#### Dr.K.K.R GOWTHAM EDUCATIONAL INSTITUTIONS :: A.P & T.S

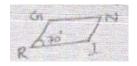
Class: 7-S Marks: 100 Sub: Maths , physics, chemistry Time: 2 ½ Hrs

#### Maths

# I. Answer the following questions

5X4 = 20M

- 1. If a=3, b=2 find the value of i.  $a^b+b^a$  ii.  $(a+b)^b$
- 2. The angles of a quadrilateral are  $x^0$ ,  $(x-10)^0$ ,  $(x+30)^0$  and  $2x^0$ . Find the angles.
- 3. In a parallelogram RING if  $m \angle R = 70^{\circ}$ , find all the angles.



- 4. If the length of a diagonal of a rhombus whose area 216sq.cm is 24cm. find the length of the second diagonal?
- 5. The ratio of the diameters of two circles 3:4. Find the ratio of their circumferences.

## II. Answer the following questions

2X5=10M

- 1. A path 5cm wide runs around a square park of side 100m. find the area of the path abo find the cost of cementing it at the rate of 250 per  $10\text{m}^0$ .
- 2. The measure of two adjacent angles of a parallelogram are in the ratio 3:2. Find the angles of the parallelogram.

## **Physics**

# I. Answer the following question

2X4=8M

- 1. Define the following a) sewage b) sludge c. oil and fats
- 2. Prepare red cabbage juice by boiling piece in water? Use as an indicates and basic solutions?

#### II. Answer the following question

2X2=4M

- 1. Why are acids not stored in metals contains?
- 2. Explain the function of bar screed in a waste water treatment plant?

## III. Answer the following questions

3X 1=3M

1. What id physical change?

- 2. Write two examples of acid contain sub lances?
- 3. Write the formula of water?

## Chemistry

# I. Answer the following questions

5X3=15M

- 1. A train travels at speed of 180 kmph. How far will it travel in 4 hours?
- 2. Why do we use mercury in the temperature? can water be used in stand of mercury? What are the problems in using it?
- 3. What is advantage of miniature circuit breaker?