Uncovered Module System (UMS)

Chapter Name – Compairing Quantities

Class- 7th

Remember & Understanding Based Questions

Ques.1) During a cricket match, 4800 people showed their spirit by wearing home team's colour. If 12000 people attended the game, then what percent of crowd wear home team's colour?
a) 60 % b) 80 % c) 20 % d) 40 %

Ques.2) Mala has a collection of bangles. She has 20 gold bangles and 10 silver bangles. What is the percentage of bangles of each type?
a) 40%, 34% b) 66%, 34% c) 70%, 30% d) 50%, 50%

Ques.3) Out of 30 students in a hostel, 8 are goingto market, 20 are going to watch T.V, rest of the students are studying. Convert all of them into percentages.
a) 30% b) 40% c) $26\frac{2}{3}\%$ d) 35%

Ques.4) 0.6% expressed as fraction is _____.

a) $\frac{6}{1000}$ b) $\frac{1}{6}$ c) $\frac{1}{2}$ d) $\frac{1}{4}$

Ques.5) There is a ratio of 5 : 4 between two numbers. If 40% of the first number is 12 then what would be the 50% of the second number?
a) 24 b) 19 c) 18 d) 12

Ques.6) A man purchases goods wroth₹ 9000 and sold half of them at a gain of 15%. at what gain percent must he sell the remainder to get a gain of 25% on whole?
a) 28% b) 128% c) 35% d) 135%

Ques.7) Kavita purchased a dozen handkerchiefs for 60 and sold them for₹ 84 whereas Pooja purchased a dozen handkerchiefs for ₹ 90 and sold them for ₹ 150. Whose profit percent is more and by how much?
a) Pooja, 26.6% b) Kavita, 31.6% c) Pooja, 25.4% d) Kavita, 23.4%

Ques.8) If SP of an article is$\frac{4}{3}$ of its CP, then the profit in the transaction is:

a) $33\frac{1}{3}\%$ b) $25\frac{1}{2}\%$ c) $20\frac{1}{2}\%$ d) $\frac{1}{3}\%$

Ques.9) What per cent of 1 day is 1 minute?

Ques.10) Convert the decimal fractions to percents: 12.35

Ques.11) In an examination, there are three papers each of 100 marks. A candidate obtained 53 marks in the first and 75 marks in the second paper. How many marks must the candidate obtain in the third paper to get an overall of 70 per cent marks?

Ques.12) Convert given percents to decimals fractions and also to fractions in simplest forms: 20%.

Ques.13) Rahul wanted to find the height of a tree in his garden. He checked the ratio of his height to his shadow's length. It was 4 : 1. He then measured the shadow of himself. It was 15 feet. So what was the height of the tree?

Ques.14) The cost of a flower vase got increased by 12%. If the current cost is 896, what was its original cost?

Ques.15) A man whose salary is Rs.7500 per month, receives an increase at 8 percent. Then what is his new salary?

Ques.16) A number is increased by 15% and then decreased by 15%. Find the net increase and decrease percent.

Ques.17) Cost of an item is Rs. 50. It was sold with a profit of 12%. Find the selling price.

Ques.18) Amina buys a book for Rs. 275 and sells it at a loss of 15%. How much does she sell it for?

Ques.19) Selling price of a toy car is₹ 540. If the profit made by shopkeeper is 20%, what is the cost price of this toy?

Ques.20) 9000 becomes 18000 at simple interest in 8 years. Find the rate per cent per annum

Ques.21) Find the amount to be paid at the end of 3 years for the principal of Rs. 7500 at 5% p.a.

Ques.22) A sum of money doubles itself in 6 years. What is the rate of interest?

Ques.23) Fill in the Blanks

1. 25 ml is _____ per cent of 5 litres.
2. To convert a fraction into a percent, we _____ it by 100.
3. To convert a decimal into a percent, we shift the decimal point two places to the _____.
4. In a class of 50 students, 8% were absent on one day. The number of students present on that day was _____.
5. 20% more than 200 is _____.
6. The money borrowed by a borrower from a lender is known as the _____.
7. Time for which money is borrowed is called the _____.
8. The total money paid back after the given time is called the _____.

