CHAPTER 3

FRACTIONS

QUESTION BANK

AVERAGE LEVEL

Directions: In questions 1 to 19, out of four options, only one is correct. Write the correct answer.

Question 1.

$\frac{2}{5} \times 5\frac{1}{5}$

a) $\frac{26}{25}$ b) $\frac{52}{25}$ c) $\frac{2}{5}$ d) 6

Question 2.

$3\frac{3}{4} \div \frac{3}{4}$ is equal to

a) 5 b) 3 c)3 d)4

Question 3.A ribbon of length 514 m is cut into small pieces each of length 34 m. Number of pieces will be:

(a) 5

(b) 6

(c) 7

(d) 8

Question 4. The ascending arrangement of (2/3), (6/7), (13/21) is:

(a) 6/7, 2/3, 13/21 (b) 13/21, 2/3, 6/7

(c) 6/7, 13/21, 2/3 (d) 2/3, 6/7, 13/21

Question 5. Reciprocal of the fraction 2/3 is:

(a) 2 (b) 3 (c) 2/3 (d) 3/2

Question 6. The product of 11/13 and 4 is:

(a) $3\frac{5}{13}$ **(b)** $5\frac{3}{13}$

(c) $13\frac{3}{5}$ **(d)** $13\frac{5}{3}$

Question 7. The product of 3 and $4\frac{2}{5}$ is:

(a) $17\frac{2}{5}$ (b) $\frac{24}{5}$

(c) $13\frac{1}{5}$ (d) $5\frac{1}{13}$

Question 8. Pictorial representation of 3 × 2/3 is:

(a) 

(b) 

(c) 

(d) 

Question 9.

$\frac{1}{5} \div \frac{4}{5}$ is equal to:

(a) $\frac{4}{5}$ (b) $\frac{1}{5}$

(c) $\frac{5}{4}$ (d) $\frac{1}{4}$

Question 10.

$\frac{5}{7} \div 6$ is equal to:

(a) $\frac{30}{7}$ (b) $\frac{5}{42}$

(c) $\frac{30}{42}$ (d) $\frac{6}{7}$

Question 11.

$5\frac{1}{6} \div$ 9/2 is equal to:

(a) $3\frac{1}{6}$ (b) $\frac{1}{27}$

(c) $5\frac{1}{27}$ (d) $3\frac{1}{27}$

Question 12.

Which of the following represents $\frac{1}{3}$ of $\frac{1}{6}$?

(a) $\frac{1}{3}+\frac{1}{6}$ (b) $\frac{1}{3}-\frac{1}{6}$

(c) $\frac{1}{3}\times\frac{1}{6}$ (d) $\frac{1}{3}\div\frac{1}{6}$

Question 13.

$\frac{3}{7}$ of $\frac{2}{5}$ is equal to

(a) $\frac{5}{12}$ (b) $\frac{5}{35}$

(c) $\frac{1}{35}$ (d) $\frac{6}{35}$

Question 14.

One packet of biscuits requires $2\frac{1}{2}$ cups of flour and $1\frac{2}{3}$ cups of sugar. Estimated total quantity of both ingredients used in 10 such packets of biscuits will be

(a) less than 30 cups

(b) between 30 cups and 40 cups

(c) between 40 cups and 50 cups

(d) above 50 cups

Question 15.

The product of 7 and $6\frac{3}{4}$ is:

(a) $42\frac{1}{4}$ (b) $47\frac{1}{4}$

(c) $42\frac{3}{4}$ (d) $47\frac{3}{4}$

Question 16.

On dividing 7 by $\frac{2}{5}$, the result is

(a) $\frac{14}{2}$ (b) $\frac{35}{4}$

(c) $\frac{14}{5}$ (d) $\frac{35}{2}$

Question 17.

$2\frac{2}{3} \div 5$ is equal to

(a) $\frac{8}{15}$ (b) $\frac{40}{3}$

(c) $\frac{40}{5}$ (d) $\frac{8}{3}$

Question 18.

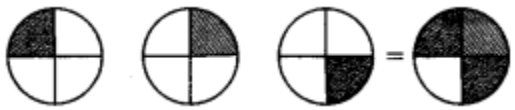
$\frac{4}{5}$ of 5 kg apples were used on Monday. The next day $\frac{1}{3}$ of what was left was used. Weight (in kg) of apples left now is

(a) $\frac{2}{7}$ (b) $\frac{1}{14}$

(c) $\frac{2}{3}$ (d) $\frac{4}{21}$

Question 19.

The picture



interprets

(a) $\frac{1}{4} \div 3$ (b) $3 \times \frac{1}{4}$

(c) $\frac{3}{4} \times 3$ (d) $3 \div \frac{1}{4}$

Directions: In questions 20 to 44, fill in the blanks to make the statements true.

MODERATE LEVEL

Question 20.

Rani ate $\frac{2}{7}$ part of a cake while her brother Ravi ate $\frac{4}{5}$ of the remaining. Part of the cake left is _____

Question 21.

The reciprocal of $\frac{2}{7}$ is _____

Question 22.

