

- **Design specification:** a detailed description of the design of the system, including how it will meet the requirements and any relevant technical specifications.
- **Test plan:** a document that outlines the testing strategy, including the types of tests to be performed, the test objectives, and the test environment.

The "test program" activity creates the following products:

- **Test cases:** a set of test cases that represent the test inputs, expected outputs, and any necessary pre-conditions.
- **Test scripts:** a set of detailed instructions for executing the test cases and evaluating the results.
- **Test data:** any necessary data or inputs for executing the test cases.
- **Test results:** a record of the actual test results, including any issues or bugs found during testing.
- **Test reports:** a summary of the test results, including any relevant statistics or graphs, and any recommendations for further action.

These products can be used to evaluate the quality and reliability of the system being tested and to identify any issues that need to be addressed before the system can be deployed.

Question 3: An employee of a training organization has the task of creating case study exercises and solutions for a training course which teaches a new systems analysis and design method. The person's work plan has a three-week task to learn a new method'. A colleague suggests that this is unsatisfactory as a task as there are no concrete deliverables or products from the activity. What can be done about this?

Answer:

In this situation, the colleague is correct in suggesting that the task "to learn a new method" is unsatisfactory as it lacks concrete deliverables or products. To address this, the employee can take the following steps:

- **Refine the task:** The employee should clarify the specific objectives and outcomes that they hope to achieve by learning the new method. This can help to create a more concrete and measurable task.
- **Create intermediate products:** The employee can break down the task into smaller, more manageable steps and create intermediate products at each step. For example, they could create summary notes, sketches, or mind maps to capture key concepts and ideas.

- Use active learning techniques: To ensure that the learning process is productive and effective, the employee can use active learning techniques such as participating in online discussions, doing hands-on exercises, or working through case studies.
- Document the process: The employee can document their learning process by creating a journal or log of their activities, reflections, and insights. This documentation can serve as a valuable reference for later use and can also provide evidence of their learning and progress.

By taking these steps, the employee can create a more concrete and productive task and ensure that they are able to effectively learn the new method and apply it in their work.

Question 4: In order to carry out usability tests for a new word processing package, the software has to be written and debugged. User instructions have to be available describing how the package is to be used. These have to be scrutinized in order to plan and design the tests. Subjects who will use the package in the tests will need to be selected. As part of this selection process, they will have to complete a questionnaire giving details of their past experience of, and training in, typing and using word processing packages. The subjects will carry out the required tasks using the word processing package. The tasks will be timed and any problems the subjects encounter with the package will be noted. After the test, the subjects will complete another questionnaire about what they felt about the package. All the data from the tests will be analyzed and a report containing recommendations for changes to the package will be drawn up. **Draw up a Product Breakdown Structure, a Product Flow Diagram and a preliminary activity network for the above.**

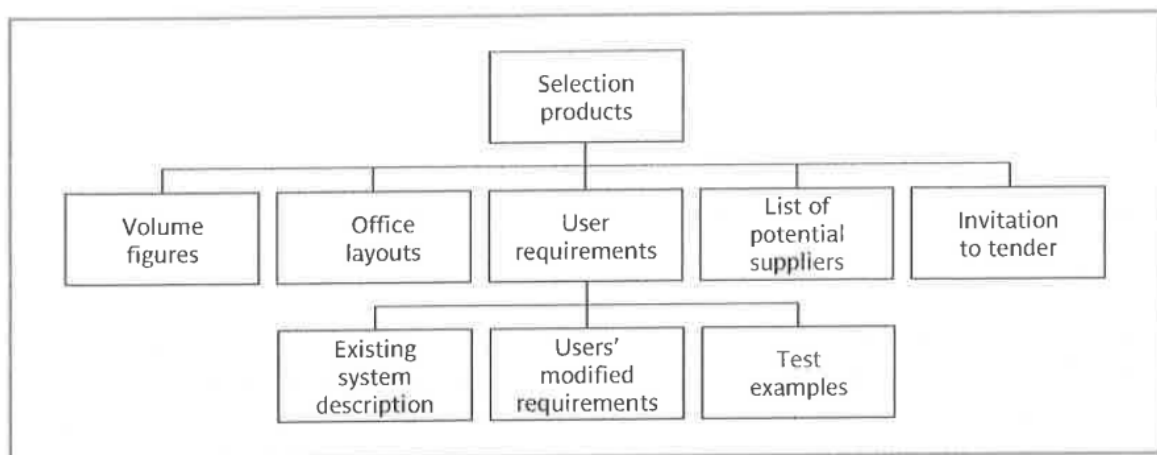


FIGURE 3.3 A Product Breakdown Structure (PBS) for the products needed to produce an invitation to tender (ITT)

