

घोराही उपमहानगरपालिका स्तरीय
आधारभूत तह (कक्षा ५) उत्तीर्ण परीक्षा २०८१

कक्षा : ५
Class : 5
विषय : गणित
Subject : Mathematics

पूर्णाङ्क : ५०
F.M. : 50
समय : २ घण्टा
Time : 2 hours

सबै प्रश्नहरू अनिवार्य छन् । (All questions are compulsory)

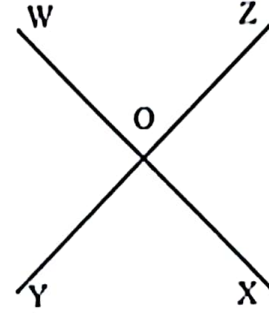
1. दिइएको चित्र हेरी तलका प्रश्नहरूको उत्तर लेख्नुहोस् । (Observe the given figure and answer the following questions.)

a) दिइएको चित्रमा कतिओटा कोणहरू छन् ? (How many angles are there in the figure?) (1)

b) ती सबै कोणको नाम लेख्नुहोस् । (Write the name of all the angles.) (1)

c) सबै कोणहरूको मान प्रोटेक्टरको सहायताले नापेर लेख्नुहोस् । (Write the value of all angles using the protractor.) (2)

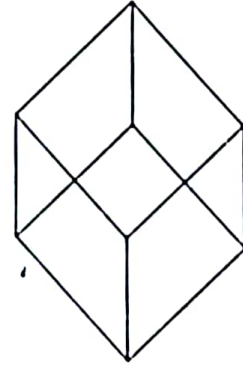
d) कुन-कुन जोडीकोणको मान समान छन् ? लेख्नुहोस् । (Which pair angles value are same? Write them.) (1)



2. दिइएको चित्र अवलोकन गर्नुहोस् र निम्न प्रश्नहरूको उत्तर लेख्नुहोस् । (Observe the given figure and write the answer of the following questions.)

a) दिइएको चित्रको नाम लेख्नुहोस् । (Write the name of given figure.) (2)

b) शीर्ष बिन्दूहरू र किनाराहरूको संख्या लेख्नुहोस् । (Write the number of vertices and edges.) (1)



3. घोराहीको कुल जनसंख्या 200530 छ भने (The total population of Ghorahi is 200530)

a) 200530 मा दुईको स्थान मान लेख्नुहोस् । (Write the place value of two in 200530) (1)

b) उक्त संख्यालाई राष्ट्रिय पद्धतिअनुसार अल्पविराम (,) को प्रयोग गरी लेख्नुहोस् । (Write the number according to national system using comma (,).) (1)

c) संख्या 200530 लाई नेपाली अक्षरमा लेख्नुहोस् । (Write the number 200530 into Nepali words.) (1)

d) दिइएको संख्यालाई अन्तर्राष्ट्रिय पद्धतिअनुसार स्थानमान तालिकामा प्रस्तुत

गर्नुहोस् । (Present the given number in the place value table according to the international system.) (2)

4. हिसाब गर्नुहोस् : (Solve the questions:)

a) तीन अंकको सबै भन्दा ठूलो संख्या लेख्नुहोस् । (Write the greatest number of three digit.) (1)

b) संख्या 12 र 16 को सम्भावित गुणनखण्डहरु लेख्नुहोस् । (List all the possible factors of the number 12 and 16.) (2)

c) एक प्राकृतिक संख्या लेख्नुहोस् जुन न रुढ हो न त संयुक्त संख्या हो । (Write a natural number that is neither prime nor composite.) (1)

5. हिसाब गर्नुहोस् : (Solve the questions:)

a) सरल गर्नुहोस् : (Simplify:) $5 \times 3 + 4 - 5$ (1)

b) गणितीय वाक्यमा लेख्नुहोस् । (Write in mathematical expressions.) (2)
12 को 3 गुणमा 7 जोड्दा कति हुन्छ ? (How much is in total if 7 is added to 3 times 12?)

c) सरल गरी अन्तिम नतीजा निकाल्नुहोस् : (Simplify and find the result.)(1)

