Class 8th
N-E-P-S

Sub: Maths | Term 1st

M.M: 60 | Paper A&B

Solve the following questions

Q1: Find the amount which RAM will get on Rs 4096, if he gave it for 18 months at 12½% per annum, intrest being compounded half yearly. (5)

Q2: Sabina borrows Rs 12,500 at 12% per annum for 3 years at simple intrest and Rabiya borrows the same amount for the same period at 10% per annum, compounded annually. Who pays more intrest and by how much? (5)

Q3: During a sale, a shop offered a discount of 10% on the marked prices of all the items. What would a customer have to pay for a pair of jeans marked at Rs 1450 and two shirts marked at Rs 850 each? (5)

Q4: A man got a 10% increase in his salary. If his new salary is Rs 1,54,000 find his original salary. (5)

Q5: A football team won 10 matches out of the total no. of matches they played. If their win percentage was 40, then how many matches did they play in all? (5)

Q6 a) Write the Pythagorean triplet whose one no. is 6. (2½)

b) Find the Sq. root of 100 by the method of repeated subtraction. (2½)

Q7 (a) The students of class VII of a school donated Rs 2401 in all for Prime Minister National Relief Fund. Each student donated as many Rupees as the no. of students in the class. Find the no. of students in class. (2 1/2)

(b) There are 500 children in a school, for a PT drill they have to stand in such a way that the no. of rows is equal to the no. of columns. How many children would be left out in this arrangement? (2 1/2)

Q8: Find the smallest no. by which each of the following no. must be multiplied to obtain a perfect cube. (5)

i 243 (ii) 100

Q9: Find the cube root of the following no's by prime factorization method (5)

(i) 512 (ii) 64

Q10: Find the smallest no. by which each of the following no's must be divided to obtain a perfect cube. (5)

(i) 135 (ii) 704

Q11

(a) State True or False

(i) There is no perfect cube that ends with 8.

(ii) A perfect cube does not end with two zeros.

(iii) The cube of a single digit no. may be a single digit.

(iv) Cube of any odd no. is even.

(v) The cube of a two digit no. may have seven or more digits.

(b) Fill in the blanks.

(i) Cube of any odd no is _____

(ii) Square of an even no. is _____

(iii) Area of square is _____

(iv) All _____ no's ends with 0, 1, 4, 5, 6 and 9 at units place.

(v) Square no's can have only square no's of _____ at the end. (10)