

# ALL BRANCH (Hinglish)



General Aptitude

Quantitative Aptitude

**DPP 01 Discussion Notes**  
Percentages



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# MCQ

The population of a city is increased by 30% and thus became 78000. What is the original population?

**A** 76000

**B** 64200

**C** 60000

**D** None

$$1.3 \times x = 78,000$$

$$x = \frac{78,000}{1.3}$$

$$= 60,000$$



# MCQ

A save 20% of his income. His income is increased by 20% and so he increased his expenditure by 30%. What is the percentage change in his savings?

- ☒ A 20% fall
- ☐ B 4% fall
- ☐ C 20% rise
- ☐ D 4% rise

	$I$	$S$	$Ex$
	100	20 ✓	80
	120	16 ✓	104

$\frac{4}{20} \times 100 = 20\% \downarrow$

# MCQ



In an election between two candidates, A and B, A secured 56% of the votes and won by 48000 votes. Find the total number of votes polled if 20% of the votes were declared invalid.

56% — 44%  
A — B

$$12\% \text{ of D.V} = 48,000$$

$$56 - 44 = 12\%$$

$$\text{D.V} = \frac{48,000}{0.12} = 4,00,000$$

$$0.8 \times \text{T.Votes} = 4,00,000$$

$$\text{T.Votes} = \frac{4,00,000}{0.8} = 5,00,000$$

- ☒ A 500000
- ☐ B 400000
- ☐ C 600000
- ☐ D None



# MCQ



$$\frac{300}{50} = 6/-$$

A reduction of 10% in price of sugar enables a housewife to buy 5 kg more for Rs. 300/-. Find the reduced price per kg of sugar.

**A** 5/-

**B** 4.5/-

**C** 6/-

**D** None

$$0.9 \times \frac{300}{x} = \frac{300}{x+5}$$

$$\frac{9}{270} = \frac{10}{300}$$

$$\Rightarrow 10x = 9x + 45$$
$$x = 45$$

$$\frac{30}{5} = \underline{\underline{6}}$$

# MCQ



In a list of weights of candidates appearing for police selections, the weight of A is marked as 58 kg instead of 46.4 kg. Find the percentage of correction required. *Wrong* Correct

**A** 30

**B** 20

**C** 24

**D** None

$$\text{Correction \%} = \frac{\text{diff}}{\text{W-Value}} \times 100$$

$$= \frac{11.6}{58} \times 100 = \frac{1160}{58}$$

$$= \underline{\underline{20\%}}$$



# MCQ

In an examination, a student secures 40% and fails by 10 marks. If he scored 50%, he would pass by 15 marks. Find the minimum marks required to pass the exam.

- ☐ A 250
- ☐ B 100
- ☒ C 110
- ☐ D 125

$$\begin{array}{r} 125 \\ - 15 \\ \hline 110 \end{array}$$

$$\begin{array}{ccc} & 10\% & \\ 40\% & \xrightarrow{\quad} & 50\% \end{array}$$

25 marks

$$10\% \text{ of Total Mark} = 25$$

$$\text{Total Mark} = \underline{\underline{250}}$$

# MCQ

If 240 ltr of oil is poured into a tank, it is still 20% empty. How much more oil is to be poured to fill the tank?         

**A** 300 ltr

**B** 60 ltr

**C** 120 ltr

**D** None

$$80\% \text{ of Tank Capacity} = 240$$

$$\div 4$$

$$20\% \text{ of Tank Capacity} = \underline{60 \text{ lit}}$$



# MCQ

A and B were hired for the same salary. A got two 40% hikes whereas B got a 90% hike. What is the percentage difference in the hikes they got?

**A** 16%

**B** 6%

**C** 10%

**D** 8%

$$A \rightarrow 1.4 \times 1.4 = 1.96$$

96% ↑

$$B \rightarrow 90\% \uparrow$$

$$96 - 90 = \underline{\underline{6}}$$

# MCQ

The population of a town increases at a rate of 10% for every year. If the present population is 12100, find the population two years ago.

- A** 11000
- B** 9800
- C** 10000
- D** 10120

$$1.1 \times 1.1 \times x = 12100$$

$$1.21 \times x = 12100$$

$$x = \frac{12100}{1.21} = 10000$$



# MCQ

In an election 10 % of the votes were invalid. 40% of the votes were for A and the rest to B. B won with a majority of 243 votes, the total number of votes polled is

- ☐ A 1250
- ☒ B 1350
- ☐ C 1215
- ☐ D 1336

$$40\% \quad 20\% \quad 60\%$$

$$A \quad B$$

$$20\% \text{ of D.V.} = 243$$

$$D.V = \frac{243}{0.2} = \frac{2430}{2}$$

$$= 1215$$

$$90\% \text{ of T.P.V} = 1215$$

$$T.P.V = \frac{1215}{0.9}$$

$$= \frac{12150}{9} = 1350$$



# Thank You!

GW Soldiers