



B.K. BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
A CBSE DAY-CUM-BOYS' RESIDENTIAL SCHOOL



PERIODIC TEST-1 2026-27 MS: MATHEMATICS: SET 2

Class: IX
Date: 10.06.26
Admission no:

Time: 1hr
Max Marks: 25
Roll no:

General Instructions:

1. This Question Paper has 4 Sections A, B, C and D.
2. Section A has 5 MCQs carrying 1 mark each
3. Section B has 3 questions carrying 02 marks each.
4. Section C has 2 questions carrying 03 marks each.
5. Section D has 2 questions carrying 04 marks each.
6. All Questions are compulsory.

SET 2 – DETAILED MARKING SCHEME

◆ SECTION A (1 mark each)

(Full mark for correct option only)

1. (c) – 1m
2. (c) – 1m
3. (c) – 1m
4. (c) – 1m
5. (d) – 1m

◆ SECTION B (2 marks each)

Q7 (2m)

- Semi-perimeter

$$s = \frac{18 + 10 + 14}{2} = 21$$

✓ 1 mark

- Area using Heron's formula

$$= \sqrt{21(21 - 18)(21 - 10)(21 - 14)} = 21\sqrt{11}$$

✓ 1 mark

Q8 (2m)

- Any 2 correct irrational numbers → 1 mark
- All 4 correct → 2 marks

Answer:

$$\sqrt{17}, \sqrt{18}, \sqrt{19}, \sqrt{20}$$

Q9 (2m)

(Number line construction)

- Correct steps → 1 mark
- Proper diagram → 1 mark

◆ SECTION C (3 marks each)

Q10 (3m)

- Semi-perimeter

$$s = 21$$

✓ 1 mark

- Area

$$= 84 \text{ cm}^2$$

✓ 1 mark

- Altitude

$$h = \frac{2 \times 84}{14} = 12 \text{ cm}$$

✓ 1 mark

Q11 (3m)

- Side = $240/3 = 80 \rightarrow 1$ mark
- Formula

$$\frac{\sqrt{3}}{4} a^2$$

✓ 1 mark

- Final answer

$$1600\sqrt{3}$$

✓ 1 mark

Q12 (3m)

- Split number → 1 mark
- Convert repeating part → 1 mark
- Final fraction

$$\frac{43}{90}$$

✓ 1 mark

◆ SECTION D (4 marks)

Q13 (4m)

(i) Semi-perimeter

$$s = 6$$

✓ 1 mark

(ii) Area

$$= 6 m^2$$

✓ 2 marks

(iii) Cost

$$600$$

✓ 1 mark

Q14 (4m)

(General marking pattern)

- Rationalising factor → 1 mark
- Simplification → 1 mark
- Rationalisation steps → 2 marks

*****ALL THE BEST*****