CLASS – 5

MATHEMATICS

<u>QUESTIONS FOR QUESTION BANK</u>

<mark>Ch.2. Indian Number System</mark>

1. Write the number name for the number 3,76,48,715

Ans. Three crore seventy six lakh forty eight thousand seven hundred fifteen

2. Give the expanded form of 3,72,86,124

Ans. 30000000+7000000+200000+80000+6000+100+20+4

3. Give the period and place value of 1 in 8,16,65,563

Ans. Period : Lakhs

Place value :Ten Lakh/10,00,000

4. Find the difference between the place values of the two 1s in 61,42,69104

Ans 10000000-100=9999900

5. Greatest 9 digit number using the digits 0,1,2,3,4,5,6,7,8 is ?

Ans. 876543210

6.The greatest 9 digit number using the digits 0,1,2,3,4 is what?

Ans. 444443210

<mark>Ch.3 International Number System</mark>

1.Write 54438676 according to international number system and the name.

Ans.: 54,438,676=fifty four million four hundred thirty eight thousand six hundred seventy six

2. Write the numeral for six million four hundred twenty five thousand seven hundred eighty

Ans: 6,425,780

1. Write the following numbers as Roman numerals:
    a) 69 b)229

Ans: a) 69=60+9=LX+IX=LXIX

b)229=200+20+9=CC+XX+IX=CCXXIX

2.Write the following in numbers:

a)XCIV b)MDCC

Ans : a) XCIV=XC+IV=(100-10)+(5-1)=90+4=94

b) MDCC= M+D+C+C=1000+500+100+100=1700

Ch.5Operations on larger numbers

1.Find the number which exceeds 17319 by 1279

Ans.. 17319+1279=18598

18598 is the required number

2.The sum of two numbers is 94506.One of the number is 49605.Find the other number.

Ans. Sum of the numbers=94506

One is 49605

Other one is 94506-49605=44901

3.What should be added o the sum of 346568 and 234263 to get the sum of 800000?

Ans. Step 1. 346568+234263=580831

Step 2. 800000-580831=219169 (ans)

4.One vegetable patch has 22 vegetables.How many total vegetables are there if there are 4 such patches?

Ans. One patch=22 vegetables

4 patches=22*4=88 vegetables

5.There were 550 passengers on a train.At the next stop 289 passengers got off.How many passengers are there on the train now.

Ans. Number of passengers=550

　　Passengers got off=289

　　Passengers on the train now=550-289=261 (ans)

6.One airplane can accommodate 330 passengers.How many airplanes are requires to accommodate seats for 990 passengers?

Ans. For 330 passengers airplane required =1

　　For 990 passengers airplane required 990/330=3 (ans)

Ch.6.Rounding off-Estimation

1.Round off to the nearest tens:

a) 9=10

b)742=740

2.Round off to the nearest hundreds::

a)57=100

b)137=100

3.Round off to the nearest thousands:

a) 505=1000

b)2502=3000

4.i) Round off 4297 and 359 to the nearest tens.

ii)After rounding off add them

iii)Round off the sum to the nearest hundreds.

Ans. i) 4300,360

　　 ii)4300+360=4660

　　 iii)4700

1.A car takes 11 hours to cover 770 km.How many hours will it take to cover 350km?

Ans.770km is covered in 11 hours.

   1km will be covered in 11/770hrs

   350km will be covered in 11/770*350=5hrs(ans)

2.The cost of 10 notebooks is 300/-.Find the number of notebooks that can be purchased with 420/- and the cost of 5 notebooks.

Ans.Cost of 10 notebooks=300/-

   Cost of 1 notebook=300/10=30/-

   In 30/- 1 notebook can be purchased.

   In 420/- 420/30=14 notebooks can be purchased.(ans)

   Cost of 5 notebooks=30*5=150/-(ans)

3.12 typists working for 4 hours to type a book in 18 days.In how many days 4 typists will work for 8 hours type the same book?

Ans..12 typists, 4 hours, type a book in 18 days.

      1 typist 4 hours types a book in 18*12days.

     1 typist, 1 hour types a book in 18*12*4 days.

    4 typists,1 hour types a book in (18*12*4)/4 days.

    4 typists, 8 hours types a book in (18*12*4)/(4*8)days

Ans.. 27 days.

