**ANSWER ONLY TWO PARTS FROM EACH QUESTION**

**Q1) Software quality factors (6 Marks)**

Read the following passage and answer questions

“The new version of our loan contract software is really accurate. We have already processed 1200 customer requests, and checked each of the output contracts. There were no errors. **But** we did face a severe unexpected problem – training a new staff member to use this software takes about two weeks. This is a real problem in customer departments suffering from high employee turnover

1. What quality factor is missing
2. How can you reformulate requirements document in order to ensure the problem described above will not happen.
3. Explain the following factors: **testability, portability, reusability**

**Q2) Software quality assurance components (4 Marks)**

1. What are the main elements discussed in software quality plan. Explain each.
2. In the software project life cycle component, a **review** is one component to ensure software quality. List and explain two other components
3. What are templates and checklists? How can they contribute to wards the improvement of software quality ?

**Q3) Software Quality Planning and control (6 Marks)**

1. Define **Quality control** and **Quality assurance**. Give an example for each one.
2. "After Mohammad finished the preparation of testing plans for the hotel booking application, he has given a copy of the plan to his colleague Ali to review the plan and list his comments or concerns" what do we call this type of review ? Is there another review type ?
3. What is software document **sign-off**

**Q4) Software quality metrics (4 Marks)**

1. How can metrics improve the quality of software?
2. Explain the following:
	* 1. **KLOC**
		2. **NFP**
		3. **Error density metrics**
		4. **Error severity metrics**