6. हिसाब गर्नुहोस् : (Solve the questions:)

a) दिइएको भिन्नलाई छाँया पारी देखाउनुहोस् । (Shading and find the result of the given fraction.) (2)

$$\frac{1}{6} + \frac{3}{6} = \boxed{} + \boxed{} = \boxed{}$$

b) 50% लाई भिन्नमा बदलि दशमलवमा लेख्नुहोस् । (Convert 50% into fraction and write in decimals.) (2)

c) गुणन गर्नुहोस् : (Multiply:)

Days	Hours
5	7
x	4

7. वर्गाकार खेल मैदानको प्रत्येक भुजाको (किनाराको) लम्बाई 25 मिटर छ । (The length of each side of a square shaped play ground is 25m.)

a) खेल मैदानको परिमिति निकाल्नुहोस् । (Calculate the perimeter of the play ground.) (1)

b) खेल मैदानको क्षेत्रफल निकाल्नुहोस् । (Calculate the area of the play ground.) (1)

c) खेल मैदानको लगत्तै भित्र 5 मिटरको बाटो वरीपरी राखिएको छ । अब बाटो बाहेकको खेल मैदानको परिमिति पत्ता लगाउनुहोस् । (What should be the perimeter of the remaining ground if a uniform path with 5m is kept within the ground?) (2)

- d) एउटा पङ्खुवाकार सलाईको बट्टाको लम्बाई 8 मिटर, चौडाई 6 मिटर र उचाई 3 मिटर छ । सलाईको बट्टाको आयतन पत्ता लगाउनुहोस् । (Find out volume of a match box which is cuboid and which length is 8m, breadth is 6m and height is 3m.) (2)

8. हिसाब गर्नुहोस् : (Solve the questions:)

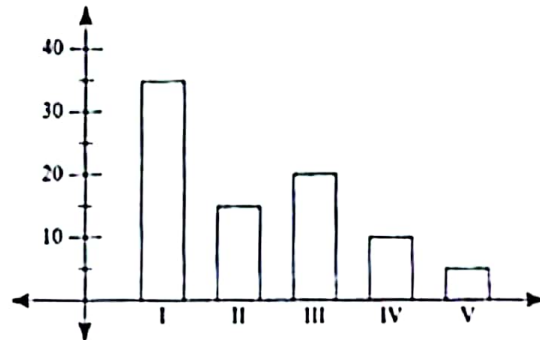
- a) जोड गर्नुहोस् । (Add:) $3\frac{1}{11} + 5\frac{3}{11}$ (1)

- b) दिइएको चित्रमा छाया पारेको भागलाई भिन्नमा लेखी प्रतिशतमा बदल्नुहोस् । (Write in fraction of the shaded parts of given figure and change into percentages.) (2)



- c) कुनै कक्षामा 40% छात्राहरु छन् भने छात्रको प्रतिशत संख्या पत्ता लगाउनुहोस् । (In a class there are 40% girls, find the percentage of boys.) (2)

9. तल दिइएको स्तम्भ चित्रको अध्ययन गरी सोधिएका प्रश्नहरुको उत्तर लेख्नुहोस् । (Study the given bar graph and answer the following questions.)



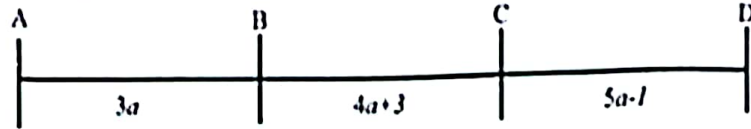
- a) कक्षा III मा कति जना विद्यार्थी छन् ? How many students are in grade III?) (1)

- b) कक्षा I मा कक्षा V मा भन्दा कति बढि विद्यार्थी छन् ? (How many more students are there in a grade I than in grade V?) (1)

10. मुनाको परिवारको मासिक आम्दानी र खर्चको विवरण तल दिइएको छ । (Monthly income and expenditure details of Muna's family is given below:)

