



# ABC PUBLIC SCHOOL

FA-1- 2017-18

CLASS- IX

SUB-MATHS

Time: 1:20 Hrs.

M.M.: 20

Note:- Every question carrying 2 marks each.

Q1:  $\left(\frac{81}{16}\right)^{-3/4} \times \left\{ \left(\frac{25}{9}\right)^{-3/2} \div \left(\frac{5}{2}\right)^{-3} \right\} = 1$

Q2: If  $\sqrt{2}=1.41$  &  $\sqrt{5}=2.24$ . find value of  $\frac{3}{8\sqrt{2}+5\sqrt{5}} + \frac{2}{8\sqrt{2}-5\sqrt{5}}$

Q3: Find the smallest of the numbers  $\sqrt[3]{6}$ ,  $\sqrt[6]{24}$  &  $\sqrt[4]{8}$

Q4: Rationalise the denominator  $\left(\frac{5\sqrt{3}-4\sqrt{2}}{4\sqrt{3}+3\sqrt{2}}\right)$

Q5: Express  $0.1\overline{23}$  in the form of p/q

Q6: Divide  $16\sqrt{75}$  by  $5\sqrt{12}$

Q7: Write 4 irrational numbers b/w 0.1 & 0.2

Q8: Write 4 rational b/w  $1/3$  &  $1/2$ .

Q9: If  $\left(\frac{\sqrt{3}-1}{\sqrt{3}+1}\right) = a - b\sqrt{3}$ , find values of a & b.

Q10: If  $x = 2 + \sqrt{3}$ , find:  $\left(x^2 + \frac{1}{x^2}\right)^2$



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