$\frac{2}{3}$ of 27 is_____

Question 23.

$\frac{5}{9}$ of 81 is_____

Question 24.

$\frac{4}{5}$ of 45 is _____

Question 25.
$4 \times 6\frac{1}{3}$ is equal to
Question 26.
$\frac{1}{2}$ of $4\frac{2}{7}$ is _____
Question 27
$\frac{1}{9}$ of $\frac{6}{5}$ is _____
Question 28.
The lowest form of the product $2\frac{3}{7} \times \frac{7}{9}$ is _____
Question 29.
$\frac{4}{5} \div 4$ is equal to ____
Question 30.
$\frac{2}{5}$ of 25 is ____
Question 31
$\frac{1}{5} \div \frac{5}{6}$ is _____
Question 32.
The product of two proper fractions is _____than each of the fractions that are multiplied.

Question 33.
While dividing a fraction by another fraction, we _____ the first fraction by the _____ of the other fraction.

Directions: In each of the questions 34 to 54, state whether the statement is True or False.

Question 34.
The reciprocal of a proper fraction is a proper fraction.

Question 35.
The reciprocal of an improper fraction is an improper fraction.

Question 36.
Product of two fractions = Product of their denominators Product of their numerators

Question 37.
The product of two improper fractions is less than both the fractions.

Question 38.
A reciprocal of a fraction is obtained by inverting it upside down.
Question 39.
1 is the only number which is its own reciprocal.

Question 40.

If 5 is added to both the numerator and the denominator of the fraction 5/9, will the value of the fraction be changed? If so, will the value increase or decrease?

HIGHER LEVEL

Question 41.

What happens to the value of a fraction if the denominator of the fraction is decreased while numerator is kept unchanged?

Question 42.

Which letter comes 2/5 of the way among A and J?

Question 43.

If 2/3 of a number is 10, then what is $1\frac{3}{4}$ times of that number?

Question 44.

Renu completed 2/3 part of her home work in 2 hours. How much part of her home work had she completed in 1¼ hours?

Question 45.

Reemu read $(1/5)^{th}$ pages of a book. If she reads further 40 pages, she would have read $(7/10)^{th}$ pages of the book. How many pages are left to be read?

Question 46.

Classify each fraction given below as decimal or vulgar fraction, proper or improper fraction and mixed fraction:

(i) 3/5

(ii) 11/10

(iii) 13/20

(iv) 18/7

(v) 3 2/9

Question 47

Express the following improper fractions as mixed fractions:

(i) 18/5

(ii) 7/4

(iii) 25/6

(iv) 38/5

(v) 22/5

Question48.Express the following mixed fractions as improper fractions:

(i) 2 4/9

(ii) 7 5/13

(iii) 3 1/4

(iv) 2 5/48

(v) 12 7/11

Question 49. Reduce the given fractions to lowest terms:

(i) 8/18

(ii) 27/36

(iii) 18/42

(iv) 35/75

(v) 18/45

Question 50. State true or false:

(i) 30/40 and 12/16 are equivalent fractions.

(ii) 10/25 and 25/10 are equivalent fractions.

(iii) 35/49, 20/28, 45/63 and 100/140 are equivalent fractions.

Question 51. Distinguish each of the fractions, given below, as a simple fraction or a complex fraction:

(i) 0/8

(ii) -3/-8

(iii) 5/-7

(iv) 3 3/5/ 18

(v) -6/ 2 2/5

(vi) 3 1/3/ 7 2/7

(vii) – 5 2/9/ 5

(viii) -8/0

Question 52. Subtract:

(i) 2 from 2/3

(ii) 1/8 from 5/8

(iii) -2/5 and 2/5

(iv) – 3/7 from 3/7

(v) 0 from – 4/5

(vi) 2/9 from 4/5

(vii) – 4/7 from -6/11

Question 53. Find the value of:

(i) ½ and 10 kg

(ii) 3/5 of 1 hour

(iii) 4/7 of 2 1/3 kg

(iv) 3 ½ times of 2 metre

(v) 1/2 of 2 2/3

(vi) 5/11 of 4/5 of 22 kg

Question 54. Simplify and reduce to a simple fraction:

(i) 3/ 3 ¾

(ii) 3/5/ 7

(iii) 3/ 5/7

(iv) 2 1/5/ 1 1/10

(v) 2/5 of 6/11 × 1 ¼

(vi) 2 ¼ ÷ 1/7 × 1/3

(vii) 1/3 × 4 2/3 ÷ 3 ½ × 1/2

(viii) 2/3 × 1 ¼ ÷ 3/7 of 2 5/8

(ix) 0 ÷ 8/11

(x) 4/5 ÷ 7/15 of 8/9

(xi) 4/5 ÷ 7/15 × 8/9

(xii) 4/5 of 7/15 ÷ 8/9

(xiii) 1/2 of 3/4 × 1/2 ÷ 2/3

Question 55.A bought 3 ¾ kg of wheat and 2 ½ kg of rice. Find the total weight wheat and rice bought.