Ch.8. Factors and Multiples

   1.   Find the leat number which is exactly divisible by 12,15 and 20

 Ans. Least number=LCM of 12,15,20=60 is the required number

   2.   Find the largest number of 4-digits divisible by 12,15,18

 Ans.Largest 4-digit number is 9999.

12=2*2*3

15=5*3

18=2*3*3

Lcm of 12,15,18=180

Now divide 9999 by 180, we get remainder as 99.

The required largest number=9999-99=9900(ans)

3.If the product and HCF of two numbers are 4107 and 37 respectively,then find the greatest number.

Ans. Product of two numbes=4107

   4107=37*LCM

   LCM=4107/37=111

 The greatest number is 111

Ch.9. Fractions

1.4/7 of a number is 84.Find the number.

Ans. 4/7 of a number=84

    The number=84*7/4=147(ans)

2.One half the students in a school are girls.3/5 of these girls are studying in lower classes.What fraction of girls are studying in lower class?

Ans. Fraction of girls in school=1/2

    Fraction of girls in lower class=3/5 of ½=3/5*1/2=3/10

    Therefore,3/10 of girls studying in lower class.

3.Maddy reads three-fifth of 75 pages of his lesson.How many more pages he need to complete the lesson?

Ans. Maddy reads=3/5of 75=3/5*75=45 pages

Maddy has to read=75-45-30pages(ans)

4.A herd of cows give 4 litres of milk each day. But each cow gives one-third of total milk each day.They give 24 litres of milk in six days.How many cows are there in he herd?

Ans. A herd of cows give 4 lit. milk each day.

Each cow gives one-third of total milk each day=1/3 of 4=4/3

Total number of cows=4÷4/3=4*3/4=3

Therefore, there are 3 cows in the herd.

Ch.10.Decimal Fractions

1.I earn Rs.5.50 per hour.I work 8 hours per day.How much will I earn after 5 days?

Ans.In one day I earn Rs.5.50*8=Rs.44

In 5 days I earn 44*5=Rs.220(ans)

2.Jenny bought 4.35kg of chocolate.She made 10 chocolate cakes.She put 0.35kg of chocolate on each cake.How much chocolate did she have left?

Ans. One cake=0.35kg chocolate

On 10 cakes=0.35*10=3.5kg chocolate

Chocolate left=4.35-3.5=0.85kg

Thus, she is left with 0.85kg chocolate

3.Erik earns $1000 per week.He works 50 hours per week.How much does she earn per hour?

Ans.In 50 hrs she earns $1000

In 1 hr she earns 1000/50=$20

Thus she earns $20 per hour.

4.The price of 1 kg apple is $0.85.What is the price of 200gms of apples?

Ans. 1000g apple costs=$0.85

200gms apple=0.85/5=$0.17(ans)

5.The price of 2 apples is $1.20.The price of 2 bananas is $0.88.What is the price of 15 apples and 12 bananas?

Ans.2 apples=$1.20

   1 apple=1.20/2=$0.60

   15 apples= 0.60*15=$9

   2bananas=$0.88

   1 banana=0.88/2=$0.44

   12 bananas=0.44*12=$5.28

Total=9+5.28=$14.28

Thus, total money=$14.28

<mark>Ch.11Average</mark>

1.Sam scored 98,25,105,62 and 65 runs in 5 matches.What was the average score per match?

Ans.Total scores= 98+25+105+62+65=355

   Average score=355/5=71

   Thus, average score per match is 71

2.Calculate the average of first 10 prime numbers.

Ans.First 10 prie numbers=2,3,5,7,11,13,17,19,23,29

Their average=(2+3+5+7+11+13+17+19+23+29)/10=12.9(ans)

3.The average height of six members of a family is 162cm.If the height of 5 family members are 154cm,156cm,160cm,159cm and 158cm,find the geight of sixth family member.

Ans.Total height of 6 members=162*6=972cm.

   Height of sixth member=972-(154+156+160+159+158)=185cm.(ans)

4.The total sales in a grocery shop for a week is Rs.5600.Find the average sale per day.

Ans.Average sales per day=5600/7=Rs.800.(ans)

5.The average income of X for 12 days is Rs.4560.The average for first six days is rs.3340 and that of last five days is Rs.2260.Calculate the income for seventh day.

