THE BRITISH COMPUTER SOCIETY

THE BCS PROFESSIONAL EXAMINATION
Diploma

PROJECT MANAGEMENT

24th April 2001 – 2.30 p.m. - 4.30 p.m.
Answer FOUR questions out of SIX. All questions carry equal marks.
Time: TWO hours.

*The marks given in brackets are **indicative** of the weight given to each part of the question.*

1. A software house needs to change its current unstructured approach to project management.

   Produce a report to the Managing Director of the software house which explains, with supporting examples, each of the following techniques. The report should discuss any potential benefits and/or drawbacks of applying each technique.

   a) Work Breakdown Structures. **(5 marks)**

   b) Network Analysis and Critical Path Analysis. **(15 marks)**

   c) Resource Smoothing. **(5 marks)**

2. *a)* You are an IT manager responsible for selecting a project manager for an MIS development project. Describe the principal skills and qualities you would expect the project manager to possess. **(15 marks)**

   b) Using examples based on project management software known to you, explain how project management software might aid the financial management of a project. **(10 marks)**

3. A division of a large organisation has been split off to form a separate company. The new company requires its own financial accounting system and a decision has been taken to obtain a suitable 'off-the-shelf' package.

   a) Outline the sequence of activities that would be needed in a project which evaluates, selects and acquires the financial accounting software from an external vendor. **(12 marks)**

   b) Explain the activities needed to make the selected package operational. **(13 marks)**

4. A project involves the design, coding and testing of software. There are six software developers who report to the project leader who in turn reports to a project board (or steering committee). This board includes representatives of the IT and user management of the organisation in which the software will ultimately be deployed.

a) Identify the information the project team leader would need from the software developers in order to monitor and control the successful execution of the project and specify how the project team leader would obtain the information. **(8 marks)**

b) Outline the content that a monthly report to the project board by the project team leader should include. **(8 marks)**

c) Outline the actions which could be considered if it were found that the actual progress of the project was at variance with what was planned and that it was unlikely that the project could be brought back in line with the plan. **(9 marks)**

5. *a)* Identify FOUR generic risks that can threaten the success of a software development project. **(8 marks)**

b) Explain how the relative seriousness of a risk, and the cost-effectiveness of particular activities that might reduce the risk, can be measured. **(9 marks)**

c) Explain the difference between risk avoidance and contingency actions, illustrating your answer by suggesting possible risk avoidance and contingency actions for TWO of the risks identified in *a)* above. **(8 marks)**

6. You are the newly appointed IT Manager of a manufacturing company.

a) A project team is needed to develop a new order processing and distribution system. Discuss the principal issues that you would take into account when setting up this team. **(15 marks)**

b) The development project mentioned in *a)* has started, but several members of the project team are under-performing. By relating your answer to an appropriate theory of motivation, explain why this underperformance may be occurring. State any assumptions you make about the manufacturing company, and its operation, within your answer. **(10 marks)**