1-) Software engineering concerns the designing and development of engineering specified software of the highest quality while Systems engineering concerns the overall management of engineering projects throughout their life cycle.

Thus, if such a system has a software component that needs to be created, then software engineering will likely be a part of the overall design and development process. At the same time, software engineering is not integral to existing systems engineering processes. For example, when the system is mechanical.

2-) Software Crisis is a term used in computer science for the difficulty of writing useful and efficient computer programs in the required time. Software crisis is also referred to as the inability to hire enough qualified programmers.

Software crisis was due to using the same workforce, same methods, same tools even though rapidly increasing in software demand, complexity of software and software challenges. With increase in the complexity of software, many software problems arise because existing methods were insufficient.

3-) Some responsibilities of a software engineer include ;
- Develops information systems by designing, developing, and installing software solutions.
- Determines operational feasibility by evaluating analysis, problem definition, requirements, solution development, and proposed solutions.
- Develops software solutions by studying information needs, conferring with users, and studying systems flow, data usage, and work processes.
- Improves operations by conducting systems analysis and recommending changes in policies and procedures.
- Obtains and licenses software by obtaining required information from vendors, recommending purchases, and testing and approving products.

4-) True. Component-based Software Engineering (CBSE) is a process that focuses on the design and development of computer-based systems with the use of reusable software components. Hence, using previously tested components, produces more reliable systems at a faster rate.