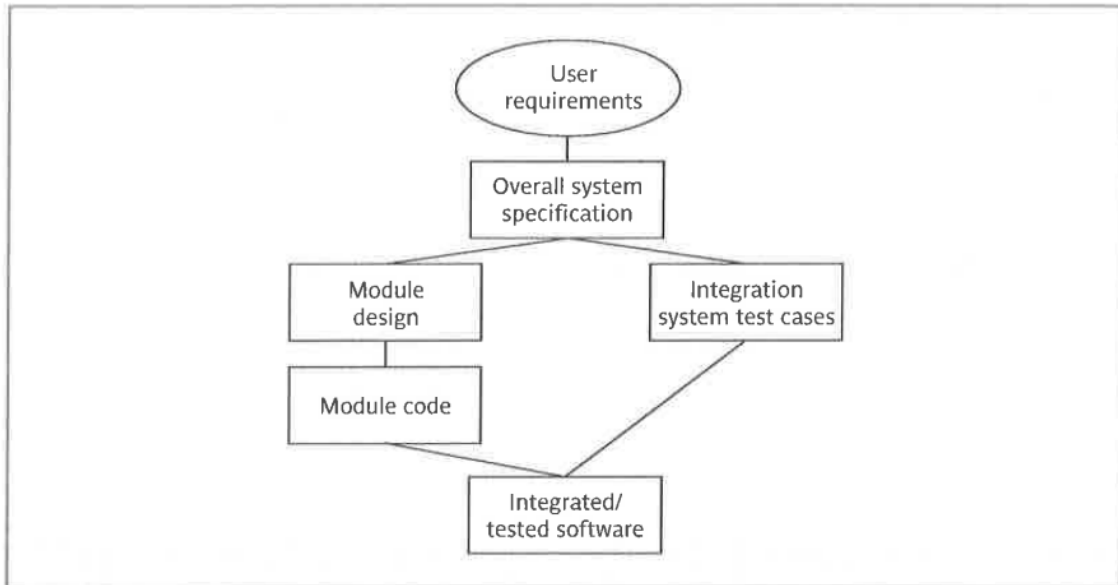


FIGURE 3.4 A fragment of a Product Flow Diagram (PFD) for a software development task

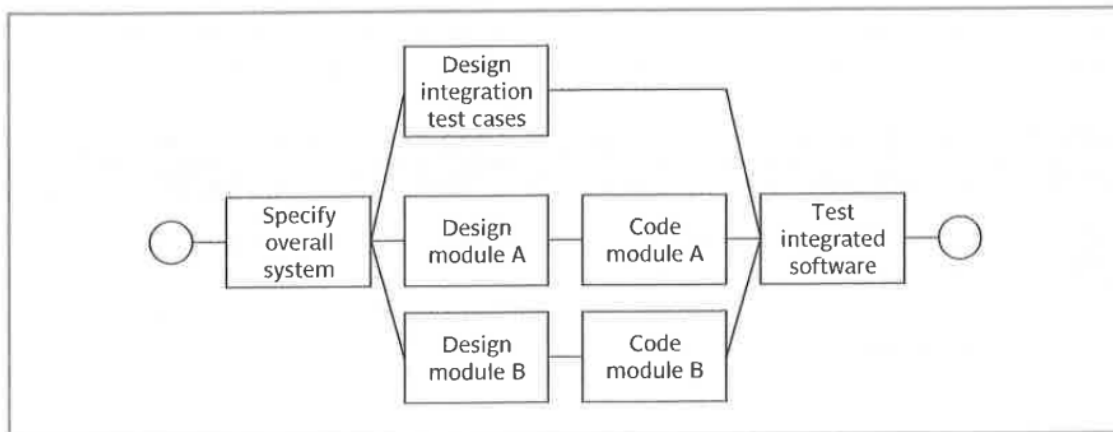


FIGURE 3.5 An example of an activity network