B.Sc in Information Systems and Information Technology

STAGE 2

SEMESTER 2 SUMMER EXAMINATION 2006/2007

INFORMATION SYSTEMS PROJECT MANAGEMENT

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2 hours

Answer question Q.1. AND any THREE other questions.

Each question carries a total of 25 marks.
Q.1. A work breakdown structure for systems project is illustrated in Table 1.

Table 1.

<table>
<thead>
<tr>
<th>Activity No</th>
<th>Activity Description</th>
<th>Duration (days)</th>
<th>Dependency Activity Nos.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Assemble management team</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Review Analysis &amp; Design</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Prepare system site</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Agree work breakdown structure and resources</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Identify and hire development team</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Identify and implement control structures</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Development and testing</td>
<td>45</td>
<td>2,5</td>
</tr>
<tr>
<td>8</td>
<td>Installation</td>
<td>14</td>
<td>3,7</td>
</tr>
<tr>
<td>9</td>
<td>Handover and signoff the phase</td>
<td>3</td>
<td>4,6,8</td>
</tr>
</tbody>
</table>

i. Draw an activity-on-node PERT diagram for the project activities shown in Table 1.
ii. Indicate the critical path.
iii. Calculate the project duration. (25 marks)

Q.2. (a) State what you understand by the term *project control*. (5 marks)

(b) Explain the *control structures* that you would put in place in order to successful manage an IS project. (15 marks)

(c) Discuss the project control tools that are available to a project manager. (5 marks)

Q.3. (a) Explain in detail any FIVE section headings that you would include in a project manager’s contract of employment. (15 marks)

(b) i. List SIX methods for training/retraining IS staff. (3 marks)

   ii. Fully explain any THREE of the methods that you list in sub-section i. (7 marks)

   [Turn over]
Q.4. Ludgate Solutions Ltd. is a young systems development organization who realise that if they are to be properly recognized internationally they must have a first rate quality policy. As a senior employee of the company you have been given responsibility for all quality functions.

Explain the issues that you will address in your quality policy in order that Ludgate Solutions Ltd. will achieve a high international reputation as quality systems developers. (25 marks)

Q.5. A major systems development project is 8 months into a 24 month project and the work progress is already showing delay in the schedule and overspending of the budget.

(a) Explain why this might be. (8 marks)

(b) Discuss the options that are available to the project manager for correcting the situation. (17 marks)

Q.6. Write short notes on any FIVE of the following:

   i. COCOMO;
   ii. Function Point Analysis;
   iii. Systems development risks;
   iv. Project reporting;
   v. The Gantt chart;
   vi. Resource leveling. (5 x 5 marks)