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**Section: K**

**1. Briefly describe what and why different testing strategies are required for different phases of software development life cycle.**

-> Software Testing is a process of evaluating the functionality of a software application to find any software bugs. It checks whether the developed software met the specified requirements and identifies any defect in the software in order to produce a quality product. A software testing strategy is an outline which describes the software development cycle testing approach. Software testing strategies are unit testing, integration testing, regression testing, smoke testing, object-oriented testing, higher order testing, basis path testing etc. Software testing ensures that the customer finds the organization reliable and their satisfaction in the application is maintained. Sometimes contracts include monetary penalties with respect to the timeline and quality of the product and software testing prevent monetary losses. The importance of software testing is imperative. Realizing the advantages of testing can help development firms to focus more on day-to-day activities rather than the errors in an application. In today’s massive competition for quality products, it has become very necessary for development firms to do extraordinary QA than mediocre testing. Software Testing is important because of the following reasons:

Software Testing points out the defects and errors that were made during the development phases. It looks for any mistake made by the programmer during the implementation phase of the software. It ensures that the customer finds the organization reliable and their satisfaction in the application is maintained. Sometimes contracts include monetary penalties with respect to the timeline and quality of the product and software testing prevent monetary losses.