Ques.24) State True & False

1. For converting time in month into years, divide the number of month by 12.
2. When an improper fraction is converted into percentage then the answer can also be less than 100.
3. Out of 600 students of a school, 126 go for a picnic. The percentage of students that did not go for the picnic is 75.
4. 0.05 is equivalent to 5%.
5. 3.5 = 350%
6. 36% can be expressed as a ratio 9 : 25.
7. 6 hours = 25% of a day.
8. If 25% of a journey is 800 km, the total journey is 3000 km.
9. Time is always taken according to the per cent rate.
10. A ratio can be represented as a fraction.
11. Loss is always reckoned on CP.
12. When the selling price of an article is greater than its cost price, then there is a loss.
13. CP - SP = Profit.
14. Gain is always reckoned on SP.
15. A tricycle was purchased for Rs. 1120 and sold for Rs. 1260. The gain percent is 40%.
16. Interest on 1200 for $1\frac{1}{2}$ years at the rate of 15% per annum is 180
17. Additional money paid by the borrower to the lender for using the money is called amount.

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Analytical Based Questions

Ques.1) Assertion (A): From ₹ 100 Dinesh bought books of ₹ 50, Pens of₹ 30 and Pencil box of₹ 20. Then he spent 30% on pens.

Reason (R): A percentage is a number or ratio that can be expressed as a fraction of 100.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false. d) A is false but R is true.

Ques.2) Assertion (A): A father divided ₹ 100 as pocket money into his three kids. Arun got ₹ 40, Vijay 35 and Neetu was given ₹ 25. Vijay got 35% amount.

Reason (R): Percentage means the part out of total 100.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false. d) A is false but R is true.

Ques.3) Assertion (A): In a cricket tournament, team Red has won 7 games out of 8 games played. Percent win = 85%.

Reason (R): Winning% = $\frac{No.of\,gameswon}{Total games} \times 100$.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false. d) A is false but R is true.

Ques.4) Assertion (A): The ratio of 1 : 25 is converted into percentage is 4%.

Reason (R): A fraction represents a part of a whole or, more generally it represents any number of equal parts.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false. d) A is false but R is true.

Ques.5) Assertion (A): To convert fraction to a percent, you just need to multiply the fraction by 100 and reduce it to percent.

Reason (R): Percentage = Ratio × 100.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false. d) A is false but R is true.

Ques.6) Assertion (A): 3 : 4 = 75%.

Reason (R): Percentage = Ratio × 100.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false. d) A is false but R is true.

Ques.7) Assertion (A): 0.25 = 25%.

Reason (R): To convert decimal number to percentage we multiply the decimal number by 100.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false. d) A is false but R is true.

Ques.8) Assertion (A): 125 % = $\frac{125}{100}$ = 1.25.

Reason (R): P % = $\frac{P}{100} = P \times 0.01$.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false. d) A is false but R is true.

Ques.9) Assertion (A): In the above figure 25% area is shaded.

Reason (R): % area shaded = $\frac{Parts\ shaded}{Total\ parts} \times 100$.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false. d) A is false but R is true

Ques.10) Assertion (A): Suresh saves 8% from his salary. If salary of Suresh is ₹ 25000 then his saving is ₹ 2000.

Reason (R): Percent amount = $\frac{amount}{percent} \times 100$.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false d) A is false but R is true.

Ques.11) Assertion (A): Saurav spent 30% of his pocket money. If pocket money was ₹ 500 then he spent ₹ 125.

Reason (R): Spent money = 0.3 × 500 = ₹ 150.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false. d) A is false but R is true.

Ques.12) Assertion (A): 1% of 1 hour=36 seconds.

Reason (R): No of seconds = $\frac{Percentage}{100} \times 1$ hour.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false. d) A is false but R is true.

