# **CSE 307 (Software Engineering)**

### Class Test -I

## **April 7, 2021**

Total marks: 20 Total Time Allocated: 30 Minutes

This is an open book examination. You have to submit the answer sheet with proper page numbering through moodle link by 10:40 AM. The mark allocated for each question is 10.

### Question # 1

In manufacturing company there are several factories producing biscuits. One of the factories is old and the management decided to renovate it. But the market demand is so high that you cannot stop production. That is why the company has taken a strategy to build a new factory to produce the same brand of biscuit as the old factory produced. It took several months to build the new factory with new machinery in a new location and in new building. They do testing for several months and finally they discontinued the old factory and start the commercial production of the new factory. This did not hamper market supply but the improved quality of the biscuits from the new factory satisfied the customer very much.

The above mentioned scenario of factory renovation could be applied in maintaining the codes in the different classes. Justify this with necessary explanation and example.

### Ouestion # 2

Show the Abstract Factory Pattern using class diagram. "One of the important functionality of the Abstract Factory Pattern is indexing of factory classes" – justify.