## **CHAPTER: PERCENTAGE**

## **Topics**

- Percentage concept.
- Conversion of percentage to Integers, Fractions, Decimals.
- Conversion of Integers, Decimals, Fractions into percentage.
- Word problems interpretation and solving.
- Percentage increase and percentage decrease concept.

Q1: Two numbers are respectively 20% and 50% more than a third. What percentage is the first of the second?

A. 90% B. 80% C. 60% D. 50% E. None o these

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Q2: A number is first increased by 20% and then decreased by 20%. What is percentage change from the original number?

A. No change B. 40% increase or decrease

C. 4% increase D. 4% decrease



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Q.3. Pooja's salary is 20% more than Seema's salary. Seema's salary is how much % less than Pooja's salary?

A. 20% less

B. Same salary

C. 16.66% less

D. Can't be determined.

Q.4. Length and breadth of rectangle is increased by 20%. What would be % change in its area?

A. 20% increase

B. 20% decrease

C. 40% increase

D. 44% increase

Q.5. Length and breadth of rectangle is increased and decreased by 10% and 20% respectively. What would be % change in its area?

A. 10% increase

B. 12 % decrease

C. 10 % decrease

D. 12% decrease



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Q.6. A positive no. is by mistake multiplied by 5 instead of being divided by 5. By what % more or less than the correct answer is the result obtained?

A. 2400% B. 2500% C. 2700% D. 2000% E. None o these

Q.7. Due to fall in manpower, the production in a factory decreases by 25%. By what percent should the working hour be increase to restore the original production?

A. 35 1/3% B. 33 1/3 % C. 36 1/3 % D. 37 ½% E. None o these

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Q.8. The population o a town is 10000. It increases by 10% during the first year. During the second year, it decreases by 20% and increased by 30% during the third year. What is the population after 3 years?

A. 10500 B. 11000 C. 11440 D. 11500 E. None o these



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Q.9. If the price of sugar falls down by 10%, by how much percent must a householder increase its consumption, so as not to decrease expenditure in this item?

A.11 1/9% B. 12% C. 10 1/3 % D. 15 % E. None o these



Q.10. The land holding o a person is decreased by 10 %. Due to late monsoon, the production decreased by 8%. Then what is the effect on revenue?

A. 18% B.20%

C. 25% D.17.2% E. None o these



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Q11. Ankita is 25 years old. If Rahul's age is 25% greater than that of Ankita then how much percent Ankita's age is less than Rahul's age?

- A. 40%
- B. 35%
- C. 10%
- D. 20%
- E.None of these



Q12. Mr.Ravi's salary was reduced by 25% for three months. But after the three months, his salary was increased to the original salary. What is the percentage increase in salary of Mr.Ravi?

- A. 33.33%
- B. 42.85%
- C. 28.56%
- D. 16.66%



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Q13. Last year there were 610 boys in a school. The number decreased by 20 percent this year. How many girls are there in the school if the number of girls is 175 percent of the total number of boys in the school this year?

A. 854

- B. 848
- C. 798
- D. 782

Q14. A reduction of 20% percent in the price of rice enables a housewife to buy 5 kg more for rupees 1200. The reduced price per kg of rice

- a) 36 of these
- b) 45
- c) 48
- d) 60
- e) None

Q15. A number is first decreased by 25%. The decreased number is then increased by 20%. The resulting number is less than the original number by 40. Then the original number is -

- a) 100
- b) 200
- c) 300
- d) 400
- e) None of these



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Q23. A man spends 60% of his income. His income is increased by 20% and his expenditure also increases by 10%. Find the percentage increase / decrease in his saving?

a) 10%

b) 15%

c) 20%

- d) 25%
- e) 35%



Q24. The number of seats in a cinema hall is decreased by 12 percent and the price of tickets also decreased by 4 percent. Find the change in the collection of revenue.

- a) decrease 15.52%
- b) decrease 16.52%
- c) decrease 17.52%
- d) decrease 14.325
- e) None of these



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Q25. A student has to get 40 percent marks to pass an examination. He got 60 marks but fails by 20 marks. Find the maximum marks of the examination.

