Ans 2

Two major issues due to variable response time are:

1. Queuing problem.
2. Frustrated user experience.

In a brief description,

When response time is unpredictable, the user can become impatient and re-attempt the command requested or tries another command. In some cases, this can create queuing problems (for commands) and in extreme cases, can cause loss of data or even a system failure. Some researches have shown that users can tolerate up to 50% variation in response rates for applications that they are familiar with. For an unfamiliar application, users become anxious after about 15-30 seconds long unexpected delays (that is about half-life of a human’s short-term memory).

While compared to the web, response times with a GUI system are fairly stable, if not nearly instantaneous. Web response times can be variable, and often aggravatingly slow. Line transmission speeds, system loads, and page content can have a dramatic impact over this variable response time. Long response times often upset and frustrate users, especially if they are frequent.

For example, mean response time is 4seconds; a 2-second overall deviation is permissible. Variations should range from 3 to 5 seconds and should never exceed 20%. However, lower response time variability has been found to yield better performance, and small variations can be tolerated.