

## Software Engineering Re-Midterm

- Each question is for 10 marks.
- Prove and justify all your answers.

1. Show examples of three different “related” behavioral patterns. Explain their pros and cons.
2. Imagine you want to create a Twitter-like system, what kind of design patterns will you use? Show the full design (justify your choices).
3. Imagine you want to create an Instagram-like system, what kind of design patterns will you use? Show the full design (justify your choices).
4. What kind of a software design methodology will you follow if you are asked to design the ERP system of IIT Delhi?
5. How are smart pointers superior to malloc/free?