

CLASS: VIII

SUBJECT: MATHEMATICS

TOPIC: 8. COMPARING QUANTITIES

NOTES FOR THE YEAR 2020 - 21

TERM : II



N.S.N MEMORIAL SENIOR SECONDARY SCHOOL

Thirumurugan Salai, Thirumurugan Nagar, Chitlapakkam, Chennai – 64.

COMPOUND INTEREST

Expected Learning Outcome:

Solve the real life problems based on Compound Interest.

- The interest compounded annually is the interest calculated on the previous year's amount A, ($A = P + I$).
- The time period after which the interest is added each time to form a new principal is called the **conversion period**.

When the interest is compounded half yearly, there are two conversion periods in a year of duration 6 months each.

- Amount when interest is compounded annually is

$$CI_{yearly} = P \left(1 + \frac{R}{100} \right)^n$$

where P is Principal

R is Rate of interest

n is Time Period

- Amount when interest is compounded half yearly is

$$CI_{half-yearly} = P \left(1 + \frac{(R/2)}{100} \right)^{2n}$$

R

200 is half yearly rate and $2n$ is number of half years.

Exercise 8.3

Classwork

Sum No.1->a,c 3,5,7,10,

Home work

Sum No. 1->b,2,4,6,8,9,11,12