1. Propose the most appropriate generic software process model that might be used as a basic for the development following system. Give the reasons for your answer.

\_waterfall model

Because

1. A complex real time system whose requirement can be relatively easily identified and are stable.

-Waterfall model should be the appropriate choice here, as the project is complex. The model is the best choice when the requirement and predictability of project's process and completion is already known.

B) a website for a local library requirements are vague and are likely to change in the future .

-Website is to serve as a communication page 4 tool for a library and it’s user’s.Thus is a way to advertise when physical presence is available and where it is located, as well as to tell user’s who works there and what sort of services they provide.

A library that it’s websites offer it services and to tell it’s story to it’s customers is rarely vague due to customers service for the future

C)an order processing system with a local business . Requirements are vague but stable( that is unlikely to change in the near future).

- An order processing system is a method of capturing all necessary data regarding a customer and the order. Some order processing systems may be manual while others are increasingly technical. It has 3 main task that is order entry for customers: for costumer placing orders, order handling: made by call, internet or even mail and order delivery: here the last is entered into the local processing system to be fully processed thus it can unlikely change in the nearest future.

2) Describe the software process model that you have proposed Is question (a) highlighting its strength or weakness.

## Advantages and Disadvantages of Waterfall Model

Here are the popular advantages of Waterfall model in Software Engineering with some disadvantages:

| **Advantages** | **Dis-Advantages** |
| --- | --- |
| * Before the next phase of development, each phase must be completed | * Error can be fixed only during the phase |
| * Suited for smaller projects where requirements are well defined | * It is not desirable for complex project where requirement changes frequently |
| * They should perform quality assurance test (Verification and Validation) before completing each stage | * Testing period comes quite late in the developmental process |
| * Elaborate documentation is done at every phase of the software’s development cycle | * Documentation occupies a lot of time of developers and testers |
| * Project is completely dependent on project team with minimum client intervention | * Clients valuable feedback cannot be included with ongoing development phase |
| * Any changes in software is made during the process of the development | * Small changes or errors that arise in the completed software may cause a lot of problems |