

Class: V  
Subject: Mathematics

Maximum Marks: 100  
Time: 3 hrs.

*Candidates are required to answer in their own words as far as practicable. Credit shall be given to originality in expression, creativity and neatness in hand, not to rote learning.*

**Attempt all the questions.**

**Group-A**

**$14 \times 1 = 14$**

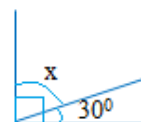
**1. Read the question carefully and encircle the correct answer.**

- a) What is the size of a straight angle?  
 (i) Exactly  $90^0$  (ii) Between  $0^0$  and  $90^0$   
 (iii) Exactly  $180^0$  (iv) Between  $180^0$  and  $360^0$
- b) The least number formed by the digits 4, 9, 2, 0, 7, 3 and 1 is  
 (i) 1023479 (ii) 2013479  
 (iii) 0123479 (iv) 9743210
- c) What is the prime factorization of 12?  
 (i)  $1 \times 12$  (ii)  $2 \times 2 \times 3$   
 (iii)  $2 \times 6$  (iv)  $3 \times 4$
- d) In  $7(10 - 4)$ , what operation is performed directly between 7 and  $(10 - 4)$ ?  
 (i) Addition (ii) Subtraction  
 (iii) Multiplication (iv) Division
- e) The mathematical operation for '3 times the sum of 2 and 8 is subtracted from 30' is  
 (i)  $3(2+8) - 30$  (ii)  $30 - 3(2 + 8)$   
 (iii)  $30 - 3 \times 2 + 8$  (iv)  $3 \times 2 + 8 - 30$
- f) The product of  $3 \times \frac{4}{5}$  is  
 (i)  $\frac{12}{15}$  (ii)  $\frac{4}{15}$   
 (iii)  $\frac{12}{5}$  (iv)  $3\frac{4}{5}$
- g) What is the product of  $3a^2b$  and  $5ab$ ?  
 (i)  $15a^3b^2$  (ii)  $15a^2b^2$   
 (iii)  $8a^3b^2$  (iv)  $8a^2b$
- h) What is the algebraic expression for '7 is less than 4 times of x by 1'?  
 (i)  $4x - 7 = 1$  (ii)  $4x - 1 = 7$   
 (iii)  $7 - 4x = 1$  (iv)  $1 - 4x = 7$

**2. Write the correct answer in the blank spaces.**

- a) The simplified value of 4 times the difference between 9 and 3 is ....  
 b) The fraction equal to 0.07 is ....  
 c) There are ... days in a leap year.  
 d) The perimeter of a triangle whose sides are 3.5cm, 5cm and 4.5cm is ....  
 e) In  $3x^4$  ... is the coefficient.  
 f) A set of odd numbers less than 10 in listing method is ....

3. (a) Find the value of  $x$  from the figure given alongside.

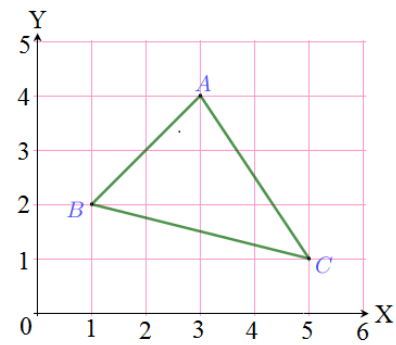


- (b) According to Worldometer among total cases of corona virus; seven crore twenty nine lakh seventy five thousand nine hundred thirty six people were recovered from corona virus till 27<sup>th</sup> Jun 2021.
- (i) Re-write the total number of people recovered from corona virus in numeral.  
(ii) Round off the number of recovered people to the nearest hundred.
4. (a) Simplify:  $30 \div (6 \times 3 - 8)$   
(b) Make the mathematical expression and simplify for 'the product of 5 and the sum of 3 and 8'.
5. (a) Find the L.C.M. of 12 and 18 by division method.  
(b) Find the cube root of 216 by factorisation method.
6. (a) The weight of a LP gas cylinder is 14.2 kg. Convert it into grams.  
(b) Find the area of a rectangular garden which is 8m long and 5m broad.
7. (a) Simplify:  $3.6 - 1.08 + 0.9$   
(b) The cost of 5 pencils is Rs 37.50. Find the cost of 1 pencil.  
(c) If  $\frac{7}{10}$  of the number of students in a class are boys.  
(i) Find the percentage of boys.                      (ii) Find the percentage of girls.
8. (a) Simplify:  $3y - 5 + y - 2$   
(b) Solve:  $\frac{3x-1}{5} = 4$
9. (a) Express  $A = \{2, 3, 5, 7\}$  in diagrammatic and descriptive methods.  
(b) List the elements of the set of star in Solar System and mention the type of the set.
10. (a) Study the bill given below and answer the questions.

