**CLASS VIII MATHS Practice Paper 1**

 **SECTION A**

1. If $(\frac{4}{11})^{x-1}$ =( $\frac{11}{4})^{2x-5}$ , then x is equal to ------.
2. Is 7x2+ √2x + 2 a polynomial?
3. Write order of rotational symmetry of given fig

 4 Write order and angle of rotational symmetry of parallelogram

 **SECTION – B**

5 Simplify : $2x^{\frac{-5}{2}}$ X $7x^{\frac{-3}{4}}$ / $x^{\frac{-1}{4}}$

 6 Evaluate : 2-1 -5-1 )$÷$ (5/3)-2

7 The present value of a mobile phone is Rs 20,000 and it depreciates at the rate of 5% in first year and 10% every next year. Find the value of this mobile after 2 years.

 8 Using factor method, divide the polynomial (Z2 + 11Z+ 24 ) by (Z+3)

 9 Find the letter in English alphabet , having rotational symmetry of order more than one

 10 Two positive integers are in the ratio 3: 7 and their sum is 70 .Find the integers.

 **SECTION – C**

 11 Solve the following equation: : $\frac{x+3}{2}$ + 3x = $\frac{5}{2}$ (x-3)

12 AT WHAT RATE % PER ANNUM , A SUM OF Rs 15000 amounts to Rs 17496 in 2 years , when the interest is compounded annually?

 OR

 In what time Rs 5400 amount to Rs 6773.76 at 12% per annum, compounded annually? 13 Find quotient of and remainder when polynomial -6x4 +5x2 +11 x +1 is divided by 2x2+1.

1. Solve the following equation : $\frac{x+\left(x+2\right)(x-2)}{x+1}$ =2x

15 Karan is three years older than Charu. Six years ago Karans age was four times Charus age. Find the present age of Karan and Charu.

16 Construct a quadrilateral ABCD in which each side is 4.5 cm and one diagonal is 6 cm 17 Simplify express the result as rational number ( $\frac{8}{125})^{2/3}$ X ( $\frac{27}{64})^{-2/3}$

18 An unbiased die is thrown once. What is the probability of getting

1. An even multiple of 3 ii) a number between 3 and 6 iii) an odd number ?

 19 In the given fig. PQRS is a quadrilateral in which PQ = PS

And QR = SR. Diagonal PR and QS intersect at O. Show that (a) $∆$ PQR$≅$ $∆$ PSR (b)$ ∆$ POQ$≅$ $∆$ POS

 20 Present ages of Seema and Shruti are in the ratio 4 : 5. Eight years from now, the ratio of thrir ages will be 5 : 6. Find their present ages.

 **SECTION – D**

21 Find the value of x if 4x – 4x-1 =24

 22 Divide 3x(5x2+3x3+2) – (2x2+8-x) by (-2+3x) to get quotient and remainder.

 23 Ashish opened a book shop with an initial invesment of Rs 32000. In the 1st year he incurred a loss of 5%, during 2nd year , heearned a profit of 10%. Calculate his net profit for the entire period of three years which he donated to an orphanage. Which value is being reflected by his action?

 24 A number consists of two digits whose sum is 9. If 27 is subtracted from the number, its digits are reversed. Find the number**.**

25 The differene between S.I and C.I on a certain sum of money for 2 years at 4%p.a is Rs20. Find the sum

 26 In what time will Rs 5400 amount to Rs 6773.76 at 12% p.a,compounded annually.

 27 The diagonals of rhombus are in the ratio 3:4. If its perimeteis 40 cm, find lengths ofsides and diagonals of rhombus.

 28 Construct a quadrilateral ABCD in which AB = BC = CD = 6cm and B = 600, C = 1050

29 A card is drawn at random from a pack of 52 cards. Find the probability that the card drawn is (a) a face card (b) a black card (c) other than an ace (d) a red king

 30 There are 1080 workers in a factory. They belongs to different departments A,B,C,D of the factory as shown in pie chart . Find number of workers in each department.

 31 The pulse rate of 30 persons was recorded as

61 76 72 73 71 66 78 73 68 81

78 63 72 75 80 68 75 62 71 81

73 60 79 72 73 74 71 64 76 71

Consruct a freqency table using class intervals 60-65, 65-70 etc. Draw histogram also