Question 56.Which is greater, 3/5 or 7/10 and by how much?

Question 57.What number should be added to 8 2/3 to get 12 5/6?

Question 58.What should be subtracted from 8 ¾ to get 2 2/3?

Question 59. A rectangular field is 16 ½ m long and 12 2/5 m wide. Find the perimeter of the field.

Question 60. Sugar costs Rs 37 ½ per kg. Find the cost of 8 ¾ kg sugar.

Question 61. A motor cycle runs 31 ¼ km consuming 1 litre of petrol. How much distance will it run consuming 1 3/5 litre of petrol?

Question 62. A rectangular park has length = 23 2/5 m and breadth = 16 2/3 m. Find the area of the park.

Question 63. Each of 40 identical boxes weighs 4 4/5 kg. Find the total weight of all the boxes.

Question 64. Out of 24 kg of wheat, $5/6^{th}$ of wheat is consumed. Find, how much wheat is still left?

Question 65. A rod of length 2 2/5 metre is divided into five equal parts. Find the length of each part so obtained.

Question 66. f A = 3 3/8 and B = 6 5/8, find: (i) A ÷ B (ii) B ÷ A.

Question 67. Cost of 3 5/7 litres of oil is Rs 83 ½. Find the cost of one litre oil.

Question 68.The product of two numbers is 20 5/7. If one of these numbers is 6 2/3, find the other.

Question 69.By what number should 5 5/6 be multiplied to get 3 1/3?

Question 70.A line AB is of length 6 cm. Another line CD is of length 15 cm. What fraction is:

(i) the length of AB to that of CD?

(ii) ½ the length of AB to that of 1/3 of CD?

(iii) 1/5 of CD to that of AB?

Simplify:

Question 71.6 + {4/3 + (3/4 – 1/3)}

Question 72. 8 – {3/2 + (3/5 – 1/2)}

Question 73. 1/4 (1/4 + 1/3) – 2/5

Question 74. 2 3/4 – [3 1/8 ÷ {5 – (4 2/3 – 11/12)}]

Question 75. 12 1/2 – [8 1/2 + {9 – (5 – 4)

Question 76. 1 1/5 ÷ {2 1/3 – (5 + 3)} – 3 ½

Question 77. (1/2 + 2/3) ÷ (3/4 – 2/9)

Question 78. 6/5 of (3 1/3 – 2 1/2) ÷ (2 5/21 – 2)

Question 79. 10 1/8 of 4/5 ÷ 35/36 of 20/49

Question 80. 5 3/4 – 3/7 × 15 3/4 + 2 2/35 ÷ 1 11/25

Question 81. 3/4 of 7 3/7 – 5 3/5 ÷ 3 4/15

Question 82. Subtract (2/7 – 5/21) from the sum of 3/4, 5/7 and 7/12.

Question 83. From a sack of potatoes weighing 120 kg, a merchant sells portions weighing 6 kg, 5 ¼ kg, 9 ½ kg and 9 ¾ kg respectively.

(i) How many kg did he sell?

(ii) How many kg are still left in the sack?

Question 84. If a boy works for six consecutive days for 8 hours, 7 ½ hours, 8 ¼ hours, 6 ¼ hours, 6 ¾ hours and 7 hours respectively, how much money will he earn at the rate of ₹ 36 per hour?

Question 85. A student bought 4 1/3 m of yellow ribbon, 6 1/6 m of red ribbon and 3 2/9 m of blue ribbon decorating a room. How many metres of ribbon did he buy?

Question 86. In a business, Ram and Deepak invest 3/5 and 2/5 of the total investment. If ₹ 40, 000 is the total investment, calculate the amount invested by each.

Question 87. Geeta had 30 problems for home work. She worked out 2/3 of them. How many problems were still left to be worked out by her?

Question 88. A picture was marked at ₹ 90. It was sold at 3/4 of its marked price. What was the sale price?

Question 89. Mani had sent fifteen parcels of oranges. What was the total weight of the parcels, if each weighed 10 ½ kg?

Question 90. A rope is 25 ½ m long. How many pieces each of 1 ½ m length can be cut out from it?

Question 91. The heights of two vertical poles, above the earth's surface, are 14 ¼ m and 22 1/3 m respectively. How much higher is the second pole as compared with the height of the first pole?

Question 92. Vijay weighed 65 ½ kg. He gained 1 2/5 kg during the first week, 1 ¼ kg during the second week, but lost 5/16 kg during the third week. What was his weight after the third week?

Question 93. A man spends 2/5 of his salary on food and 3/10 on house rent, electricity, etc. What fraction of his salary is still left with him?

Solution:

Question 94. A man spends 2/5 of his salary on food and 3/10 of the remaining on house rent, electricity, etc. What fraction of his salary is still left with him?

Question 95. Shyam bought a refrigerator for Rs5,000. He paid 1/10 of the price in cash and the rest in 12 equal monthly instalments. How much had he to pay each month?

Question 96. Subtract (2/7 – 5/21) from the sum of 3/4, 5/7 and 7/12.

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