1. You, as an appointed software engineer are in-charge for designing an online management system for Study Point Tutor center. Currently the tuition center has been using manual way to manage the center and now has decided to automate all their registration, classes scheduling, attendance, and payment processes.

Assuming that you are adopting Component Based Software Engineering. Identify and explain 4 activities that must be carried out in developing the proposed Study Point Tutor online management system.

1. Highlight the difference among *black-box wrapping, white-box wrapping* and *grey-box wrapping* technique in Component Adaptation of CBSE.
2. Discuss 2 advantages and 2 obstacles of CBSE approach on software development.
3. Running Boy For You (RuBy4U) is a company that allows users to call in to select food and beverages from a list of twenty-five local restaurants and six fast food restaurants. RuBy4U will deliver the order with minimum charges from RM1 to RM5 depending on the delivery distance. Recently the owner of RuBy4U is planning to market its business online within a month. As a newly recruited software engineer in RuBy4U, you are to handle the system development all by yourself.

Suggest 4 functional categories of computer-aided software engineering (CASE) tools to help you to automate the software engineering process in accelerating the RuBy4U online system development. Explain the tools by giving 1 example for each category.

1. A local television programs production company (Longevity Pte. Ltd.) is planning to develop an online real time system which allows users to watch television programs online (OnlineWatch.com). The website allows users to login and watch three local television channels’ programs archived for one month. You have successfully bid the project for your software organization and will kick start the project in a month time
2. Assume that this project is adopting Computer-Aided Software Engineering (CASE). List and explain 4 appropriate CASE tools that can assist you in this project. You must select the tools from different functional classification of CASE tools.
3. Longevity Pte. Ltd. would like to reuse some screens (user interface) from their proprietary system. Briefly explain the 4 activities involved in Component-based Software Engineering (CBSE) to the customer.