



No of Questions: 3

No of Pages: 1

Academic Year: 2018/2019

Answer the Following Questions: [Total Marks: 15]

First Question: [4 Marks]

- What is software engineering? [1]
- In the field of software engineering, give an example of metrics. [1]
- Suppose changes are to be made to a software system that is in operation. Why will changes to such a system cost a lot more than just making changes to the source code files? [2]

Second Question: [4 Marks]

- In the V process model, which test activity that occurs during the "high-level design" phase? [1]
- Who conducts the "Beta Testing" for software? When and where may it be conducted? [1]
- In the industrial-strength software domain, there are three basic forces at play - cost, schedule, and quality. Discuss in detail how these three forces affect each other. Give examples. [2]

Third Question: [7 Marks]

- List three of the activities which performed during project planning phase. [1]
- Explain the "Requirements Modification" phase for the "Reuse-Oriented Development Processes". [2]
- Consider a software project, where an organization wants to use this software to improve its services to customers. The required software system is novel, and the organization will try to solve some of the complex problems that exist using it. The organization wants the entire software to be delivered at the end of the development process. Also, the entire software system is required to be developed and delivered as soon as possible.
 - Discuss in detail the suitability of each of the following development processes if used alone for this project: Time-boxing model – Waterfall model. [2]
 - Design an appropriate development process for the project. You can use a hybrid of several process models together. [2]

With my best wishes,

Dr. Zeiad El Saghir