Ans to qr no 3

Diffrences between white and black box test

Black box	White box
1. Internal knowledge is unknown.	1. Internal knowledge is known
2. It is data driven, functional	2. Its code based and structonal.
3. known as closed box test	3. known as clear box test
4. Nee less time	4. Lots time reqvined
5. Trail and error based	5. Internal boundaries are tested

Ans to qr 2

Unit test is a white box test where small chunk of codes are tested by testers at a time. ex: methods.

Stress testing : ① testing in abnormal stivations. ex: taking away resources ② Overloading the system to find break point.

Ans to qr 1

(a) for loggin system - singletone pattern should be used because only one instance is created and passed on to other classes. It falls under creational pattern where creation instance logic is hidden and method returns the instance to other classes.

(b) for payment gateaway - Adapter pattern. should be used. since The adapter class has to convert the existing interface to be compatible with the target, new interface. Here existing system is adapter. It is a structural pattern as it involves extending structure of class and instance.

(c) For weather monitor - observar pattern should be used which falls under behavioral pattern. Here, when the subject weather class changes, the connected various devices which are observers will be notified and changed. Since many devices are connected to one subject class, It's an observer pattern.