MODEL ACTIVITY TASKS
CLASS – XII
MATHEMATICS

Answer the following questions :

1. If relation R is defined from A = {2, 3, 4, 5} to B = {7, 8, 9, 15} such that x and y are coprimes where $(x, y) \in$ R. Calculate the domain and range of R. Find R in the form of ordered pairs.

2. (i) A relation R is defined in the set of natural numbers N by $(x, y) \in R \Rightarrow 2x + y = 10$ and $x, y \in N$. Find R in the form of ordered pairs.

    (ii) If A={1,2,3} then find reflexive relation on A.

3. Prove that the mapping $f : Q \to Q$ (Q is a set of rational numbers) defined by $f(x) = 2x + 5 \;\forall x \in Q$ is a bijective mapping.

4. Let the functions $f, g : R \to R$ be defined by $f(x) = x^2 + 3x + 1$ and $g(x) = 2x - 3$ respectively. Find fog, (R is a set of real numbers).

Students will write answers to these activity tasks in subject specific exercise books at home, and submit the exercise books to respective subject teachers after schools reopen. Under no circumstance, students will go out of home.