# Assignment-2.

1. For any 3 sets A, B and C. Draw venn diagram for following condition.

a. $(A \cup B) \subseteq B$ and $B \subseteq A$

b. $A \subseteq B$, $A \subseteq C$; $(B \cap C) \subseteq A$ and $A \subseteq (B \cap C)$

c. $(A \cap B \cap C) = \phi$, $A \cap B = \phi$ $A \cap C = \phi$ and $B \cap C = \phi$

2. Suppose $A \subseteq B$. Show that $n(A \cup B) = n(B)$ and $n(A \cap B) = n(A)$

3. Out of 200 students, 50 of them take course DM, 150 take ECO and 24 take both. Since both courses have scheduled examinations for the following day, only students who are not in either one of these courses will be able to go to the party the night before. Tell how many students will be at the party. Suppose 60 of 200 are under class students. Among underclass 20 of them take DM, 45 of them take ECO and 16 of them take both. Tell how many upperclass students will be at the party?

Q4. 30 cars were assembled with Radio, A/C and tyres. 15 cars have Radio, 8 cars have A/C. and 6 have tyres. 3 had all. Tell at least how many cars do not have any option.

Q5. Determine no. of integers between 1 and 250 that are divisible by any of integers 2, 3, 5 and 7.

285 572 70
151 733 143
4 2