

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**.

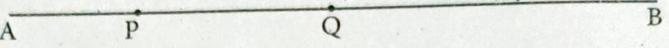
Section B

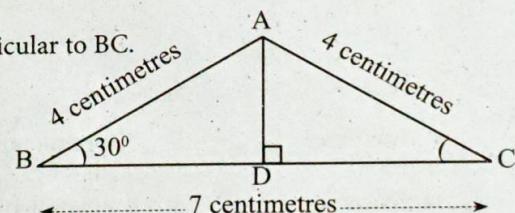
This section has 4 questions of score 2 each.

5. A person bought 2 bags and 3 umbrellas for 2300 rupees. The price of 3 umbrellas is 900 rupees.
 - i) What is the price of an umbrella ?
 - ii) 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

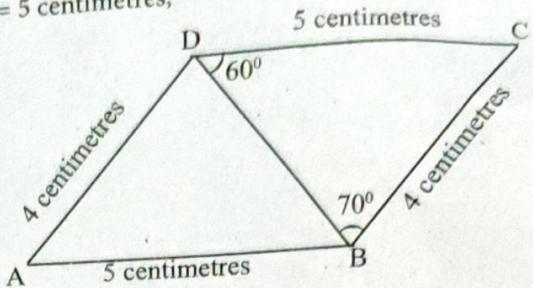
This section has 4 questions of score 3 each.

9. The line AB is divided in the ratio 2:3:5 by the points P and Q.
 $QB = 15$ centimetres, 
i) a) What is the length of AP ?
b) What is the length of PQ ?
ii) 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 .
 $\angle B = 30^{\circ}$
i) What is $\angle C$?
ii) Write the length of BD .
iii) 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

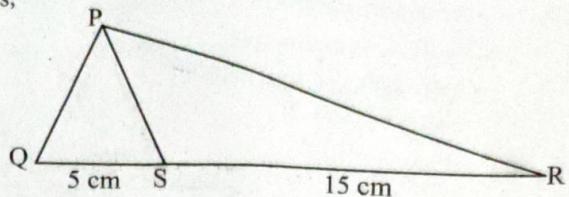
B. 60 centimetres long wire is to be bent into a rectangle, with the length 3 centimetres longer than the twice the breadth.

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 ?