आम्दानीका स्रोतहरु (Income details)	आम्दानी (Income) (Rs.)	खर्चका स्रोतहरु (Expenditures details)	खर्च (Expenditures) (Rs.)
मासिक आम्दानी (Monthly Salary)	50,000	खाना (Food)	20,000
मासिक घरको भाडा (Monthly House Rent)	56,000	शिक्षा (Education)	45,000
बैंक व्याज (Bank Interest)	35,000	यातायात (Transport)	5,000
		बिबिध (Miscellaneous)	7,000

- a) जम्मा आम्दानी पत्ता लगाउनुहोस् । (Find the total income.) (1)
- b) जम्मा खर्च र बचत रकम पत्ता लगाउनुहोस् । (Find the total expenditure and saving amount.) (2)
- c) घरको औषधी उपचारमा रु. 20,000 खर्च भएछ भने औषधी उपचार पछिको बचत कति होला ? (What should be the saving amount after spent Rs. 20,000 on medical treatment?) (1)
11. चित्रमा रेखाखण्डहरूको लम्बाई दिइएको छ । (In the figure the length of line segments is given.) (3)



- a) रेखाखण्ड CD को लम्बाईमा कतिओटा पदहरू छन् ? How many terms are there in the length of line segment CD. (1)
- b) यदि $a=2$ भए $(4a+3)+(5a-1)$ को मान पत्ता लगाउनुहोस् । If $a=2$, find the value of $(4a+3)+(5a-1)$. (2)
- c) हल गर्नुहोस् । (Solve:) $x + 4 = 9$. (1)

12. हिसाब गर्नुहोस् । (Solve the questions:)

- a) खाली बक्सको मान कति होला ? What is the value of empty box? (1)

$$\square + 7 = 12$$

- b) P को मान पत्ता लगाउनुहोस् । Find out the value of P. (1)

$$7p - 5 = 9$$

- b) $2x + 7y - 6$ को मान पत्ता लगाउनुहोस् । जहाँ $x=3$ र $y=1$ छ । (Find the value of $2x + 7y - 6$ where $x=3$ and $y=1$.) (2)

समाप्त (The End)

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1

Q.N.1 Ans

Solⁿ

(a) There are 4 angles in the figure.

(b) The name of the all angles are:-

1. $\angle W O Z$

2. $\angle W O Y$

3. $\angle Y O X$

4. $\angle Z O X$

(c) The values of all the angles are

$$\angle W O Z = 90^\circ$$

$$\angle W O Y = 90^\circ$$

$$\angle Y O X = 90^\circ$$

$$\angle Z O X = 90^\circ$$

(d) All the angles are same value.

Q.N.2 Ans

Solⁿ.

(a) The name of given figure is cube.

(b) No. of vertices = 8
No. of edges = 12

Q.N.3 Ans

Solⁿ.

(a) The place value of two in 200530 is 200000.

(b) $200530 = 2,00,530$

(c) $200530 =$ दुई लाख पाँच सय तीस

(d) place value table

M	H-Th	T-Th	Th	H	T	O
	2	0	0	5	3	0

Q.N. 4 Ans

Solⁿ

(a) The greatest number of 3-digit is 999.

(b) The factors of 12 are: 1, 2, 3, 4, 6 and 12.

The factors of 16 are: 1, 2, 4, 8 and 16.

(c) A natural number that is neither prime nor composite = 1

Q.N. 5 Ans

Solⁿ

(a) Here,

$$5 \times 3 + 4 - 5$$

$$= 15 + 4 - 5$$

$$= 19 - 5$$

$$= 14 \text{ Ans}$$

(b) The mathematical expression of the given statement is
 $= 12 \times 3 + 7$

(c) Here,

$$12 \times 3 + 7$$

$$= 36 + 7$$

$$= 43$$

The final result is 43.

Q.N. 6 Ans

Soln.

