## St. Xavier's Sr. Sec. School

## Delhi-54

## SUMMATIVE ASSESSMENT 2 MATHS

Marks: 30
Time: 30 minutes

Name: $\qquad$ Class \& Sec. $\qquad$ R. No. $\qquad$
Note: All the answers should be done on the question paper itself.

1. Half a number $x$ added to 7 is equal to
a. $2 x+7$
b. $\frac{x}{2}+7$
c. $\frac{x}{2}-7$
2. Exponential form for $3 \mathrm{x} x \mathrm{x} \times \mathrm{x} \times y \mathrm{x} y$
a. $3 x^{2} y^{3}$
b. $3 x^{3} y^{2}$
c. $3 x^{2} y^{2}$
3. The coefficient of $x$ in $-7 x y^{2} z$ is
a. $7 y^{2} z$
b. $y^{2} z$
c. $-7 y^{2} z$
4. The value of $a-b$ if $a=5, b=-3$ is
a. 2
b. 8
c. -2
5. The expression $x y \times p q \times 5$ is a
a. monomial
b. binomial
c. trinomial
6. The numerical coefficient of $p q, r$ is
a. $p q$
b. $q$ r
c. 1
7. If $z+4=7$, then the value of $z$ is
a. -3
b. 3
c. 11
8. The linear equation for 3 more than 5 times a number $y$ is 11 should be
a. $3 y+5=11$
b. $3 y+11=5$
c. $5 y+3=11$
9. The root of the equation $\frac{x}{2}+3=7$ is
a. 4
b. 8
c. 20
10. The solution of $5 t=20$ is
a. 4
b. 8
c. 20
11. The sum of two consecutive even integers is 30 . The numbers are
a. 12,18
b. 10,20
c. 14,16
12. The ratio $16: 20$ in the simplest form is
a. $8: 10$
b. $4: 5$
c. $2: 5$
13. The ratio of $500 \mathrm{~m}: 2 \mathrm{Km}$ in the simplest form is
a. 5:2
b. 1:2
c. $1: 4$
14. Which of the following are in proportion

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a. $2,3,4,6$
b. $3,4,5,7$
c. $5,10,15,20$
15. The value of $x$ in $2: 6: 7: x$ is
a. 12
b. 21
c. 14
16. If $a, b, c, d$ are in proportion than
a. $a b=c d$
b. $a b=b c$
c. $\mathrm{ad}=\mathrm{bc}$

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-2- (Class 6, Maths, 29.2.2016)
17. The perimeter of a square of side 5 cm is
a. 25 cm
b. 10 cm
c. 20 cm
18.

a. 8 cm
b. 12 cm
c. 16 cm
19. 1 square centimetre is equal to
a. 100 sq mm
b. 10 sq cm
c. none of these
20. The perimeter of a regular hexagon with side ' $a$ ' is
a. 6a
b. 7 a
c. 8 a
21. If the side of a square is doubled then its area becomes
a. remains the same
b. becomes doubled
c. becomes four times
22. The cost of fencing a square park of perimeter 100 cm at the rate of Rs. 25 per metre is
a. Rs. 500
b. Rs. 2500
c. Rs. 100
23. The perimeter of a triangle with sides $a, b, c$ is
a. $a+b+c$
b. axbxc
c. 2 abc
24. Two numbers are in the ratio $2: 3$ and their sum is 50 , then the numbers are
a. 15,35
b. 20,30
c. 10,40
25. The numbers of girls and boys in a school are 14 and 42 respectively, the ratio of girls to that of boys will be
a. 2 : 21
b. $7: 21$
c. $1: 3$

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26. The area of a rectangle is $200 \mathrm{~cm}^{2}$. If the length of the rectangle is 40 cm , then the breadth is
a. 10 cm
b. 5 cm
c. 25 cm
27. The distance covered by Rohan by taking 4 rounds of a square park with side 25 m is
a. 100 m
b. 200 m
c. 400 m
28. The perimeter of a square is 80 cm , then its side is
a. 20 cm
b. 25 cm
c. 40 cm
29. The perpendicular bisector of a line segment divides the line segment into
a. two equal halves
b. three equal halves
c. does not divide
30. The perpendicular drawn on a line makes an angle of
a. $45^{0}$
b. $90^{\circ}$
c. $180^{\circ}$

Class: 6
Date: 29.2.2016

SUMMATIVE ASSESSMENT 2
MATHS

Marks: 60
Time: $11 / 2$ hrs.

NOTE: All the questions are to be done on the answer sheet with proper steps.

1. Reduce the following ratios to the simplest form :
a) $15 \mathrm{~min}: 2$ hours
b) $200 \mathrm{ml}: 1$ litre
2. Find the value of $x$ in the following proportions:
a) $8: x:: 20: 25$
b) $x: 9:: 20: 45$
3. Write the terms and the factors of the following algebraic expressions using the tree diagram
a) $7 x^{2}+3 x y-4 y^{2}$
b) $a p^{2}+b p+c$
4. Evaluate the following
a) $2 a+3 b+4 c$
where $a=2, b=-2, c=3$
b) $x^{2}-7 x y+4 y$

$$
\text { where } x=3, \quad y=-2
$$

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5. Arrange the following ratios in ascending order

$$
\begin{equation*}
2: 3,3: 4,5: 8 \tag{3}
\end{equation*}
$$

6. The ratio of rice and wheat consumed by a family in a month is $1: 3$, if the total consumption of grains is 20 Kg , then find the weight of rice and wheat consumed in a month.
7. The sum of three consecutive numbers is 45 . Find the numbers.
8. The length of a rectangle is 3 cm more than its breadth. If the perimeter of the rectangle is 54 cm , find the length and the breadth.
9. Find the perimeter of a rectangle with area $650 \mathrm{~cm}^{2}$, whose breadth is 13 cm .
10. A hall is 18 m long and 5 m wide. Find the cost of carpeting the floor at the rate of Rs. 525 per square metre.
11. Solve the following equations:
a) $2(2 x-5)=3(x+5)$
b) $\frac{t}{4}-5=3$
12. The perimeter of a rectangular park is 150 m . If the breadth of the park is 25 m , find the length of the park.
13. Ajay's age is 5 times the age of his son Sahil. If the sum of their ages is 54 years, find their ages.
14. How many tiles of size 30 cm by 18 cm are required to cover a rectangular room of length 27 m and breadth 15 m .
15. Draw a line segment of length 6 cm and construct its perpendicular bisector using a scale and a compass.
16. Draw a line segment of length 5.5 cm . Construct a perpendicular on it from a point on the line segment.