Ques.13) Assertion (A): The ratio of 1 week and 2 days = 7 : 2.

Reason (R): 1 week = 7 days.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false. d) A is false but R is true.

Ques.14) Assertion (A): 2 : 5 = 50%.

Reason (R): Percentage = Ratio × 100.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false. d) A is false but R is true.

Ques.15) Assertion (A): Ajay got 60 marks in Maths but in English he got 75. He got in english 25% more than Maths.

Reason (R): % more marks = $\frac{Difference}{Maths\ marks} \times 100$ ..

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false. d) A is false but R is true.

Ques.16) Assertion (A): Last year the no of students in a school were 4000. This year No of students becomes 5000 then % increase = 25%.

Reason (R): % Increase = $\frac{(Increment}{(No.of\ students\ in\ last\ year)} \times 100$.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.

c) A is true but R is false. d) A is false but R is true.

Ques.17) Assertion (A): The cost of the article was ₹ 15500 and ₹ 500 was spent on its repairing. If it is sold for a profit of 15%. The selling price of the article is ₹ 18,400.

Reason (R): Selling Price = Profit + cost price.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false. d) A is false but R is true.

Ques.18) Assertion (A): If Selling Price > Cost Price; then you have a Profit and the difference between the prices is called the profit.

Reason (R): Selling Price< Cost Price; then you have a loss and the difference between the prices is called the loss.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false. d) A is false but R is true.

Ques.19) Assertion (A): For Principal of ₹ 7,200 at 10% p.a.interest paid at the end of 5 years = ₹ 720.

Reason (R): On principal P withinterest rate R the interest paid for T years would be = $\frac{T \times R \times P}{100}$.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false. d) A is false but R is true.

Ques.20) Assertion (A): The S.I. of ₹ 100 of 1 year at the rate of 3% per month is ₹ 24.

Reasons (R): Simple interest is a quick and easy method of calculating the interest.

a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false. d) A is false but R is true.

Ques.21) Match the following

Column A	Column B
i. 125%	a.0.45
ii. 45%	b.1.25
iii. 2.5%	c.0.0025
iv. $\frac{1}{4}\%$	d.0.025

Ques.22) Match the following

Column A	Column B
i. Cost Price - Selling Price	a.C.P + Profit
ii. Selling Price - Cost Price	b.Loss
iii. Cost Price	c.Profit
iv. Selling Price	d.S.P + Loss

Ques.23) Match the following

Column A	Column B
i. 75%	a. $\frac{11}{2000}$
ii. 0.25%	b. $\frac{7}{5}$
iii. 140%	c. $\frac{1}{400}$
iv. 0.55%	d. $\frac{3}{4}$

Ques.24) The ratio of the number of boys and girls in a school is 3 : 2. If 20% of the boys and 30% of the girls are scholarship holders, the percentage of the students who are not scholarship holder is
a) 50% b) 72% c) 76% d) 75%

Ques.25) The numerator and denominator of a fraction are in the ratio of 2 : 3. If 6 is subtracted from 54. the numerator, the result is a fraction that has a value $\frac{2}{3}$ of the original fraction. The numerator of the original fraction is
a) 6 b) 18 c) 27 d) 36

Ques.26) The marks obtained by three students in a test are in the ratio of 2 : 3 : 4. If maximum marks obtained among them is 36 then it is how much percent of the sum of the marks obtained by them?
a) $34\frac{5}{7}\%$ b) $42\frac{2}{9}\%$ c) $45\frac{3}{5}\%$ d) $44\frac{4}{9}\%$

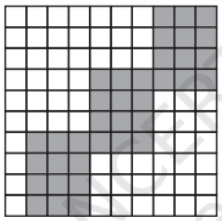
Ques.27) The Difference between the principal and amount is said to bethe:
a) Rate b) Interest c) Time and rate d) Time

