8/10/18

KENDRIYA VIDYALAYA AFS BAGDOGRA.

Sub : Maths

Class : VIII

Time : $2\frac{1}{2}$ hours. Max Marks-80

General Instruction :

1. Q. No. 1 to 5 each carries 1 marks
2. Q. No 5 to 15 each carries 2 marks
3. Q. No 16 to 25 each carries 3 marks
4. Q. No. 26 to 30 each carries 5 marks

Section A

Q1. 60% of 500 students are good in mathematics. How many are not good in mathematics.

Q2. Write a Pythagorean triplet whose one number is 8.

Q3. When a die is thrown, list the outcomes of an event of getting a prime number.

Q4. How many sides does a regular polygon have if the measure of an exterior angle is 24^0?

Q5. Find the Value of x.

$$\frac{x}{3}+1=\frac{7}{15}$$

Section B

Q6. Find $\frac{2}{5}\times\frac{-3}{7}-\frac{1}{14}-\frac{3}{7}\times\frac{3}{5}$

Q7. Two numbers are in ratio 5:3 if they differ by 18, what-are the numbers.

Q8. Two adjacent angles a parallelogram have equal measures. Find the measure of each of the angles of the parallelogram.

Q9. Solve the following equation and check your answer

$$\frac{2x}{3}+1=\frac{7x}{15}+3$$

Q10. Find the square root of 1225 using prime factorization.

Q11. Find the greatest 4 digit number which is a perfect square.

Q12. Is 392 a perfect cube? if not find the smallest natural number by which 392 must be multiplied so that the product is a perfect cube.

Q13. An item marked at Rs 840 is sold for Rs714 what is the discount and discount percent?

Q14. A man got a 10% increase in his salary if his new salary is Rs 154000 them find his original salary.

Q15. Find the square root by division method: 12.25

Section C

Q16. Find five rational numbers between $\frac{2}{3}$ and $\frac{4}{5}$

Q17. Prove that the opposite angles of a parallelogram are of equal measure.

Q18. Present ages of Anu and Raj are in the ratio 4:5. Eight years from now the ratio of their ages will be 5:6. Find their present ages.

Q19. Find the cube root by prime factorization method: 175616

Q20. A bag has 4 red balls and 2 yellow balls (the balls are identical in all respects other than colour). A ball is drawn from the bag without looking into the bag. What is the probability of getting a red ball? Is it more or less then getting a yellow ball?

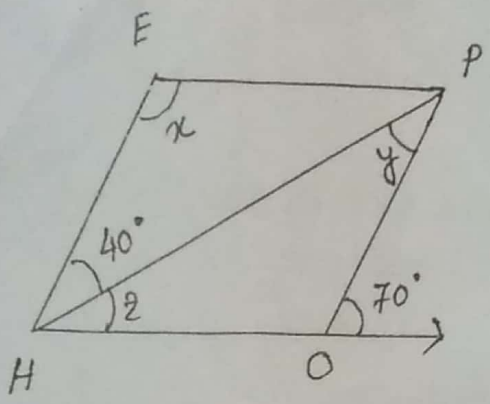
Q21. Calculate the amount and compound interest on Rs.62500 for $1\frac{1}{2}$ years at 8% per annum compounded annually.

Q22. Meenu bought two fans for Rs 1200 each. She sold one at a loss of 5% and the other at a profit of 10%. Find the Selling price of each. Also find out the total profit or loss.

Q23. The digits of a two - digit number differ by 3. It the digits are interchanged, and the resulting number is added to the original number, we get 143. What can be the original number?

Q24. Find the smallest number by which 9408 must be divided so that the quotient is a perfect square.

Q25. The adjacent figure HOPE is a parallelogram. Find the angles measures x, y and Z, State the properties you we to find them



Section - D

Q26. Half of a herd of deer are grazing in the field and three fourths of the remaining are playing nearby. The rest 9 are drinking water from the pond. Find the number of deer in the herd.

Q27. Construct quadrilateral DEAR.

DE=4cm, EA=5cm, AR=4.5cm, $\angle E = 60^0$, $\angle A = 90^0$

Q28. Fabina borrows Rs 12,500 at 12% per annum for 3years at simple interest and Radha borrows the same amount for the same time period at 10% Per annum, compounded annually. Who pays more interest and by how much?

Q29. The number of students in a hostel, speaking different languages is given below, Display the data in a pie chart.

Language	Hindi	English	Marathi	Tamil	Bengali	Total
Number of students	40	12	9	7	4	72

Q30. The weekly wages (in Rs) of 30 workers in a factor are.

830, 835, 890, 810, 835, 836, 869, 845, 898,
890, 820, 860, 832, 833, 855, 845, 804, 808,
812, 840, 885, 835, 835, 836, 878, 840, 868,
890, 806, 840

using tally marks make a frequency table with intervals as 800-810, 810-820 and so on & draw a histogram for the frequency table.