

Sample				
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

28 P-593

SSC-A-I-2026 (9th)

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Roll No
Student Must Fill the
Roll Number Bubbles

(Section-A) Marks= (15) Time Allowed: 20 Minutes

All questions of this section must be answered on this page and handed over to the Superintendent within given time

991234



Student Name

Name of Paper MATHEMATICS (M-I)

Paper Date 10-APR-26

165

Paper Code 31

Signature of Student

Paper Version

A B

SEAL

Sign and Seal of Suptd.

سوالات

سوال نمبر کے مطابق درست جواب نمبر کا دائرہ پُر کریں۔

- The HCF of the algebraic expressions $4x^2 - 8x$ and $x - 2$ is a. $4x$, b. $x^2 - 8$, c. $x - 2$, d. $4x^2 - 8$
- The linear equation $\frac{12x}{7} - x = 5$ is true for the value of x: a. 5, b. $\frac{7}{5}$, c. $\frac{5}{7}$, d. 7
- The point $(-2, -7)$ lies on the line having equation: a. $y = 4x + 1$, b. $y = x + 1$, c. $y = x + 2$, d. $2y = 3x + 2$
- $4 + x = 4 + y \Rightarrow x = y$, the property used is: a. cancellation property w.r.t multiplication, b. cancellation property w.r.t addition, c. multiplicative, d. additive
- Conjugate of the complex number $2 + \sqrt{3}i$ is: a. $2 + \sqrt{-3}i$, b. $2 - \sqrt{3}i$, c. $-2 + \sqrt{3}i$, d. $-2 - \sqrt{3}i$
- If $\log_5 125 = x$ then the value of x is: a. 10, b. 5, c. 4, d. 3
- Value of algebraic expression $\frac{x^2 - 9}{3x - 2}$ at $x = 3$ is: a. 10, b. 8, c. 0, d. undefined
- One of the factor of expression $x^2 - 8x + 12$ is: a. $x - 2$, b. $x + 2$, c. $x - 3$, d. $x + 3$
- The order of the matrix $\begin{bmatrix} 1 & 5 \\ 3 & 3 \\ 0 & 0 \\ 4 & 1 \end{bmatrix}$ is: a. 4×2 , b. 3×4 , c. 4×3 , d. 2×4
- The decimal representation of $\frac{5}{11}$ is: a. $0.\overline{43}$, b. $0.\overline{45}$, c. $0.\overline{46}$, d. $0.\overline{47}$
- Radical form of the expression $a^{\frac{1}{3}}$ is: a. $\sqrt[3]{a^2}$, b. $\sqrt[3]{a^3}$, c. $\sqrt[3]{a^1}$, d. $\sqrt{a^{\frac{1}{3}}}$
- The simplified form of the expression $\frac{5^4 \times 2^3}{50^2}$ is: a. 10, b. 20, c. 40, d. 50
- The matrix $\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$ is an example of a. a. diagonal matrix, b. scalar matrix, c. null matrix, d. column matrix
- The determinant of the matrix $\begin{bmatrix} -4 & 5 \\ -2 & 1 \end{bmatrix}$ is: a. 3, b. 0, c. 6, d. -6
- The property used in the equation $3 \times \frac{1}{3} = \frac{1}{3} \times 3 = 1$ is: a. associative, b. additive inverse, c. distributive, d. multiplicative inverse

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If the Candidate is absent, The Superintendent Should fill this Circle }
To pack the sheet with solved OMR sheets in roll number order } → ○

MATHEMATICS — 9th

SSC-9th-Abbottabad-2026

Time: 2 Hours 40 Minutes

SECTION-B

Marks: 36

1. Attempt any nine of the following short questions. Each question carries 4 marks.

- i. Solve the system of equations $x - 4y = -10$ and $2x + 3y = 2$ using Cramer's rule. 1+2+1
- ii. Simplify $\frac{\sqrt{9x^4y^2}}{\sqrt[3]{27x^6y^{12}}}$ 1+1+2
- iii. Find the value of x from the equation $\log x = 3.8621$ 2+2
- iv. Simplify the rational expression $\frac{1}{3x-6} \cdot \frac{3x+6}{2x^2-32}$ 1+2+1
- v. If $2x - 1$ is a factor of $24 + kx + 3$, find the value of k 1+2+1
- vi. If $x = \sqrt{15} - 4$, find the value of $x + \frac{1}{x}$ and $x^2 + \frac{1}{x^2}$ 2+2
- vii. Find LCM of the polynomials $x^3 - 34 + 5x + 2$ and $x^3 - 3x^2 - x + 3$ 2+2
- viii. Solve the radical equation $\sqrt{5x-3} - \sqrt{3x+1} = 0$ 1+2+1
- ix. Solve the inequality $\frac{3x}{4} + 2 \geq \frac{2x-5}{3}$ and plot the solution on number line. 2+1+1
- x. Prove that the points $A(1,2)$, $B(1,8)$ and $C(5,2)$ are the vertices of right angled triangle. 1+2+1
- xi. Prove that in any correspondence of two triangles, if three sides of one triangle are congruent to corresponding three sides of the other, the two triangles are congruent. 1+2+1
- xii. Prove that the line segment joining the midpoints of two sides of a triangle, is parallel to the third side and is equal to one half of its length. 1+2+1

SECTION-C

Marks: 24

NOTE: Attempt any four of the following questions. Each question carries 6 marks.

2. Prove that any point on the right bisector of a line segment is equidistant from its end points. 1+1+2+2
3. Prove that if two sides of a triangle are unequal in length, the longer side has an angle of greater measure opposite to it. 1+1+2+2
4. Prove that if a line segment intersects the two sides of a triangle in the same ratio then it is parallel to the third side. 1+1+2+2
5. Prove that in a right angled triangle, the square of the length of hypotenuse is equal to the sum of the squares of the length of the other two sides. 1+1+2+2
6. Prove that parallelogram on the equal bases and having same altitude are equal in area. 1+1+2+2
7. Construct a quadrilateral ABCD such that $\overline{AB} = 5\text{cm}$, $\overline{BC} = 6\text{cm}$, $m\angle A = 100^\circ$, $m\angle B = 60^\circ$, $m\angle C = 110^\circ$ 1+1+2+2