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

(b) Here, In Fraction,

$$50\% = \frac{50}{100} = \frac{1}{2}$$

In decimal,

$$50\% = \frac{50}{100} = 0.50$$

(c) Here,

Days
5

Hours
7

X 4

20

28

+ 1

- 24

[$\because$ 1 day = 24 hrs]

21

4

Q.N.7 Ans

Solⁿ

(a) Here,

Length of each side (l) = 25m

$\therefore$ perimeter of the playground (p)

$$= 4l$$

$$= 4 \times 25m$$

$$= 100m \text{ Ans}$$

(b) Here,

Length of each side (l) = 25m

$\therefore$ The area of the playground (A)

$$= l \times l$$

$$= 25\text{m} \times 25\text{m}$$

$$= 625\text{m}^2 \text{ Ans}$$

(c) Here,
Length of the playground after
5m uniform path (l) = $25\text{m} - 5\text{m}$
= 20m

$$\therefore \text{The perimeter of the remaining ground (p)} = 4l$$

$$= 4 \times 20\text{m}$$

$$= 80\text{m}$$

(d) Here,
Length (l) = 8m
breadth (b) = 6m
height (h) = 3m

$$\therefore \text{The Volume of the match box}$$

$$(V) = l \times b \times h$$

$$= 8\text{m} \times 6\text{m} \times 3\text{m}$$

$$= 144\text{m}^3 \text{ Ans}$$

Q.N. 8 Ans

Soln.

(a) Here,

$$3\frac{1}{11} + 5\frac{3}{11}$$

$$= \frac{34}{11} + \frac{58}{11}$$

$$= \frac{34+58}{11}$$

$$= \frac{92}{11}$$

$$= 8\frac{4}{11} \text{ Ans}$$

(b) The fraction of the shaded part is $\frac{15}{4}$.

In percentage,

$$\frac{15}{4} = \frac{15}{4} \times \frac{25}{100} \%$$

$$= 15 \times 25\%$$
$$= 375\% \text{ ans}$$

(c) Solⁿ.

Here,

The percentage of girls = 40%.

Now,

The percentage of boys = $100\% - 40\%$
 $= 60\%$.

Q.N.9 Ans

(a) Solⁿ

(a) There are 20 students in grade III.

(b) There are more students in grade I than grade V by

$$= 35 - 5$$

$$= 30$$

Q.N. 10 Ans

Solⁿ

(a) The total income of Muna's family is

$$\begin{aligned} &= \text{Rs. } 50000 + \text{Rs. } 56000 + \text{Rs. } 35000 \\ &= \text{Rs. } 1,41,000 \end{aligned}$$

(b) Total expenditure of Muna's family is

$$\begin{aligned} &= \text{Rs. } 20000 + \text{Rs. } 45000 + \text{Rs. } 5000 + \text{Rs. } 7000 \\ &= \text{Rs. } 77,000 \end{aligned}$$

Also,

Total saving of Muna's family is

$$\begin{aligned} &= \text{Rs. } 1,41,500 - \text{Rs. } 77,000 \\ &= \text{Rs. } 64,500 \end{aligned}$$

(c) The saving amount after Rs. 20000 spent on medical treatment is

$$\begin{aligned} &= \text{Rs. } 64000 - \text{Rs. } 20000 \\ &= \text{Rs. } 44,000 \end{aligned}$$

Q.N. 11 Ans

Soln

(a) There are 2 terms in the length of the line segment CD.

(b) Given, $a = 2$

Here,

$$(4a+3) + (5a-1)$$

$$= (4 \times 2 + 3) + (5 \times 2 - 1)$$

$$= (8+3) + (10-1)$$

$$= 11+9$$

$$= 20 \text{ Ans}$$

(c) Here,

$$x+4=9$$

$$\text{or, } x=9-4$$

$$\therefore x=5 \text{ Ans}$$

Q.N. 12 Ans

Soln

(a) The value of empty box is 5.

(b) Here,

$$7p - 5 = 9$$

$$\text{or, } 7p = 9 + 5$$

$$\text{or, } 7p = 14$$

$$\text{or, } p = \frac{14}{7}$$

$$\therefore p = 2 \text{ Ans}$$

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(c) Given,

$$x = 3, y = 1$$

Here,

$$2x + 7y - 6$$

$$= 2 \times 3 + 7 \times 1 - 6$$

$$= 6 + 7 - 6$$

$$= 13 - 6$$

$$= 7 \text{ Ans}$$

Thank You!!!