Ques.28) If the simple interest on₹ 1500 increases by ₹ 30, when the time increases by 8 yr. The rate percent per annum is
a) 0.25% b) 0.75% c) 0.5% d) 1.25%

Ques.29) Of a certain sum, $\frac{1}{3}$ rd is invested at 3%, $\frac{1}{6}$ th at 6% and the rest at 8%. If the SI for 2 years from all these investments amounts to ₹ 600. Then the original sum was
a) ₹ 3000 b) ₹ 2000 c) ₹ 5000 d) ₹ 4000

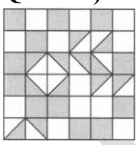
Ques.30) A farmer borrowed₹ 5500 at 8 % per annum. After 5 years, he cleared the account by giving ₹ 6000 and a cow. Find the cost of the cow.
a) ₹ 1700 b) ₹ 1900 c) ₹ 1500 d) ₹ 2100

Ques.31) The percent that represents the shaded region in the figure is



a) 48% b) 27% c) 64% d) 36%

Ques.32) What percentage of the given figure is shaded?



a) 65 % b) 50 % c) 60 % d) 70 %

Ques.33) In an examination 52% candidates failed in English, 42% in maths and 17% in both. The percentage of those passed in both the subjects is:
a) 23% b) 40% c) 53% d) 33%

Ques.34) If 11% of a number exceeds 7% of the same by 18, the number is
a) 370 b) 300 c) 350 d) 450

Ques.35) Kavita invited 24 of her friends on her birthday party. In the party, the ratio of boysand girls was 3 : 5 (excluding Kavita). Find the number of boys and girls invited by Kavita on her birthday party respectively.
a) 10, 14 b) 7, 17 c) 9, 15 d) 6, 18

Ques.36) Rahul bought a sweater and saved₹ 200 when a discount of 25% was given. What was the price of the sweater before the discount?

Ques.37) Jim saves 20% of his monthly income. If he saves Rs.5000 per month, then find his monthly income.

Ques.38) Manoj bhai bought an old tractor through a broker for Rs.2,50,000. The broker charged 1%brokerage from the seller and 2% brokerage from the buyer. What is the total amount ofbrokerage received by the broker?

Ques.39) Narayan secured 45% marks in English, 60% in Mathematics and 69% in Hindi. If the maximum marks in these subjects are 60, 80 and 100 respectively, find his aggregate percentage.

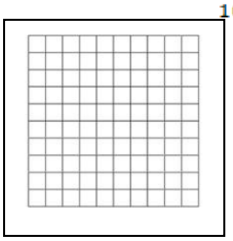
Ques.40) The percentage profit earned by selling an article for Rs.1920 is equal to the percentage lossincurred by selling the same article for Rs.1280. At what price should the article be sold to make25% profit?

Ques.41) Find the value of x if

1. 8% of x is 100
2. 32% of x kg is 400 kg
3. 35% of x is 280
4. 45% of marks x is 405

Ques.42) Imagine that a 10× 10 grid has value 300 and that this value is divided evenly among the small squares. In other words, each small square is worth 3. Use a new grid for each part of this problem, and label each grid "Value : 300."

1. Shade 25% of the grid. What is 25% of 300? Compare the two answers.
2. What is the value of 25 squares?
3. Shade 17% of the grid. What is 17% of 300? Compare the two answers.
4. What is the value of $\frac{1}{10}$ of the grid?



Ques.43) The pieces of Tangrams have been rearranged to make the given shape.
By observing the given shape, answer the following questions:

1. What percentage of total has been coloured?
   a. Red (R) = _____
   b. Blue (B) = _____
   c. Green (G) = _____
2. Check that the sum of all the percentages calculated above should be 100.
3. If we rearrange the same pieces to form some other shape, will the percentatge of colours change?

Ques.44) In a debate competition, the judges decide that 20 per cent of the total marks would be given for accent and presentation. 60 per cent of the rest are reserved for the subject matter and the rest are for rebuttal. If this means 8 marks for rebuttal, then find the total marks