

MODEL ACTIVITY TASKS
CLASS – XI
MATHEMATICS

Answer the following questions :

1. If $S = \{a, b, c, p, q, r\}$ be a universal set and A, B, C are the subsets of S , where $A = \{a, c, p, r\}$ and $B \cap C = \{a, b, r\}$, then find
(i) $B^c \cup C^c$ (ii) $(A \cup B) \cap (A \cup C)$
2. Using set theory, show that, $(A \cap S) \cap (\phi \cup A^c) = \phi$, where ϕ is a null set, S is a universal set and A is a finite set.
3. Analytically prove that $(A \cup B)^c = A^c \cap B^c$, where A and B are two finite sets.
4. With the help of algebra of sets, prove that, $A \Delta B = (A \cup B) - (A \cap B)$, where A and B are two finite sets.

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.