

BASAVA INTERNATIONAL SCHOOL
SEMESTER – I, UNIT TEST
SUBJECT: MATHEMATICS

CLASS: IX

M M: 20

DATE: 26.07.21

TIME: 45mins

INSTRUCTIONS : 1. Paper will be uploaded in the form of pdf on Microsoft Teams.
 2. Students need to write the answers on UT sheets, scan and email the answer sheets by 9 am to the following email ids :
 submissionsix21-22@outlook.com (For 9 – A and 9-B)
 bis.maths09@gmail.com (For 9 – C)
bismath9d@gmail.com (For 9 – D)

1. Find the equations of the lines parallel to x-axis at a distance of 5 units. 1m
2. Evaluate 99^3 using suitable identity. 1m
3. If (3, -2) is a solution of the linear equation $3x - py - 7 = 0$, then find the value of p. 1m
4. The perimeter of an equilateral triangle is 60cm, find its area. 1m
5. Verify using Factor theorem, whether $2x + 3$ is a factor of the polynomial
 $4x^3 - 3x^2 - 5x + 1$ or not. 2m
6. Factorise : (i) $9x^2 + y^2 + z^2 - 6xy + 2yz - 6zx$
 (ii) $8x^3 + 27y^3 + 36x^2y + 54xy^2$ 3m
7. The polynomial $p(x) = x^4 - 2x^3 + 3x^2 - ax + 3a - 7$ when divided by $(x + 1)$ leaves the remainder 19. Find the value of a. 3m
8. Two students of class IX, together contribute Rs. 500 towards Prime Minister's Relief Fund to help the earthquake victims. Write a linear equation which satisfies this data and draw the graph of the same. 4m
9. The perimeter of an isosceles triangle is 32cm. The ratio of the equal side to its base is 3:2. Find the area of the triangle. 4m