



KINETICS

We Nurture The Future

IIT-JEE | Medical | Foundations

Comparing Quantities

Question 1.

A shopkeeper purchased 300 bulbs for Rs 10 each. However 10 bulbs were fused and had to be thrown away. The remaining were sold at Rs 12 each. Find the gain or loss %.

- (a) 15%
- (b) 13%
- (c) 16%
- (d) none of these

Answer: (c) 16%

Question 2.

Find the ratio of 5 m to 10 km.

- (a) It is 1:3
- (b) It is 3000:1
- (c) It is 2000:1
- (d) It is 1:2000

Answer: (d) It is 1:2000

Question 3.

Rohan bought a second hand refrigerator for Rs 2,500, then spent Rs 500 on its repairs and sold it for Rs 3,300. Find his loss or gain per cent.

- (a) Loss 15% 2a
- (b) Loss 10%
- (c) Profit 10%
- (d) None of these

Answer: (c) Profit 10%

Question 4.

The sale price of a shirt is Rs.176. If a discount of 20% is allowed on its marked price, what is the

marked price of the shirt?

- (a) Rs.160
- (b) Rs.180
- (c) Rs. 200
- (d) Rs. 220

Answer: (d) Rs. 220

Question 5.

Find selling price (SP) if a profit of 5% is made on a cycle of Rs 700 with Rs 50 as overhead charges.

- (a) Rs 600
- (b) Rs 787.50
- (c) Rs 780
- (d) None of these

Answer: (b) Rs 787.50

Question 6.

Sohan bought a washing machine for Rs 40,000, then spent Rs 5,000 on its repairs and sold it for Rs 50,000. Find his loss or gain per cent.

- (a) Loss 10%
- (b) Loss 20%
- (c) Profit 11%
- (d) none of these

Answer: (c) Profit 11%

Question 7.

Find the ratio of speed of a cycle 20 km per hour to the speed of scooter 30 km per hour.

- (a) It is 3:1
- (b) It is 2:1
- (c) It is 2:3
- (d) It is 1:3

Answer: (c) It is 2:3

Question 8.

A shopkeeper purchased 500 pieces for Rs 20 each. However 50 pieces were spoiled in the way and had to be thrown away. The remaining were sold at Rs 25 each. Find the gain or loss %.

- (a) 18%
- (b) 15%
- (c) 12.5%
- (d) none of these

Answer: (c) 12.5%

Question 9.

A picnic is being planned in a school. Girls are 60% of the total number of students and are 300 in number. Find the ratio of the number of girls to the number of boys in the class.

- (a) It is 3:2
- (b) It is 3:1
- (c) It is 2:3
- (d) It is 2:1

Answer: (a) It is 3:2

Question 10.

An item marked at Rs 840 is sold for Rs 714. What is the discount %?

- (a) 20%
- (b) 10%
- (c) 15%
- (d) none of these

Answer: (c) 15%

Question 11.

The price of a house was Rs 34,00,000 last year. It has increased by 20% this year. What is the price now?

- (a) Rs 40,40,000
- (b) Rs 40,80,000
- (c) Rs 30,40,000
- (d) Rs 30,80,000

Answer: (b) Rs 40,80,000

Question 12.

Find the ratio of speed of a cycle 15 km per hour to the speed of scooter 30 km per hour.

- (a) It is 1:2
- (b) It is 1:3

- (c) It is 2:1
- (d) It is 3:1

Answer: (a) It is 1:2

Question 13.

In what time will Rs.1000 amount to Rs.1331 at 10% p.a. compounded annually?

- (a) 4 years
- (b) 3 years
- (c) 2 years
- (d) 1 year

Answer: (b) 3 years

Question 14.

A sum of money, at compound interest, yields Rs. 200 and Rs. 220 at the end of first and second years respectively. What is the rate percent?

- (a) 20%
- (b) 15%
- (c) 10%
- (d) 5%

Answer: (c) 10%

Question 15.

The value of an article which was purchased 2 years ago, depreciates at 12% per annum. If its present value is Rs.9680, what is the price at which it was purchased?

- (a) Rs.10000
- (b) Rs.12500
- (c) Rs.14575
- (d) Rs.16250

Answer: (b) Rs.12500

Question 16.

The difference in S.I. and C.I. on a certain sum of money in 2 years at 15% p.a. is Rs.144. Find the sum.

- (a) Rs. 6000
- (b) Rs. 6200

- (c) Rs. 6300
- (d) Rs. 6400

Answer: (d) Rs. 6400

Question 17.

Find the ratio of speed of a car 50 km per hour to the speed of scooter 40 km per hour.

- (a) It is 4:5
- (b) It is 4:1
- (c) It is 5:4
- (d) It is 1:5

Answer: (c) It is 5:4

Question 18.

_____ means comparing two quantities.

- (a) Ratio
- (b) Proportion
- (c) Percent
- (d) None of these

Answer: (a) Ratio

Question 19.

The population of a city was 20,000 in the year 1997. It increased at the rate of 5% p.a. Find the population at the end of the year 2000.

- (a) 25153
- (b) 24153
- (c) 23153
- (d) None of these

Answer: (c) 23153

Question 20.

The present population of a town is 25000. It grows at 4%, 5% and 8% during first year, second year and third year respectively. Find the population after 3 years.

- (a) 29484
- (b) 28696
- (c) 24576
- (d) 30184

Answer: (a) 29484

Question 21.

The price of a scooter was Rs 34,000 last year. It has increased by 20% this year. What is the price now?

- (a) Rs 30,800
- (b) Rs 30,400
- (c) Rs 40,800
- (d) Rs 40,400

Answer: (c) Rs 40,800

Question 22.

A sum of money, at compound interest, yields Rs. 200 and Rs. 220 at the end of first and second years respectively. What is the rate percent?

- (a) 20%
- (b) 15%
- (c) 10%
- (d) 5%

Answer: (c) 10%

Question 23.

Calculate compound interest on Rs 10,800 for 3 years at 12.5% per annum compounded annually.

- (a) 13,377.34
- (b) 4577.34
- (c) 14,377.34
- (d) None of these

Answer: (b) 4577.34

Question 24.

The ratio of 10m to 10 km is:

- (a) $\frac{1}{10}$
- (b) $\frac{1}{100}$
- (c) $\frac{1}{1000}$
- (d) 1000

Answer: (c) $\frac{1}{1000}$