- a) 150
- b) 200
- c) 300
- d) 400
- e)

None of these

Q26. A student has to obtain 35% of the total marks to pass. He got 165 marks and failed by 45 marks. The maximum marks are?

a) 300

d)800

e)none b) 500 c r c

Q27. If A is 5 times as large as B. then percent by which B is less than A is

a) $83_3^1$ %

b)  $16_3^2\%$ 

c)90%

d) 80%

e)none



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Q28. Ram sells his goods 25% cheaper than Shyam and 25% dearer than Bram. How much percentage is Bram's goods cheaper than Shyam's?

a)33.33%

b)50%

c) 66.66%

d)40%

e) none

Q29. In an examination, Mohit obtained 20% more than Sushant but 10% less than Rajesh. If the marks obtained by Sushant is 1080, find the percentage marks obtained by Rajesh If the full marks is 2000?

a) 86.66%

b)72%

c) 78.33%

- d)77.77% e) none

Q30. A's salary is first increased by 25% and then decreased by 20%. The result is the same as B's salary increased by 20% and then reduce by 25%. Find the ratio of B's salary to that of A's

- a) 4:3
- b)11:10

e c

c) 10:9

- d)12:11
- e) none



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Q31. The length of a rectangular plot is increased by 10% to keep its area unchanged the width of the plot should be?

- a) keep unchanged
- b)increased by 10%
- c)increased by  $9_{11}^1\%$
- d) reduce by 9<sup>1</sup><sub>11</sub>%
- e)none

Q32. Mr john is worried about the balance of his monthly budget. The price of petrol has increased by 40%. By what percent should he reduce the consumption of petrol so that he is able to balance his budget? I magination

a)33.33

b)28.56

c) 25

d)14.28

e) none



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Q33. The price of a certain article was raised by 10% in India. The consumption of the same article was increased from 200 tons to 225 tons. By how much percent will the expenditure on the article rise in the Indian economy?

a)24.25%

b)22.5%

c)23.75 %

d)26.75%

e) none



Q34. Bill Ambani, a very cleaver businessman, started off a business with very little capital. In the first year, he earned a profit of 50% and donated 50% of the total capital (initial+ profit) to a charitable organisation. The same course was followed in the 2<sup>nd</sup> and 3<sup>rd</sup> years also. If at the end of three years, he is left with Rs.16,875 then find the amount donated by him al the end of the 2<sup>nd</sup> year.

a)45000

b)12500

c)22500

d) 20000

e)none



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Q35. The population of a Village is 6400. If the number of Male Increased By 40% and that of female increased by 30%. The population become 8380. Find the population of female in the town?

- a)6400
- b)5800
- c)7000

- d) 6000
- e)none

Q36. During one year the population of town increased by 5% and during the next year, the population decreased by 5%. If the total population is 10374 at the end of the second year, then what was the population size in the beginning of the first year?

- a)8000
- b)10000
- c)10400

- d) 10100
- e)none



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Q37. A student multiplied a number by 3/5 instead of 5/3, What is the percentage error in the calculation?

A) 54 %

B) 64 %

C) 74 %

D) 84 %



Q38. The difference of two numbers is 20% of the larger number, if the smaller number is 20, then the larger number is :

A) 15

B) 25

C) 35

D) 45



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Q39. A bag contains 600 coins of 25 p denomination and 1200 coins of 50 p denomination. If 12% of 25 p coins and 24% of 50 p coins are removed, the percentage of money removed from the bag is nearly:

- A) 21.6 %
- B) 15.3 %
- C) 14.6 %
- D) 12.5 %



Q40. If the numerator of a fraction is increased by 150% and the denominator of the fraction is increased by 350%, the resultant fraction is 25/51. What is the original fraction?

- A) 31/25
- B) 15/17

- C) 14/25
- D) 11/16



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## **ANSWERS**

1.	2.	3.	4.	5.
6.	7.	8.	9.	10.
11.	12.	13.	14.	<b>15.</b>
16.	17.	18.	19.	20.
21.	22.	23.	24.	25.
26.	27.	28.	29.	30.
31.	32.	33.	34.	35.
36.	37.	38.	39.	40.
41.	42.	43.	44.	45.
46.	<b>47.</b>	48.	49.	50.

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