

**BCS Higher Education Qualification**

**Diploma**

**September 2019**

**EXAMINERS' REPORT**

**IT Project Management**

<b>Question number: A1</b>
<b>Syllabus area:</b> 1.1 Feasibility studies and the establishment of a business case for a project 1.2 Requirements elicitation, analysis, verification: purpose and methods 1.3 Establishing project objectives, goals, and measures of success.
<b>Total marks allocated: 25</b>
<b>Examiners' Guidance Notes</b> <p>This question proved the second most popular choice from section A and achieved a reasonable success rate. A few candidates had clearly not covered the syllabus and were unable to adequately answer any parts of the question.</p> <p>Part a) Overall candidates made good attempts at this part of the question. Some confusion appeared with those answers where the Feasibility study merged with the requirements gathering phase of a project and candidates wasted time and gained fewer marks by giving comprehensive descriptions of techniques used in the requirements phase of a project.</p> <p>Part b) This part of the question was generally well answered. The question had wide scope for a candidate to choose any examples of success criteria for whatever type of project they wanted to consider and the fairly comprehensive range of approaches to answering the question showed a good knowledge of assessing project success within a particular context.</p>

**Question number: A2**

**Syllabus area:**

- 5.1 Risk identification: types of risk, risk checklists
- 5.2 Risk prioritisation: assessment of likelihood and impact of risk; qualitative and quantitative methods of assessing risk exposure

**Total marks allocated: 25**

**Examiners' Guidance Notes**

This question proved most popular in section A with a majority of candidates achieving a pass rate. There was an obvious issue with many candidates not fully interpreting the wording of the question correctly and in some cases giving explanations and descriptions that were to do with risk in general but not the specific type of risk being addressed in the questions.

**Part a)**

Many candidates were stuck on giving a coherent example of the differences between project and business risks. In many cases business risk was interpreted as a consequence of the project risks per se and not as a separate risk factor to risks that are specifically project related.

**Part b)**

This part of the question elicited a fairly wide range of answers in considering generic project risk. Many candidates chose the well-known software project risks from Boehm as the template and were generally able to give a sufficient number of types. Many candidates chose to cite more generic risks that tended to be more related to risk assessment at the project initial appraisal stage and struggled to give them relevance to a development project. In quite a few cases candidates provided the content outline for a risk register template and consequently gained few marks.

**Part c)**

This part was generally well answered in terms of understanding the essential differences, however the explanations from many candidates tended to become confused and it was obvious that many strained to use the appropriate language to do the comparative explanation. Many of the answers therefore did not achieve the higher mark allocation.

**Question number: A3**

**Syllabus area:**

2.7 Principles, methods, advantages and disadvantages and relative accuracy of different estimating techniques including parametric and algorithmic (size and productivity rates), expert judgement, analogy, top down and bottom up

**Total marks allocated: 25**

**Examiners' Guidance Notes**

This was the least popular choice in section A. The pass rate was just a little less than question A2. In general, this question was well answered by the majority of candidates whilst a few others had obviously no clear idea of the areas of estimation techniques required in the question.

Part a)

This part was generally well answered with only a few candidates not being succinct in their answers and tending to repeat the same advantage or disadvantage often at length and not gaining full marks for giving two advantages/disadvantages.

Part b)

Once again, this part tended to produce reasonable answers and a number of candidates provided a convincing explanation of the steps involved. Many candidates did not fully organize the answer in steps but often got lost in discussion of issues in using analogy and therefore did not gain full marks for providing the main steps asked for in the question.

Part c)

Quite surprisingly this question seemed to pose problems for many candidates. Many simply chose to skip this part and many others did not show a good understanding of both approaches. Those candidates that showed a good understanding to each approach were subsequently able to gain high marks by making a meaningful comparison.

**Question number: B 4**

**Syllabus area:**

- 2.1 Use of product and work breakdown structures (PBS and WBS).
- 2.2 Use of (activity on node) precedence plans and network analysis;
- 2.3 Critical path analysis
- 2.4 Gantt charts

**Total marks allocated: 25**

**Examiners' Guidance Notes**

**Examiner's Comments**

This was the most popular question in Part B. Some candidates started it by drawing an Activity-on-Arrow diagram based on the tasks set out in the question, even though this was not asked for in the question – gaining no marks for this. This does imply a lack of confidence in planning and drawing an A-on-N or Gantt chart from scratch and could possibly also have led to a loss of time in the examination.

