CS6403 Software Engineering

TADR (Think, analyse, discuss and respond) – 3

1. A system has 12 external inputs, 24 external outputs, fields 30 different external queries, manages 4 internal logical files, and interfaces with 6 different legacy systems (6 EIFs). All of these data are of average complexity and the overall system is relatively simple. Compute FP for the system.

2. You have been appointed a project manager within an information systems organization. Your job is to build an application that is quite similar to others your team has built, although this one is larger and more complex. Requirements have been thoroughly documented by the customer. What team structure would you choose and why? What software process model(s) would you choose and why?

3. You have been appointed a project manager for a small software products company. Your job is to build a breakthrough product that combines virtual reality hardware with state-of-the art software. Because competition for the home entertainment market is intense, there is significant pressure to get the job done. What team structure would you choose and why? What software process model(s) would you choose and why?

4. You have been appointed a project manager for a major software products company. Your job is to manage the development of the next-generation version of its widely used word processing software. Because competition is intense, tight deadlines have been established and announced. What team structure would you choose and why? What software process model(s) would you choose and why?

5. You have been appointed a software project manager for a company that services the genetic engineering world. Your job is to manage the development of a new software product that will accelerate the pace of gene typing. The work is R&D oriented, but the goal is to produce a product within the next year. What team structure would you choose and why? What software process model(s) would you choose and why?

6. Compute the function point value for a project with the following information domain characteristics:

   Number of user inputs: 32
   Number of user outputs: 60
   Number of user inquiries: 24
   Number of files: 8
   Number of external interfaces: 2

   Assume that all complexity adjustment values are average.