$$=\frac{30\times 20}{100}=6$$

$\therefore$ Total naya MG purchased in 1999
$= (124 + 6) - 80 = 50.$ **Ans.(2)**

**19.** How many Purana mixer-grinders were purchased in 1999?

1. 20
2. 23
3. 50
4. Cannot be determined from the data

**Sol.**n 1997 the number of purana MG replaced = 10.

From 1996 to 1997, 20 purana MG were newly introduced

So, the total number of purana MG replaced in 1999 = 14 + (1/5)×30 = 20 **Ans.(1)**

**20.** How many Purana mixer-grinders were disposed off in 2000?

1. 0
2. 5
3. 6
4. Cannot be determined from the data

**Sol.**Cannot be determined (same as previous question)

**Ans.(4)**

***A very simple question, verbatim questions are present in DRSB's of PT, PT students should have taken less than 3 minutes to solve the set***

**Directions for Questions 21 to 26:** Each question is followed by two statements, A and B. Answer each question using the following instructions:

Choose 1 if the question can be answered by using one of the statements alone but not by using the other statement alone.
Choose 2 if the question can be answered by using either of the statements alone.
Choose 3 if the question can be answered by using both statements together but not by either statement alone.
Choose 4 if the question cannot be answered on the basis of the two statements.

**21.** Ravi spent less than Rs.75 to buy one kilogram each of potato, onion, and gourd. Which one of the three vegetables bought was the costliest?

A: 2 kg potato and 1 kg gourd cost less than 1 kg potato and 2 kg gourd.
B: 1 kg potato and 2 kg onion together cost the same as 1 kg onion and 2 kg gourd.

**Sol.**(A) 2Kg P + 1 Kg < 1 Kg P + 2 Kg G

P < G. But we don't get the answer.

(B) P + 2 Onion = 1 Onion + 2k G

(P + Onion)/2 = G

But we can not get the answer.

From (A) and (B), we get P < G < O

So, O is the costliest. **Ans.(3)**

**22.** Tarak is standing 2 steps to the left of a red mark and 3 steps to the right of a blue mark. He tosses a coin. If it comes up heads, he moves one step to the right; otherwise he moves one step to the left. He keeps doing this until he reaches one of the two marks, and then he stops. At which mark does he stop?

A: He stops after 21 coin tosses.
B: He obtains three more tails than heads.

**Sol.**(A) 21 coin tosses implies he can reach to blue only. Red is not possible.

Hence statement (A) alone is sufficient.

(B) (x +3)T + xH = odd.

Since total number of heads and tails equals odd, therefore he will reach to blue. Statement (B) alone is sufficient. **Ans.(2)**

**23.** Nandini paid for an article using currency notes of denominations Re.1, Rs.2, Rs.5, and Rs.10 using at least one note of each denomination. The total number of five and ten rupee notes used was one more than the total number of one and two rupee notes used. What was the price of the article?

A: Nandini used a total of 13 currency notes.
B: The price of the article was a multiple of Rs.10.

**Sol.** Let No. of coins be Re.1 = a, Rs.2 = b, Rs.5 = c, Rs.10 = d

(A) $c + d - 1 = a + b$.

$a + b + c + d = 13 \Rightarrow a + b = 6, c + d = 7$.

Hence statement (A) alone is not sufficient .

(B) $a + 2b + 5c + 10d = 10\ k$

where k is a constant.

Hence, statement (B) alone is not sufficient combining, both the statements also, we can't get the Price article. Hence **Ans.(4)**

**24.** Four candidates for an award obtain distinct scores in a test. Each of the four casts a vote to choose the winner of the award. The candidate who gets the largest number of votes wins the award. In case of a tie in the voting process, the candidate with the highest score wins the award. Who wins the award?

A: The candidates with top three scores each vote for the top scorer amongst the other three.
B: The candidate with the lowest score votes for the player with the second highest score.

**Sol.**(A) From statement (A), either the topper and the second topper, will get equal no.of votes or the topper will get most votes. In case both are equal also. Topper can be selected as his score is higher. Hence statement (A) alone is sufficient.

(B) from statement (B) alone, we can't get the answer. **Ans.(1)**

***A easy question, a good student should have answered this in no time***

**25.** In a class of 30 students, Rashmi secured the third rank among the girls, while her brother Kumar studying in the same class secured the sixth rank in the whole class. Between the two, who had a better overall rank?

A: Kumar was among the top 25% of the boys merit list in the class in which 60% were boys.
B: There were three boys among the top five rank holders, and three girls among the top ten rank holders.

**Sol.**From statement (A), we can't tell whether Kumar is higher in rank to Rashmi or not. From statement (B), Top-5 have 3 boys. Sixth rank is Kumar. Hence there are only 2 girls above kumar. Hence, statement (B) alone is sufficient. **Ans.(1)**

***A very easy question, dealt in PT classroom. Remember DRSB # 11 Part A.***

**26.** Zakib spends 30% of his income on his children's education, 20% on recreation and 10% on healthcare. The corresponding percentages for Supriyo are 40%, 25%, and 13%. Who spends more on children's education?

A: Zakib spends more on recreation than Supriyo.
B: Supriyo spends more on healthcare than Zakib.

**Sol.**

| | CE | REC | HC |
|---|---|---|---|
| Zakib (Z) | 30% | 20% | 10% |
| Subriyo (S) | 40% | 25% | 13% |

From statement (A) we get

$0.2Z > 0.25S \Rightarrow 0.3Z > 0.375S$

Hence, from (A) we don't get the Answer.

From statement (B), we get

$0.13\ S > 0.1\ Z \Rightarrow 0.39S > 0.3Z$

Hence Supriyo spends more on CE. Hence, statement (B) alone is sufficient. **Ans.(1)**

***A very easy question, should have been solved in less than 1 min***