| Success Key Test Series$\square$ Ney | SUCCESS KEY TEST SERIES <br> VIII. (English) <br> (Unit Test-1 (Ch- 1,2 / 10,11)) <br> Mathematics- | DATE: <br> TIME: 1:30 hrs |  |  |  |
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|  |  | MARKS: 40 |  |  |  |
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Q. 1 A) Choose the correct alternative.

1) The algebraic expression in one variable is a polynomial if the index of the variable of each is a $\qquad$
2) If any index term is missing in the dividend, assume the co-efficient of the term to be $\qquad$
3) $4 a \times 3 a^{2}=$ $\qquad$
4) $4 x \times 0=$ $\qquad$
5) $2 x-(-7 x)=2 x+7 x=$ $\qquad$
B) Answer the following questions
6) Division of a monomial by a monomial $4 x \div 12 x^{3}$
7) Division of a monomial by a monomial $\left(-15 a^{2} b c^{3}\right) \div(3 a b)$
8) In the given figure if line $\mathrm{a} \|$ line b line $\mathscr{C}$ is a transversal then find x .

9) Compare the following numbers : -9 and -6
10) Division of a monomial by a monomial

$$
\left(-20 y^{5}\right) \div\left(-2 y^{3}\right)
$$

## Q. 2 Attempt the following questions. (Any five)

1) Division of a polynomial by a monomial
$\left(25 m^{4}-15 m^{3}+10 m+8\right) \div 5 m^{3}$
2) $\left(16 a^{3}-8 a^{2}\right) \div 8 a$
3) Draw a line $m$. Draw a line $n$ which is parallel to line $m$ at a distance of 4 cm from it.
4) $-72 x^{3} y^{2}$ by $-8 x^{2} y$
5) The number of Science and Mathematics projects submitted by Model high school, Nandpur in last 20 years at the state level science exibition is :
$2,3,4,1,2,3,1,5,4,2,3,1,3,5,4,3,2,2,3,2$. Prepare a frequency table and find the mean of the data.
6) Compare the following numbers.
$\frac{15}{12}, \frac{7}{16}$
Q. 3 Solve the following questions. (Any four)
7) $\left(6 a^{3}-a^{2}-10 a-10\right) \div(2 a-3)$
8) Observe the following graph and answer the questions.

i. State the type of the bar graph.
ii. How much percent is the Tur production to total production in Ajita's farm?
iii. Compare the production of Gram in the farms of Yash and Ravi and state whose percentage of production is more and by how much ?
iv. Whose percentage production of Tur is the least?
v. State production percentages of Tur and gram in Sudha's farm.
9) In the given figure line a \|l line b, line $\int$ is a transversal. Find the measure of $\angle x, \angle y, \angle z$ using the given information.

10) Show the following numbers on a number line. Draw, a separate number line for each example.
$\frac{-5}{8}, \frac{11}{8}$
11) $\left(6 p^{3}-11 p^{2}+7 p+5\right) \div(2 p-3)$

## Q. 4 Answer the following (Any two)

1) The following data is collected in a survey of some students of $10^{\text {th }}$ standard from some schools. Draw the percentage bar graph of the data.

| School | $1^{\text {st }}$ | $2^{\text {nd }}$ | $3^{\text {rd }}$ | $4^{\text {th }}$ |
| :--- | :---: | :---: | :---: | :---: |
| Inclination towards science stream | 90 | 60 | 25 | 16 |
| Inclination towards commerce stream | 60 | 20 | 25 | 24 |

2) Write the following rational numbers in decimal form.
$\frac{-65}{21}$
3) In the given figure line $\mathrm{p} \|$ line q , line $\lceil\|$ line m find measure $\angle \mathrm{a}, \angle \mathrm{b}$ and $\angle \mathrm{c}$ using the measure of given angles. Justify your answer.

