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FOR MAHARASHTRA BOARD (MSBSHSE) CLASS 10 EXAM PREPARATION

Maharashtra Board (MSBSHSE) Class 10 2026 March Session Question Paper · Maths Part 1 (Algebra)

EXAM
Maharashtra Board (MSBSHSE) Class 10

YEAR
2026

TYPE
March Session Question Paper

SUBJECT
Maths Part 1 (Algebra)

N 919

Seat Number | | | | | | | |

2026 III 06 1100 -N 919- MATHEMATICS (71) ALGEBRA—PART I (E)

(REVISED COURSE)

Time : 2 Hours **(Pages 11)** **Max. Marks : 40**

Note **:— (*i*) *All* questions are compulsory.**

(*ii*) Use of a calculator is not allowed.

(*iii*) The numbers to the right of the questions indicate full marks.

(*iv*) In case of MCQs [Q. No. 1(A)] only the first attempt will be evaluated and will be given credit.

1. (A) For every subquestion, four alternative answers are given. Choose the correct answer and write the alphabet : 4

(*i*) Rate of GST on essential commodities is ..... .

(A) 5%

(B) 12%

(C) 0%

(D) 18%

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(*ii*) Out of the following equations which one is not a quadratic equation ?

(A) $x^2 + 4x = 11 + x^2$

(B) $x^2 = 4x$

(C) $5x^2 = 90$

(D) $2x - x^2 = x^2 + 5$

(*iii*) To draw graph of $4x + 5y = 19$, find the value of y when $x = 1$.

(A) 4

(B) 3

(C) 2

(D) –3

(*iv*) Sum of first five multiples of 3 is ..... .

(A) 45

(B) 55

(C) 15

(D) 75

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(B) Solve the following subquestions : **4**

(*i*) On certain article if rate of CGST is 9%, then what is the rate of GST ?

(*ii*) For simultaneous equations in variables x and y, if $D_x = -42$ and $D = -3$, then find the value of x.

(*iii*) When two coins are tossed simultaneously, write the sample space 'S'.

(*iv*) Write the following quadratic equation in the form $ax^2 + bx + c = 0$:

$$2y = 10 - y^2$$

2. (A) Complete and write any *two* activities from the following : 4

(*i*) If one die is rolled, then find the probability of the event, that the number on the upper face is prime.

Solution :

'S' is the sample space.

$S = \{1, 2, 3, 4, 5, 6\}$

$\therefore \quad n(S) =$ ☐

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Event A : Prime number on the upper face.

$$A = \{2, 3, 5\}$$

$\therefore \quad n(A) = \square$

$\therefore \quad P(A) = \dfrac{n(A)}{\square}$

$\therefore \quad P(A) = \dfrac{\square}{6}$

$= \dfrac{1}{2}$

(*ii*) Write the correct number in the given boxes from the given A.P.; 70, 60, 50, 40, ...

Here $t_1 = \square$, $t_2 = 60$, $t_3 = \square$

$\therefore \quad a = \square$, $d = \square$

(*iii*) Complete the following table to draw graph of the equation.

$x + y = 3$

x	3	$\square$
y	$\square$	5
(x, y)	$\square$	$\square$

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(B) Solve any *four* subquestions from the following : 8

(*i*) If two coins are tossed simultaneously, find the probability of the event, "getting at least one head."

(*ii*) Solve the following simultaneous equations :

$$x + y = 4$$

$$2x - y = 2$$

(*iii*) Solve the following quadratic equation by factorisation method :

$$x^2 + x - 20 = 0$$

(*iv*) Given A.P. is 12, 16, 20, 24, ...

Find the 24th term of this progression.

(*v*) If $\sum x_i f_i = 1265$ and N = 50, then find the mean of the given data.

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3. (A) Complete and write any *one* activity from the following : 3

(*i*) Shreekar bought a Laptop with 10% discount on printed price. The printed price of that Laptop was ₹ 50,000. 18% GST was charged on discounted price. Find the amount of CGST and SGST. What amount did Shreekar pay ?

Solution :

Discount = 10% of 50,000 = ₹ [ ]

∴ Taxable value of Laptop = 50,000 – [ ]

= ₹ 45,000

∴ Rate of GST = [ ]

∴ Rate of CGST = 9%

∴ CGST = 9% of 45,000

= [ ] × 45,000

= ₹ [ ]

∴ SGST = ₹ 4,050

Total amount of Laptop = 45,000 + 4,050 + 4,050 = ₹ [ ]

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(*ii*) One of the roots of the quadratic equation $5m^2 + 2m + k = 0$ is $\frac{-7}{5}$. Complete the following activity to find the value of 'k'.

Solution :

$\frac{-7}{5}$ is a root of quadratic equation $5m^2 + 2m + k = 0$.

$\therefore$ put $m = \frac{-7}{5}$ in the equation.

$\therefore$ $5 \times \square^2 + 2 \times \square + k = 0$

$\square + \square + k = 0$

$\square + k = 0$

$\therefore$ $k = \square$.

(B) Solve any *two* subquestions of the following : 6

(*i*) Two numbers differ by 3. The sum of twice the smaller number and thrice the greater number is 19. Find the numbers.

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(*ii*) Sachin invested some amount in a National Saving Certificate Scheme. In the first year he invested ₹ 5,000, in the second year ₹ 7,000, in the third year ₹ 9,000 and so on. Find the total amount that he invested in 12 years.

(*iii*) There are six cards in a box, each bearing a number from 0 to 5. Find the probability of each of the following events, that :

(1) The number on the card drawn is a natural number.

(2) The number on the card drawn is a whole number.

(*iv*) Draw a histogram of the following data :

Height of Students (cm)	**No. of Students**
135—140	4
140—145	12
145—150	16
150—155	8

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4. Solve any *two* subquestions of the following : 8

(*i*) The sum of two roots of a quadratic equation is 7 and sum of their cubes is 91, find the equation.

(*ii*) Smt. Tejaswini purchased 100 shares of FV ₹ 80 when the MV is ₹ 900. She paid brokerage at the rate of 0.5% and 18% GST on brokerage. Find the following :

(1) Net amount paid for 100 shares.

(2) Brokerage paid on sum invested.

(3) GST paid on brokerage.

(4) Total amount paid for 100 shares.

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(*iii*) The following table shows the funds collected by 105 students for flood affected people. Find the median of the data.

Fund (Rupees)	No. of Students
10—20	10
20—30	37
30—40	15
40—50	20
50—60	7
60—70	8
70—80	8

5. Solve any *one* subquestion of the following : 3

(*i*) A survey was conducted in the school. Student using different modes of transport is given below :

Mode of Transport	Percentage of Students
Bicycle	35
Bus	a
Railway	$2a$
Rickshaw	20

Find the value of a and draw the Pie diagram.

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(*ii*) There are some students in group A and group B. If one student goes from group A to group B, then the number of students in both groups is same. But one student goes from group B to group A, then the number of students in group A becomes twice of group B. Find the number of students in each group.