

SAMAGRA SHIKSHA KERALA
SUMMATIVE ASSESSMENT II, 2025 - 2026
MATHEMATICS

Class : VIII

Time: $1\frac{1}{2}$ Hrs.
Total Score : 40

Instructions:

- Use the first 15 minutes to read the questions and think about answers.
- There are 16 questions, split into 4 parts A, B, C, D
- Answer all questions; but in questions of the type A or B you need answer only one of those.
- You can answer the questions in any order, writing the correct question number.
- Answers must be explained whenever necessary.

Section A*This section has 4 questions of score 1 each. Select the correct answer.*

1. Four subtracted from 5 times of a number gives 6. What is the number ?

A. 1 B. 2 C. 3 D. 0

2. Which of the following gives -2 as the answer ?

A. $7-5$ B. $-7-5$ C. $-5+7$ D. $5-7$

- 3 Find the missing number in the given table.

	20	4
20	400	80
4	80

A. 160 B. 80 C. 400 D. 16

4. Read the following Statements.

Statement I : The perpendicular bisector of a chord passes through the centre of the circle.

Statement II : Any point at the same distance from the endpoints of a line lies on its perpendicular bisector.

Choose the correct answer from those given below.

- A. **Statement I** is true, **Statement II** is false.
- B. **Statement I** is false, **Statement II** is true.
- C. Both statements are true, **statement II** is the reason of **statement I**.
- D. Both statements are true, **statement II** is not the reason of **statement I**.

Section B

This section has 4 questions of score 2 each.

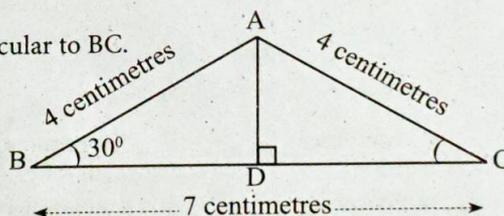
5. A person bought 2 bags and 3 umbrellas for 2300 rupees. The price of 3 umbrellas is 900 rupees.
- What is the price of an umbrella?
 - What is the price of a bag?
6. Draw an angle of $32\frac{1}{2}^\circ$.
7. Write the decimal form of $\frac{7}{25}$.
8. There are 20 questions in a test. Each correct answer gets 2 marks. For each wrong answer, 1 mark is subtracted. A person answers all questions, but only 5 of them are correct. How much marks he get?

Section C

This section has 4 questions of score 3 each.

9. The line AB is divided in the ratio 2:3:5 by the points P and Q.
QB = 15 centimetres.
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- What is the length of AP?
 - What is the length of PQ?
 - If QB = 30 centimetres, what is the length of AP?
10. A. Prove that the chords of a circle at equal distances from the centre have equal length.
- OR
- B. Prove that the perpendicular from the centre of a circle to a chord bisects the chord.
11. Draw a rhombus of diagonals 7 centimetres, 5.5 centimetres.

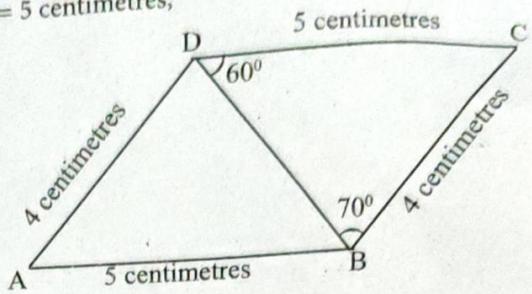
12. A. In the figure, AB = AC = 4 centimetres,
BC = 7 centimetres, and AD is perpendicular to BC.
 $\angle B = 30^\circ$



- What is $\angle C$?
- Write the length of BD.
- What is $\angle BAD$?

OR

- B. In the quadrilateral ABCD, $AB = CD = 5$ centimetres,
 $AD = BC = 4$ centimetres,
 $\angle CDB = 60^\circ$, $\angle CBD = 70^\circ$



- i) Are the angles of triangle ABD and triangle BCD equal? Why?
 ii) Write all the angles of triangle ABD.

Section D

This section has 4 questions of score 4 each.

13. Draw a triangle of two sides 4 centimetres and 6 centimetres; angle between these sides 55° . Draw its circumcircle.
 14. A. Appu is 5 year older than Ammu. Next year, Appu's age will be twice that of Ammu's age.

	Age now	Age after one year
Ammu	x
Appu	$x + 5$

- i) Complete the table.
 ii) After one year, write the relation between their ages using algebra.
 iii) What are their ages now?

OR

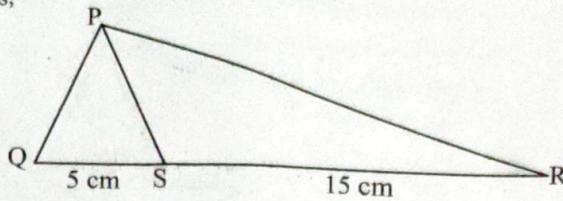
- B. 60 centimetres long wire is to be bent into a rectangle, with the length 3 centimetres longer than the twice the breadth.

- i) What is the sum of length and breadth?
 ii) Form an equation, find the length and breadth.

15. A. Blue and yellow colours are mixed in the ratio 2:3 to make a new colour of 60 litres. To make the ratio 3:4, should more blue or yellow to be added? How many litres?

OR

- B. In the figure $QS = 5$ centimetres,
 $SR = 15$ centimetres.



- i) What is $QS:SR$?
 - ii) Write the ratio of areas of triangle PQS and triangle PSR.
 - iii) The area of triangle PQS is 10 square centimetres.
What is the area of triangle PQR?
16. A regular polygon has 10 sides, then
- (i) a) What is the sum of its outer angles?
 - b) Find the outer angle and inner angle at one vertex.
 - (ii) Name the polygon in which inner angles and outer angles are equal?