# ADARSHA VJDYALAYA. HUNASHYAL, P.B 

NAME :-
ROLL.NO:-
Total Marks:- 20

## CLASS:-IX <br> UNIT TEST 2:-Polynomials and Co-Or Geometry <br> SUBJECT:- Mathematics

## Answer the following questions

1. Which of the following is not a polynomial?
a) $x^{2}+2 \sqrt{x}+3$
b) $x^{2}-\sqrt{2} x+3$
c) $x^{3}-3 x^{2}-3$
d) $\mathbf{6 x}+4$ ANS:-
$\qquad$
2. The degree of the polynomial $3 x^{3}-x^{4}+5 \mathrm{x}+3$ is

ANS:- $\qquad$
3. Zero of the polynomial $\mathbf{p}(\mathbf{x})=\boldsymbol{a}^{\mathbf{2}} \mathbf{x}$ is

ANS:- $\qquad$
4. Which quadrant the below points belongs to ?
a. $(0,0)$
b. $(-3,5)$

ANS:- $\qquad$
5. Write the name of the point where the $x$ and $y$ axis intersects

ANS:- $\qquad$

## Answer the Following:

6. Find the remainder when $x^{3}+3 x^{2}+3 \mathrm{x}+1$ is divided by $(\mathrm{x}+1)$, ANS:-
7. Find the value of a if $x+6$ is a factor of $x^{3}+3 x^{2}+4 x+a$. ANS:-
8. State Reminder theorem. Or factories $4 x^{2}+14 x+10$

ANS:-
9. Write the coordinates, Quadrant or Ordinates of the given points marked on the Cartesian plane as per the instruction.
a) Co ordinates of A is $=(, \quad)$
b) Quadrant of B is $=$
c) Ordinate of D is $=$
d) Point belongs to III Quadrant is $=$
e) Difference between Abscissa of $\mathrm{E} \& \mathrm{~F}$ is $=$
f) Abscissa of point $(0,3)$ is $=$

10. Draw below points on graph and join all the points

| x | -2 | -1 | 0 | 1 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| y | 6 | 5 | 1.3 | -1 | -3 |


11. Match the followings

| A | B |
| :--- | :--- |
| 1) $x^{3}+3 x^{-2}+3 \mathrm{x}+1$ | a) $a x^{2}+\mathrm{bx}+\mathrm{c}$ |
| 2) $7 x^{3}$ | b) Cubic polynomial |
| 3) Degree of polynomial is 2 | c) Non polynomial |
| 4) Coefficient of x in $x^{3}+3 x^{2}+1+5 \mathrm{x}$ | d) 6 |
| 5) Degree of $x^{5}+3 x^{6}+3 \mathrm{x}+1$ is | e) $\mathrm{ax}+\mathrm{b}$ |
| 6) General Form of linear Polynomial | f) 5 |

ANS:-

## Answer the following

## $1 \mathrm{X} 5=5$

1. 2. Which of the following is not a polynomial?
a) $x^{2}+2 \sqrt{x}+3$
b) $x^{2}-\sqrt{2} x+3$
c) $x^{3}-3 x^{2}-3$
d) $6 x+4$ ANS:-
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1. The degree of the polynomial $3 x^{3}-x^{4}+5 \mathrm{x}+3$ is

ANS:- $\qquad$
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ANS:- $\qquad$
4. Which quadrant the below points belongs to ?
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ANS:- $\qquad$
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ANS:- $\qquad$

Answer the Following:
6. Find the remainder when $x^{3}+3 x^{2}+3 \mathrm{x}+1$ is divided by $(\mathrm{x}+1)$, ANS:-
7. Find the value of a if $x+6$ is a factor of $x^{3}+3 x^{2}+4 \mathrm{x}+\mathrm{a}$.

ANS:-
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ANS:-
9. Write the coordinates, Quadrant or Ordinates of the given points marked on the Cartesian plane as per the instruction.
g) Co ordinates of A is $=(, \quad)$
h) Quadrant of B is $=$
i) Ordinate of D is $=$
j) Point belongs to III Quadrant is =
k) Difference between Abscissa of $\mathrm{E} \& \mathrm{~F}$ is $=$

1) Abscissa of point $(0,3)$ is $=$

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| x | -2 | -1 | 0 | 1 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| y | 6 | 5 | 1.3 | -1 | -3 |


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| :--- | :--- |
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ANS:-