Part a)

Most candidates showed a good understanding of WBS diagrams, but knowledge of product breakdown structures was very limited. Many answers concentrated on elements of the final product from the project, not the deliverables produced from specific tasks during the project. The underlying concept of a task deliverable was not well understood. Ideally the EST should always be shown on the top lhs of the node diagram with the LFT at the bottom rhs. Usually the EFT is top right and the LST bottom left. Other arrangements can be confusing.

Part b)

The most common problems were not calculating or showing the task float, the LST and/or the LFT, not using a correctly structured task node or not highlighting the critical path on the diagram.

Part c)

When answered, most candidates presented sound, well-structured and scaled Gantt charts. However quite often the task dependencies were not clear, especially those following non-critical tasks, with the consequent floats not being shown correctly and with an incorrect duration. Also, these dependency lines should not continue down to the bottom axis of the diagram. The Critical Path was not always highlighted on the diagram and sometimes only the critical dependencies were highlighted – but not the tasks themselves.

**Question number: B5**

**Syllabus area:**

- 3.1 Team building theory and practice, structures and responsibilities, including Belbin's team roles and Tuckman-Jensen stages of team evolution (forming, storming, norming, performing)
- 3.2 How to staff a project stage with appropriate skill sets; how and where to obtain skilled personnel

**Total marks allocated: 25**

**Examiners' Guidance Notes**

This question, though quite popular, was not, on the whole, answered well, with very few outstanding answers. There were several instances of the question not being read correctly. In all three question parts, candidates often exceed the requested number of factors, possible actions and steps. No additional marks are ever awarded for this.

Part a)

Candidates often did not concentrate on the factors involved when allocating specific staff (with identified, proven skills) to specific tasks and tended instead to concentrate on leadership, team formation and team building, and even motivation and recruitment, issues. There was a tendency also to consider time, budget and individual staff costs, rather than relating staff skills to the needs of each task, especially critical ones.

Part b)

This was usually answered well though there was sometimes a tendency to assume that any member of the project team could undertake any task in the project, not allowing for the matching of staff skills to task requirements. If experienced staff are re-allocated to critical tasks then they must have the skills to undertake these tasks within the budgeted time. Also it is not always possible to split long or critical tasks into discrete subtasks – this was often assumed. There was a tendency to consider only different ways of finding additional staff for the project, to the exclusion of other different options,

Part c)

This required a straightforward list for the whole cycle from "identifying the resource need" to "the end of the recruitment process". Some candidates assumed that the decision to hire a new member of staff had not yet been made so wrongly included steps to justify the need. Many candidates overlooked the initial and final steps. Others considered transferring staff from other projects within the organisation rather than the external recruitment of a new member of staff as stated clearly in the question.

**Question number: B6**

**Syllabus area:**

- 6.1 Definition of product quality and software quality
- 6.5 Quality assurance and quality control, project audit and quality audit
- 6.6 Methods of enhancing quality: the different types of testing, inspections, reviews, standards

**Total marks allocated: 25**

**Examiners' Guidance Notes**

This was, by far, the least popular question in Part B, and also the least well-answered. This is concerning as the quality aspects of IT project management and the need for thorough testing should not be overlooked. In particular a significant number of candidates gave, incorrectly, examples of part b answers in their part c answer. Limited marks were given to answers to parts b and c that were just lists, with no description or explanation. Again the requested number of examples in each part was often exceeded. Part a)

There were many varying definitions here, but they were often quite vague and missed one or more of the three underlying points. Too often cost and time implications, or just meeting requirements were mentioned, rather than emphasising the need for quality.

The distinction between these two concepts appeared usually to be understood in principle but was often not described very clearly, particularly the over-riding review and audit approach of QA. Several answers tended to discuss manufacturing aspects of QC, referring to "products", rather than examples relating to IT projects. Many also stated, incorrectly, that QC activities can take place only at the end of the project and/or that QA activities are the responsibility of the whole project team.

Several candidates referred to the cost and/or timing of each concept, identifying that the QA cost would not be within the specific project budget, some of these stated (incorrectly) that QA could not take place until after the project has finished, implying again a lack of understanding.

Part b)

This part of the question referred very specifically to the software development phase. Again several candidates referred to cost and time in this answer, rather than techniques that relate to meeting requirements and fitness for purpose etc.

As well as the various testing types listed above, other approaches such as adherence to programming standards and the use of reliable/proven development tools were acceptable, but rarely stated.

Part c).

Answers to this part of the question were quite frequently omitted, though there were some good answers. However relatively few answers extended to IT project topics other than software development, but some (incorrectly) considered team coherence, staff performance or post-implementation software maintenance.