<b>Janaki Stationery</b>				
Ram Chowk, Janakpur				
Bill No. 0385				
Customer's name: Rekha Gupta				
Address: Wakil Tol, Dhanusha				Date: 2077/10/15
S.No.	Particulars	Quantity	Rate (Rs)	Amount (Rs)
1.	Exercise books	8	40.00	320.00
2.	Gel pens	3	25.00	75.00
3.	Colour pencils	6	10.00	60.00
<b>Total</b>				455.00
<b>In words:</b> Four hundred and fifty five rupees only.				
				..... Salesman: Manish Chaudhary

- (i) What is the rate of cost of Exercise book?  
(ii) What is the total amount of the bill?

- (b) Write down the coordinates of vertices of  $\triangle ABC$  in the given squared graph.

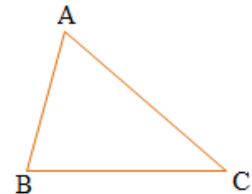


**Group-C**

$12 \times 3 = 36$

11. In the given  $\triangle ABC$ , measure each angle by using protractor and fill up the table given below.

Angles			Sum of 3 angles
$\angle A$	$\angle B$	$\angle C$	$\angle A + \angle B + \angle C$
...	...	...	...

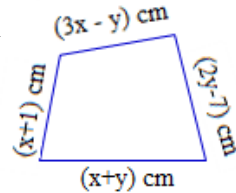


12. On Sunday, there were 28 students present in class five. 18 of them were boys and the rest were girls. If only 4 girls were absent on that day, how many girls were there in class five? Find it.
13. Mrs. Chamling earns Rs 5,000 in a week. She spends Rs 250 for food and Rs 75 for transportation every day. How much money does she save in a week?
14. Find the greatest number that divides 20 and 30 without leaving remainder.
15. There are 20 plants of cauliflower in each row of a square field. How many plants of cauliflower are planted in the field? Find.
16. The cost of 5 kg of apples is Rs 600. Find the cost of rate of apple. Find the cost of 8 kg of apples.
17. The perimeter of a rectangular garden of length 60m is 200m. Find the area of the garden.
18. A motorbike can travel 30 km 400 m with 1 litre of petrol. How many kilometres does it travel with 6 litre of petrol? Find.
19. Find the simple interest on Rs 5,000 in 2 years at the rate of 8% per year.
20. Look at the annual budget of Mr. Sharma given below and answer the questions.

Income		Expenditure	
Sources	Amount (Rs)	Topics	Amount (Rs)
Vegetable farming	1,05,000	Food	90,000
Poultry	1,50,000	Cloth	20,000
Fishery	75,000	Education	1,15,000
Diary	60,000	Insurance	25,000
		Transportation	18,000
		Taxes	15,000
Total	.....	Total	.....

- (i) Find his total annual income and expenditure.  
 (ii) How much money is he planning to save in the year?

21. Find the perimeter of the quadrilateral given alongside. If  $x = 5\text{cm}$  and  $y = 8\text{cm}$ , find its actual perimeter.



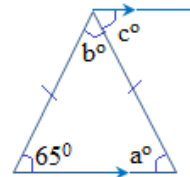
22. The average monthly attendance of class 5 in the first six months of a new academic session is given in the table. Draw a bar graph to represent the data.

Months	Baishakh	Jestha	Asar	Shrawan	Bhadra	Aswin
Attendance	25	18	20	27	24	30

**Group-D**

$4 \times 4 = 16$

23. Find the sizes of unknown angles represented by the letters.



24. The area of a Ludo board is  $400\text{ cm}^2$  and the volume of a cubical Ludo is  $8\text{ cm}^3$ . By how much is the length of board more than the length of Ludo?



25. A rectangular carton filled with 24 packets of soaps is  $5\text{kg } 350\text{g}$  and the weight of each packet of soap is  $210\text{g}$ . Find the weight of empty carton.
26. On the occasion of Arohi's birthday, Arohi ate  $\frac{1}{4}$  parts of the cake and her parents ate  $\frac{5}{8}$  part of the cake. What part of the cake was left? Find.

**The End**