

**Department of Computer Applications**  
**23MX21 – Software Engineering – Estimation**  
**Self-Assessment Questions**

1. Apply COCOMO technique to compute all the estimates required for an embedded project having 4 modules of size 12.34 KLOC, 12,345 LOC, 33.125 KLOC and 23,678 LOC respectively. Consider the following cost drivers: High Skilled Programmer and Analyst, High Database Size and Very High Use of Software Tools.
2. Suppose you are developing a software product of organic type. You have estimated the size of the product to be about 100000 lines of code. Compute the nominal effort and the development time.
3. What are the problems associated with Under Estimate and Over Estimate?
4. A semidetached project size of 200 KLOC is to be developed. Software development team has average experience on similar type of projects. The project schedule is not very tight. Calculate the Effort, development time, average staff size, and productivity of the project.
5. Is it true that a software product can always be developed faster by having a larger development team? Assume that all developers are equally skilled & experienced.
6. Suppose a project was estimated to be 400 KLOC. Calculate the effort and development time for each of the three model i.e., organic, semi-detached & embedded.
7. Suppose you are project manager of a large project. The top management informs that you would have to do with a fixed team size throughout the duration of project. What will be the impact of this decision on your project?
8. As the manager of a software project to develop a product for business application, if you estimate the effort required for completion of the project to be 50 person-months, can you complete the project by employing 50 developers for a period of one month? Justify your answer.

