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समग्र शिक्षा Samagra Shiksha SAMAGRA SHIKSHA KERALA

E 603

SUMMATIVE ASSESSMENT I 2025-2026

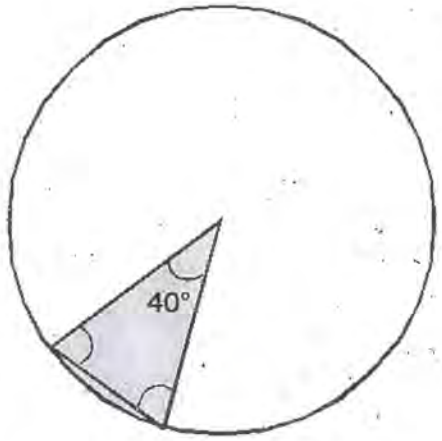
Mathematics

Standard : VI **Time : 2 Hrs 15 minutes**

Instructions

- First 15 minutes is allotted as cool-off time. Read the questions carefully and plan the answers during this time.
- Answer all six questions. Answer all the sub questions.
- Two questions are there in Question 3 and 4. Attempt **any one** of them. (3A or 3B and 4A or 4B).

1.



A triangle is drawn inside a circle of radius 4 centimetres. One of the angles of the triangle is 40°.

a. What part of the circle is shaded?

b. Measure and write the other two angles of the triangle.

c. How many triangles can be drawn like this?

d. Which of the statements are correct about the triangle inside the circle?

i. One of the angles of the triangle is right angle.

ii. The two sides of the triangle are equal.

iii. The three sides of the triangle are equal.

iv. The three angles of the triangle are less than 90°.

A. (i), (ii) are correct B. (ii), (iii) are correct

C. (ii), (iv) are correct D. (i), (iv) are correct

2. The inner length, width and height of a rectangular water tank are 90 centimetres, 70 centimetres, 50 centimetres respectively.

a. What is the volume of the tank?

b. Now, the tank holds 189 litres of water. How high is the water in the tank?

c. Which is the correct statement about the change in the volume of the tank if its length, width and height are doubled?

A. The volume is doubled
B. The volume increases by 4 times
C. The volume increases by 16 times
D. The volume increases by 8 times.

Question 3 has two questions (3A and 3B). Answer **any one**.

3.**A.**

a. By which number should the numerator and denominator be divided to get the lowest term of $\frac{12}{15}$?

b. If 16 cakes are divided equally among 6 people, the portion that each person gets is the same as if 8 cakes are divided equally among how many people?

c. 42 metres of cloth were brought for shirt of the uniform. It was cut equally to 24 students. How many metres of cloth did each student get?

d. A statement and its reason are given below.

Statement - $\frac{2}{3}$ is the lowest term of $\frac{24}{36}$.

Reason - The greatest common factor of 24 and 36 is 12 and when the numerator and denominator is divided by12, the result is $\frac{2}{3}$.

Which of the following statement is correct about this?

A. Statement is right, reason is wrong.
B. Statement and reason are right.
C. Statement is wrong, reason is right.
D. Statement and reason are wrong.

OR

3.B.

a. Write two forms of $\frac{1}{3}, \frac{1}{5}$ having the same denominator.

b. Will $\frac{21}{27}$ be there in the different forms of $\frac{2}{3}$. Why?

c. Find the right answer when columns A and B are matched.

A	B
p) One of 3 divided into 4 equal parts	x) $\frac{4}{3}$
q) One of 4 divided into 3 equal parts	y) $\frac{2}{3}$
r) Two of 1 divided into 3 equal parts	z) $\frac{3}{4}$

A. p = x, q = y, r = z
B. p = z, q = x, r = y
C. p = z, q = y, r = x
D. p = y, q = x, r = z

Question 4 has two questions (4A and 4B). Answer **any one.**

4.A.

a. $\frac{1}{2}+\frac{1}{4}=\frac{3}{4}$

$\frac{3}{4}+\frac{1}{8}=\frac{7}{8}$

$\frac{7}{8}+\frac{1}{16}=\frac{15}{16}$

Write the next two lines of the pattern.

b. Milk is kept in a large vessel and a small vessel. There is $8\frac{3}{4}$ litres of milk in the large vessel. If $1\frac{1}{4}$ litres of milk is poured from the large vessel to the small vessel, the quantity of milk in both the vessels become the same. What is the quantity of milk in the small vessel in the beginning?

c. The sum of the fractions in column A is given in column B. If they are matched, which of the following is the correct answer.

A		B	
m)	$\frac{1}{2}+\frac{1}{3}$	t)	$\frac{5}{6}$
n)	$\frac{1}{3}+\frac{1}{5}$	u)	$\frac{7}{12}$
p)	$\frac{1}{3}+\frac{1}{4}$	v)	$\frac{8}{15}$

A. m = t n = v p = u
B. m = u u = t p = v
C. m = v u = t p = u
D. m = t p = v n = u

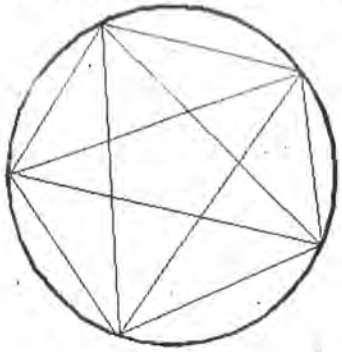
OR

4.B.

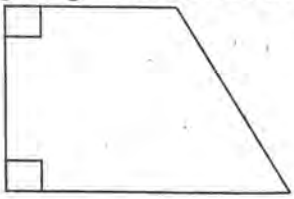
A vessel contains 5 litres of milk. One part of the milk is taken by Hari when it is divided into 6 equal parts and one part of the milk is taken by Sudha when it is divided into 3 equal parts.

a. How many litres of milk did Hari take?
b. How much did Sudha take?
c. How many litres of milk did they take together?
d. Which of the following statement is true?
   A. One part of 10 divided by 6 is $\frac{6}{10}$.
   B. When 6 is divided into 10 equal parts, one part is more than 1.
   C. One part of 10 divided by 6 and one part of 5 divided by 3 is the same.
   D. $\frac{10}{6}$ is less than 1.

5. a. Draw the given pattern. Shade and make it beautiful.



b. The figure given here is not a rectangle. Why?



A. It has 4 sides

B. It has 4 corners

C. Their opposite sides are not equal.

D. Their two angles are right angles.

6. a. The area of a rectangle is 96 square centimetres. The volume of a rectangular box having the same length and width is 96 cubic centimetres. What is the height of the box?

b. There is 250000 litres of water in a rectangular swimming pool. It has 2 metres depth and 10 metres width. If the pond is half full of water, what is the length of the pond?

c. Some water from this pond is used for agricultural purposes. Now, the water in the pond is 40 centimetres high. Which of the following is the calculation for finding the volume of water in the pond?

A. $\frac{2500\times1000\times40}{1000}$

B. $\frac{2500\times1000\times60}{1000}$

C. $\frac{25\times10\times40}{1000}$

D. $\frac{25\times10\times60}{1000}$