

## 2004 Paper 11 Question 12

### Business Studies

A software project has two phases, each with three tasks. They are expected to take the following amount of effort:

*Phase 1:*  
Analysis: 3 weeks  
Code: 2 weeks  
Test: 1 week

*Phase 2:*  
Analysis: 1 week  
Code: 2 weeks  
Test: 3 weeks

Within a phase a task cannot start until the previous task completes. A task in Phase 2 cannot start until the corresponding task in Phase 1 has completed.

- (a) Draw the PERT and Gantt charts for the project. What is the minimum elapsed time? [5 marks]
- (b) Two staff are assigned to the project, an analyst and a programmer. The analyst also acts as test engineer. How long will the project take with this staffing? [5 marks]
- (c) The analyst is charged out at a fixed rate of £500/day and the programmer at £300/day, including overheads. How much would you quote for the project and why? [5 marks]
- (d) Explain how you would monitor such a project. How would you turn the result into a product? [5 marks]