

# COMSATS Institute of Information Technology Attock campus

### **Department of Mathematics**

#### Assignment # 02

Class: MSc-I
Subject: Set Topology
Due Date: 09-04-2018
Course Code: MTH251

**Instructor:** Dr. Atiq ur Rehman **Marks:** 10

#### Question #1

Let  $X = \{1, 2, 3, 4, 5\}$ . Then make five topologies on X with exactly four elements.

#### Question # 2

Let  $X = \{1, 2, 3, 4, 5\}$  and  $\tau = \{\varphi, X, \{1\}, \{1, 2\}, \{1, 2, 3\}, \{1, 2, 3, 4\}\}$ . Write the relative topology for  $A = \{1, 3, 5\}$ .

## **Academic Honesty Requirements:**

You are encouraged to work with others in the completion of assignments but it doesn't include copying. However, in the spirit of Academic Honesty, which includes crediting others for their contribution to your work, please include one of the following statements with every submitted assignment on title page:

- 1. I worked alone on this assignment.
- 2. I worked with the following: List their full names. Include their relationship to you if they are not also a member of this class.