

P-640

MATHEMATICS 9th SSC-9th-Swat-2026 Time: 20 Minutes Marks: 15 Multiple Choice Questions 01 Mark for each		Paper Code ① ② ③	Roll No. of the Student
		Serial No. Of the Answer Book _____	

SECTION-A

Note:

- 1) Attempting all MCQs is compulsory. This paper along with the OMR sheet must be returned to the superintendent after due time.
- 2) Fill the circle (A) (B) (C) (D), which one is correct with blue or black ball in separate OMR Sheet like ●
- 3) If more than one circle in the OMR sheet is filled then no credit will be given to such answer.

I.i. The value of the expression $\frac{3^3}{3^{-2}}$ is:

- (A) 3^0 (B) 3^1 (C) 3^{-1} (D) 3^5

ii. Conjugate of the complex number $z = -3 - 2i$ is:

- $-3 + 2i$ (B) $3 - 2i$ (C) $3 - i$ (D) $-3 + i$

iii. The simplest value of the expression $\log 12 - \log 3$ is:

- Log 4 (B) Log 9 (C) Log 15 (D) Log 36

iv. The following are examples of polynomials EXCEPT:

- (A) $2x^2 + 7$ ● $2x^2 + \sqrt{7}$ (C) $\sqrt{2}x^2 + 7$ ● $\frac{2}{x^2} + 7$

v. The zero of the polynomial $P(x) = x^2 - 3x + 2$ is:

- (A) 0 ● 1 (C) 2 (D) 3

vi. H.C.F of $4x^2 - 4y^2$ and $4x^2 - 4xy$ is:

- xy (B) $4xy$ (C) $4(x-y)$ ● $4x$

vii. The value of $|-5+2|$ is:

- (A) - (B) 2 (C) -3 ● 3

viii. The point () lies in the Cartesian plane in:

- (A) 1st Quadrant (B) 2nd Quadrant (C) 3rd Quadrant ● 4th Quadrant

ix. The order of the matrix $A = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \end{bmatrix}$ is:

- 2×3 (B) 3×2 (C) 2×2 (D) 3×3

x. $X = \begin{bmatrix} 2 & 0 \\ 0 & 3 \end{bmatrix}$ is a type of matrix:

- (A) Zero matrix (B) Row matrix (C) Scalar matrix ● Diagonal matrix

xi. The determinant of the matrix $y = \begin{bmatrix} 2 & -5 \\ 3 & 8 \end{bmatrix}$ is:

- (A) 1 (B) 31 (C) -1 ● -31

xii. The value of i is:

- (A) -1 ● $\sqrt{-1}$ (C) 1 (D) 0

xiii. Decimal representation of the number $\frac{7}{3}$ is:

- (A) $2.2\bar{3}$ ● $2.\bar{3}$ (C) $3.\bar{2}$ (D) $3.2\bar{3}$

xiv. The property used in $2 < 7 \Rightarrow 14 < 49$ is:

- (A) Trichotomy ● Transitive (C) Additive (D) Multiplicative

xv. The value of index in the radical expression $\sqrt[3]{25x^2}$ is:

- (A) $25x^2$ (B) $\sqrt{\quad}$ ● 3 (D) 2

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MATHEMATICS 9th

SSC-9th-Swat-2026

Note: Time allowed for section B and C is 2 hours and 40 minutes.

SECTION "B"

Marks: 36

II. Attempt any NINE Parts out of the following. Each Part carries equal marks.

- i. If $A = \begin{bmatrix} 2 & 3 \\ 1 & 0 \\ 4 & -2 \end{bmatrix}$, $B = \begin{bmatrix} 3 & 0 \\ 1 & 2 \end{bmatrix}$ find $AB =$
- ii. Add the complex numbers: $4 - 5i$, $-7 + 2i$.
- iii. Find logarithm of the number 500.
- iv. Simplify the following $\frac{4x-20}{4x} \div (x-5)$.
- v. If $x = 3 - \sqrt{8}$. Find the value of $x - \frac{1}{x}$ and $x^2 + \frac{1}{x^2}$.
- vi. By using remainder theorem find the remainder of the polynomial when $3x^3 - 7x^2 + 6x - 3$ is divided by $x - 2$.
- vii. Find H.C.F by division method $y^2 - y - 6$, and $y^2 - 2y - 3$.
- viii. Solve for x
 $3|7x - 3| + 2 = 8$
- ix. Solve the solution of the following inequalities.
 $\frac{3x+9}{3} \leq \frac{x-7}{5}$
- x. Prove that the points $(3, -2)$, $(2, -4)$, $(4, 0)$ are collinear.
- xi. Prove that if two angles of a triangle are congruent, then the sides opposite to them are also congruent.
- xii. Prove that, if two opposite sides of a quadrilateral are congruent then the quadrilateral is a parallelogram.

SECTION "C"

Marks: 24

III. Attempt any FOUR questions of the following. Each question carries equal Marks.

- III. Prove that any point inside an angle, equidistant from its arms is on its right bisector.
- IV. Prove that the sum of the lengths of any two sides of a triangle is greater than the length of the third side.
- V. 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.
- VI. Prove that in a right-angle triangle the square of the length of hypotenuse is equal to the sum of the squares of the length of other two sides.
- VII. Prove that parallelograms on equal bases and having the same altitude are equal in area.
- VIII. Construct $\triangle ABC$ such that.

$$m\overline{BC} = 4cm, m\overline{AB} = 5cm \text{ and } m\angle A = 45^\circ.$$