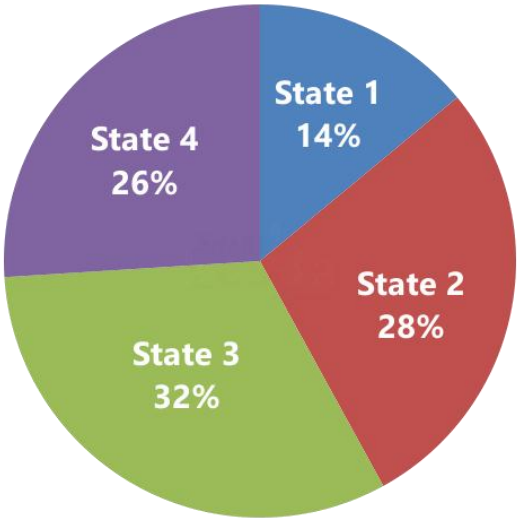
Date Interpretation Mixed Chart Questions Quiz for Bank PO Exams.

Data Interpretation Mixed Chart Quiz 3

Direction: Study the following table carefully and answer the questions based on it.

Pie Chart Showing Percentagewise Distribution of Cars in Four Different States Distribution of Cars



Total Cars = 700

Table showing Ratio between Diesel and Petrol Engine Cars which are Distributed among Four Different States

States	Diesel Engine Cars	Petrol Engine Cars
State 1	3	4
State 2	5	9
State 3	5	3
State 4	1	1

1. What is the difference between the number of diesel engine cars in state 2 and the number of petrol engine cars in state 4?

A. 159 B. 21 C. 28 D. 34 E. 161

2. Number of petrol engine cars in state 3 is what per cent more than the number of diesel engine cars in state 1?

A. 100% B. 200% C. 300% D. 125% E. 225%

3. If 25% of diesel engine cars in state 3 are AC and remaining cars are non-AC, what is the number of diesel engine cars in state 3 which are non-AC?

A. 75 B. 45 C. 95 D. 105 E. 35

4. What is the difference between the total number of cars in state 3 and the number of petrol engine cars in state 2?

A. 96 B. 106 C. 112 D. 102 E. 98

5. What is the average number of petrol engine cars in all the states together?

A. 86.75 B. 89.25 C. 89.75 D. 86.25 E. 88.75

Correct Answers:

1	2	3	4	5
B	B	D	E	B

Explanations:

1. Total number of cars in state 2 = 28% of 700

Total number of diesel engine cars in state 2

$= 28\% \text{ of } 700 \times \frac{5}{(5+9)}$

$= \frac{28}{100} \times 700 \times \frac{5}{14} = 70$

Total number of cars in state 4 = 26% of 700

Total number of petrol engine cars in state 4

$= 26\% \text{ of } 700 \times \frac{1}{(1+1)}$

$= \frac{26}{100} \times 700 \times \frac{1}{2} = 91.$

∴ Required difference = 91 – 70 = 21.

Hence, option B is correct.

2. Total number of cars in state 3 = 32% of 700

$\therefore$ Total number of petrol cars in state 3 = $\frac{3}{(5+3)} \times$ 32% of 700

$= \frac{3}{8} \times \frac{32}{100} \times 700 = 84.$

And total number of cars in state 1 = 14% of 700

Number of diesel engine cars in state 1 = $\frac{3}{(3+4)} \times$ 14% of 700

$= \frac{3}{7} \times \frac{14}{100} \times 700 = 42.$

$\therefore$ Required percentage $= \frac{84}{42} \times 100 = 200\%$

Hence, option B is correct.

3. Total number of cars in state 3 = 32% of 700

$\therefore$ Number of diesel engine cars in state 3 = $\frac{5}{(5+3)} \times$ 32% of 700

$= \frac{5}{8} \times \frac{32}{100} \times 700 = 140.$

Number of non-AC diesel engine cars = 100 – 25 = 75% = $\frac{3}{4}$th part

Total number of diesel engine cars = $140 \times \frac{3}{4} = 105.$

Hence, option D is correct.

4. Total number of cars in state 3 = 32% of 700 = $\frac{32}{100} \times 700 = 224$

Total number of cars in state 2 = 28% of 700

Total number of petrol engine cars in state 2 = 28% of 700 $\times \frac{9}{(5+9)}$

$= \frac{28}{100} \times 700 \times \frac{9}{14}$

$= 126$

$\therefore$ Required difference = 224 – 126 = 98.

Hence, option E is correct.

5. Total number of cars in state 1 = 14% of 700 = 98

Total number of cars in state 2 = 28% of 700 = 196

Total number of cars in state 3 = 32% of 700 = 224

Total number of cars in state 4 = 26% of 700 = 182

Now, number of petrol engine cars in state 1 $= 98 \times \frac{4}{(4+3)} = 98 \times \frac{4}{7} = 56$

Number of petrol engine cars in state 2 $= 196 \times \frac{9}{(5+9)} = 196 \times \frac{9}{14} = 126$

Number of petrol engine cars in state 3 $= 224 \times \frac{3}{(5+3)} = 224 \times \frac{3}{8} = 84$

Number of petrol engine cars in state 4 $= 182 \times \frac{1}{(1+1)} = 182 \times \frac{1}{2} = 91$

$\therefore$ Average total number of petrol engine cars in all states $= \frac{56 + 126 + 84 + 91}{4} = \frac{357}{4} = 89.25$

Hence, option B is correct.