Ans.Income for seventh day= 12*4560-(3340*6+2260*5)=Rs.23380.(ans)

1.36/2=8+y*3-22

Ans. 36/2+y*3-22

    = 18+3y-22=8

    =18+3y=30

    =3y=30-18

    3y=12

    Y=12/3=4(ans)

2.3+3of 3/3of 3/3

Ans.. 3+(3of3)/3of 3*3

    3+9/3of3*3

    3+3of3*3

    3+(3 of 3)*3

    3+9*3

    3+27=30(ans)

Ch.13.Percentage

1.In an election netween two candidates one got 55% of the total valid votes,20% of the votes were invalid.If the total number of votes was 7500,find the number of valid votes that the other candidate got.

Ans. Total number of votes=7500

    Valid votes= 80% =80/100*7500

1st candidate got 55% of total valid votes, so 2nd candidate got 45% of total valid votes= 7500*(80/100)*(45/100)=2700(ans)

2.If 20% of a=b, then b% of 20 is what?

Ans. 20%of a=b

=(20/100)*a=b

B% of 20= (b/100)*20= [(20a/100)/   100]*20=4a/100=4% of a.(ans)

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

Ans.Let the number be x.

The correct ans should be 5x/3

By mistake it was 3x/5

Then, error=(5x/3-3x/5)=16x/15

Error %=(error/true value)*100= [(16/15)*x/(5/3)*x]*100=64% (ans.)

4.If the price of a book is first decreased by 25% and then increased by 20%, then the net change in the price will be what?

Ans. Let the original price be Rs.100

New final price=120% of (75%of Rs.100)=Rs.[(120/100)*(75/100)*100]=Rs.90.

Decrease=10% (ans)

Ch.14.Introduction to Negative Numbers

1.What is 14-(-4)?

A. 14-(-4)=14+4=18

2.What is 5+(-2)?

A. 5+(-2)=5-2=3

3.What is (-8)-(-3)?

A. (-8)-(-3)=-8+3=-5

4.Simplify -5+(-8)+9-1+6

A. 5-8+9-1+6=20-9=11

Ch.15.Geometry

1.Define line.

A. A straight line that can be extended to any length on both sides..It has no breadth and thickness.

2.What is a line segment?

A.A part of a line is known as line sgment.

3. Name the types of angle.

A.Acute angle,obtuse angle,right angle and straight line angle..

4. What are perpendicular lines?

A. when two lines intersect each other at $90°$, they are called perpendicular lines.

5.Number of degrees in two and half right angles is ?

A. 90+90+45=225°

6.Find the area of a right angle whose base=5cm and height is 12cm.

A. Base=5cm

Height=12 cm

Area=1/2*base*height=1/2*5*12=30cm²

7.What is symmetrical figure?

A. When a given figure is divided by a line and we get two figures that are exactly same in shape and size, they are said symmetrical.

Ch.16. Measurement

1.Convert 20mm to cm.

A.20mm/10=2cm(ans)

2.Convert 145km into a) metres b)centimeters c) hectometers

A. 145km=145000m

  145km=14500000cm

   145km=1450hm

3.Fill in the blanks:

a) 8km=__8000__m

b)4.325kg=_____g (ans.4325g)

c)20.325kl=____hl(203.25hl)

d)___mm=2m(2000mm)

e)____dag=5kg(500dag)

f)____mm=25cm(250mm)

g)25382mg=___g___mg(25g382mg)

h)5405l=__kl_l(5kl405l)

i)2496ml=___m___dm____cm____mm(2m4dm9cm6ml)

j)9kg5hg2dag3g=____g(9523g)

4.We are driving to Los Vegas.The sigh says that it is one hundred fortyfive kilometers to Los Vegas.How many metres is it to Los Vegas?

A. As per sign board distance is 145km=145000m

  Hence it is 145000m to Loa Vegas.

1.Each side of square is of 10m.What will be the area of the square?

A.Each side=10m

Area=10*10=100m².

2.Find the third side of the triangle if the perimeter of a triangle is 20m and two of its sides are 5m and 4m.

A. Area=20m

Two sides=5m and 4m

Third side=20-(5+4)=20-9=11m(ans)

3.The length and breadth of a rectangle are(3a+2) and (2a-1).What is the perimeter?

A.Perimeter=2(3a+2+2a-1)=2(5a+1)(ans)

4.The difference between the length and breadth of a rectangle is 8cm and the perimeter is 64cm.Find length and breadth.

