Maheshwari Public School, Ajmer

Class Test-II ; SESSION: 2018-2019

Class: VIII; Subject: Mathematics

Time Allowed: 40 Min **Maximum Marks: 20**

General Instructions:

1. All questions in this paper are compulsory to attempt.
2. Marks are indicated against each question.

A) Write correct alternative for any four of the following multiple choice questions. **$\frac{1}{2}$x4=2**

1. Which of the following is not a polynomial?
   (a) $5x^2-3x+2$ (b) $5\frac{x^2}{x}-3x+2$ (c) $5\frac{x^2}{x^2}-3x+2$ (d) $5\frac{x^2}{x^3}-3x+2$
2. $(x-5y)(x+5y)=x^2+\ldots\ldots y^2$
   (a)5 (b) -5 (c) 25 (d) -25
3. The value of $(\sqrt{81})^2$ is
   (a) 9 (b) 18 (c) -81 (d) none
4. The value of $\sqrt{\frac{1}{64}}-\sqrt{\frac{1}{16}}$ is
   $\frac{1}{4}$(b) $\frac{-1}{4}$ (c) $\frac{1}{8}$ (d) $\frac{-1}{8}$
5. $(x+3)(x-10)=x^2+\ldots\ldots x+\ldots\ldots$
   (a)7,-30 (b) -7,30 (c) 13,30 (d) -13, -30

B) State the following statements as true or false : **$\frac{1}{2}$x4=2**

1. $7x^2y$ & $-7yx^2$ are like terms.
2. $(2x+3y)^2=4x^2+12xy+3y^2$
3. $7x+3y-2x$ is a trinomial.
4. $(x+\frac{1}{x})^2=x^2+\frac{1}{x^2}$

C) Answer any six of the following questions: **1x6=6**

1. Find the value of $(0.08)^2$.
2. If $P=3x^3-4x^2y+6xy^2$ & $Q=2x^3-x^2y+7xy^2$ then find the value Q-P.
3. Find the value of $(x-7y)^2$.
4. Find the value of algebraic expression $3x^2y-7xy+1$ for x= -1 &y=2
5. Find the Pythagorean triplet in which one member is 10.
6. The area of square is 729 sq m. Find the dimension of square.
7. Find the value of $\sqrt{0.6}\times\sqrt{2.4}$.

D) Short answer type questions: **2x3=6**

1. Simplify : $5(x-2)-4(x-3)+3(x-4)$
2. Find the value of 'a' if $9a=76^2-67^2$
3. Evaluate using identities : 68 x72 0r $(998)^2$

E) Problem solving application based questions: **2x2=4**

1. If the length of two sides of a triangle are $3x^2+5xy$, $5x^2-2xy-y^2$ and its perimeter is $10x^2+6xy+2y^2$. Find the third side
2. Find the smallest square number that is divisible by each of the number 6, 8 and 10.

OR

Find the smallest 4 digit number which is a perfect square.