A.Length=x cm

Breadth=(x-8)cm

Perimeter=2(x+x-8)=2(2x-8)

Given=2(2x-8)=64cm

==2x-8=64/2=32

==2x=32+8=40

==x=40/2=20

Length=20cm

Breadth=20-8=12cm(ans)

5.What is the area of a triangle whose base is 12cm and height is twice the base?

A.Base=12cm

Height=2*12=24cm

Area of triangle=1/2*base*height=1/2*12*24=144sq.cm(ans)

6.The breadth of a rectangle is increased by 2 units.Its perimeter is now increased by?

A.4units

7.The area of a square is equal to the area of a rectangle of l=8cm and b=2cm.what is the side of the square?

A.Area of the rectangle is 8*2=16sq.cm.=area of the square

Side of the square=√16=4cm(ans)

Ch.18.Volume

1.Find the number of cubical boxes of sides 5cm which can be accommodated in cartoon of dimensions 25cm*10cm*15cm

A. Volume of the cubical box=5*5*5=125cu.cm.

Volume of cartoon=25*10*15=3750c.cm.

No. of boxes=Volume of cartoon/volume of each box=3750/125=30(ans)

2.A cubical of wood was cut into 8 equal cubes of sides 4cm.What is the volume of the block of wood?

a. Volume of one cubical wood=4*4*4=64cu.cm.

Volume of the wood=64*8=512cu.cm

3.Find the volume of the oil that can be poured into a container of dimension 13cm*8cm*11cm

A. Required volume of oil=13*8*11=1144cu.cm

4.Find the volume of a cuboid of dimension 21mm*2cm*12mm.

A. 21mm=21/10=2.1cm and 12mm=12/10=1.2cm

Volume of cuboid=2.1*2*1.2=5.04cu.cm

5.Find the volume of a cuboid of dimensions 8500cm*950mm*15m

A. Volume of the cuboid=85*0.95*15=1211.25cu.m

<mark>Ch.19. Money</mark>

1.Kanta bought a TV set for Rs.8249.36 & a watch for Rs.1249.36.How much did she spend in all?

A. TV=Rs.8249.36

Watch=Rs.1249.36

Total=8249.36+1249.36=Rs.9498.72(ans)

2.Praveen purchased 3pens @Rs.14 each,6 books @Rs.64 each,7 maps @Rs.8 each,9 notebooks @Rs.7 each.How much he spent in all.

A. Total expenditure=(3*14)+(6*64)+(7*8)+(9*7)=42+384+56+63=Rs.545.00(ans)

3.If the cost of 1 mtr cloth is Rs.58.65, find the cost of 12 mtrs of cloth.

A. 1 mtr cloth=Rs.58.65

   12 mtr cloth=58.65*12=Rs.703.80(ans)

4.Namita bought a book for Rs.425.65 and gave Rs.500 to the shopkeeper.What amount did she get back?

A. Cost of book=Rs.425.65

Money given=Rs.500.00

Money got back=500-425.65Rs.74.35(ans)

Ch.20. Time

1.A chess game started at 10.20am and ended at 12.30pm.How long did the game last?

A. Duration of the game=(12-10.20)+(12.30-12)=1.40+30=2hrs 10 mins(ans)

2.Peter opens his shop at 9.30am and closes at 8.00pm every day.How long is the shop open?

A.Opens at 9.30am

Closes at 8pm

Shop opens for=(12-9.30)+8=2.30+8=10hrs 30 mins(ans)

3.Alison took 54 mins to walk to the school.Her brother took 18mins less to walk to the same school.How long did it take Alison's brother to walk to school?

A. Alison took 54 mins

Her brother took 18mins less than Alison=54-18=36mins.(ans)

4.A boy runs at a speed of 20m per minute.How much time will be taken to cover a distance of 1 km?

A. 20m is covered in 1 min.

  1m is covered in 1/20 mins.

  1000m is covered in 1/20*1000=50mins.(ans)

Ch.22.Pattern

1.Find the mssing items: 3,8,13,18,23,___,___(28,33)

2.21,25,33,49,81,___,____(145)

3. 5,7,,12,6,8,14,7,___,16,8,10,18

A. In the series whe we add the first two numbers we get the third number.

5+7=12

6+8=14

7+____=16;now 16-7=9

Thus, the answer is 9