

**BCS Higher Education Qualification**

**Diploma**

**March 2019<sup>1</sup>**

**EXAMINERS' REPORT**

**IT Project Management <sup>2</sup>**

<b>Question number:</b>
<b>Syllabus area:</b> 1.5 Criteria for building or buying in software applications 1.9 Selection, acquisition and implementation of off-the-shelf and customised off-the-shelf applications 1.4 (part only) Adapting the development life cycle to projects where off-the-shelf packages are to be installed
<b>Total marks allocated: 25</b>
<b>Examiners' Guidance Notes</b> <p>This was marginally the most popular question in Part A and in general was answered well. Most answers displayed a good understanding of the implications of acquiring an OTS system rather than developing such a system in-house. However, some answers tended to be far too generic and did not mention any of the specific issues raised in this scenario (such as the competitive market, the management's concerns and, importantly, the lack of specific experience in the current IT section).</p> <p>a. This required a good memorandum format (heading, addressee, addressor, date, short introduction and clear conclusion) and then a clear distinction between advantages and disadvantages. Often, this was omitted.</p> <p>Some candidates discussed each of the two possible approaches separately, which often became confusing and led to the duplication of points. Some key advantages, such as the much quicker time to implementation and the probability of an almost immediate fully-working system (without the need for extensive in-house testing) were overlooked, as were important potential disadvantages (such as the management's concerns and how these might be met). There was often an assumption that no staff training would be needed if the new system was developed in-house, or that the suppliers of an OTS system would not provide training. Some answers provided the standard advantages and disadvantages without relating them to the scenario described in the question. Others seemed to assume that the OTS system would in fact be developed specifically by an external systems house (i.e. not 'Off The Shelf').</p> <p>b. This part was often not answered as well as part a, with some candidates producing lists of activities with very limited explanation. The question mentioned three distinct phases – select, acquire, and then set up the working system – but frequently one of these (usually either the selection phase or the implementation phase) was not covered. The question also expected the activities to be presented</p>

<sup>1</sup> Insert sitting and year

<sup>2</sup> Insert module title in full – no abbreviations

in a logical order. Site visits were almost never mentioned, nor was any integration with existing systems. Very few considered the probable need to modify and test the amended package to meet the specific company requirements. Some included unnecessary standard system development activities (such as unit testing) or discussed in detail the choice of standard implementation methods (without considering this scenario)

**Question number: A2****Syllabus area:**

- 3.1 (part only) team building, ...team evolution
- 3.2 How to staff a project stage with appropriate skill sets; how and where to obtain skilled personnel.
- 3.4 (part only)...Team management

**Total marks allocated: 25****Examiners' Guidance Notes**

- a. Some candidates seemed not to realise that this full recruitment process would only be needed for the staff being hired from outside the company (as stated in the question), and thus omitted some key steps. There was also a tendency to concentrate too much on specific parts of this process.
- b. Many answers here comprised lists of possible factors, but with no brief explanation of their relevance. Several answers mentioned "qualifications", which are not often relevant.
- c. The key point in this part of the question was often not well understood. It is that there is an overall decrease in productivity from the whole team when the new members join it, i.e. there is an effect on the productivity of the existing team members, so their work must have been disrupted in some way. The question expected some discussion of the possible reasons for this.

**Question number: A3**

- 2.2 Use of (activity on node) precedence plans and network analysis;
- 2.3 Critical path analysis
- 2.4 Gantt charts
- 4.4 (part of) Use of plans in project control

**Syllabus area: 25****Total marks allocated:****Examiners' Guidance Notes**

This network diagram question was far less popular than usual (indeed the least popular in Part A), with a wide variation of answers. There were instances where candidates failed to read each part of the question fully and thus omitted one or more key point, particularly in parts b and c. Part c was essentially a resource allocation issue, with a clear resource clash, which many candidates overlooked. The proposed resource allocation in Part b required the staff types (NOT the individuals) to be named for each task whereas part c required the individual(s) concerned to be named.

- a) Very few problems here with the underlying network structure. It is helpful if candidates use a full page for their diagram with one of the standard (see recommended text book, page 42, or a BS standard) activity node layouts – and a key. Several used a node layout that omitted the float. Dependencies were also omitted quite often (or, very occasionally, shown in the wrong direction).
- b) Three key parts of the wording of this (straightforward) question were: 'On the network diagram', 'including end users' and '**individuals should not be identified**'. Very few candidates gained full marks, mostly by failing to follow one or more of

these instructions. Most often the individuals, rather than the staff types, were identified when allocating staff types to tasks. “End Users” (or just “Users”) were often ignored – especially for task A.

The question did not expect the IT Manager to be a resource to be allocated to any of the named tasks, nor for other staff types (such as tester) to be introduced. However the question stated the Project Manager should be included.

Many answers did not display this allocation of staff types on the network diagram (in part A) – thus losing 2 marks.

- c) Many candidates did not allow for resource clashes here, especially between tasks D and E for programmer Y. Others split parts of the programming tasks (C, D & E) between the programmers (rather than allocating one programmer to each task) – which usually is not acceptable for programming tasks.

The overall quality of the diagrams produced for this answer was quite disappointing, often missing the key requirements for a clear informative chart. In particular, task dependencies or the resource(s) allocated to each task were often omitted completely, or the critical path was not highlighted. Note also that, with resource allocation, there can be two different types of task dependency – those between the tasks themselves (as stated in the original question) and those dictated by the resource allocation.

**Question number: B4**

**Syllabus area:**

- 4. Progress monitoring, project control and reporting.
- 4.3 Use of plans in project control
- 4.6 Monitoring and control of project finances and quality

**Total marks allocated:**

**Examiners’ Guidance Notes**

This question was the least popular in section B. Most candidates had difficulty with all sections of this question which dealt with project planning and control and could be expected to be a topic that candidates would be comfortable with. Part a) had very few structured answers with many using common-sense answers. In part b) candidates were generally unaware of the topic and had no real idea of the S curve. Best efforts were given in part c) with some confusion between process quality and software and product quality. Very many of the attempts at this question did not manage three ways but merely applied a single response to different parts of the process. In all the pass rate of this question was disappointing and indicates the need for better acquaintance with part 4 of the syllabus.

**Question number: B5****Syllabus area:**

- 5 Risk Management
- 5.1 Risk identification: types of risk, risk checklists.
- 5.4 Cost benefit analysis of planned risk reduction actions, risk reduction leverage

**Total marks allocated:****Examiners' Guidance Notes**

This question was second most popular in Section B. In part a) answers were generally very poor with many not appreciating that the timing of when a risk occurs in a project can affect its severity. Part b) surprisingly was not well answered. This topic is a regular one in the examination. Half of the attempts were unable to mention ANY risks from the well-known checklists referred to in the answer pointers to this question. Nearly 20% of attempts achieved marks of 4 or less showing a very poor appreciation. Part c) once again revealed the attempts showing that many candidates were completely unaware of the topic. Those candidates who showed familiarity generally achieved good marks. Few answers achieved maximum marks by correctly including evidence of the calculation and around half were unable to present possible problems in using the method.

**Question number: B6****Syllabus area:**

- 6 Software quality management
- 6.5 Quality assurance and quality control
- 6.7 Management and control of testing

**Total marks allocated:****Examiners' Guidance Notes**

This was the most popular choice in Section B and had the highest pass rate of this section.

Part a) was generally well answered and with the exception of Regression testing where a majority of answers incorrectly thought it was part of a stress test. This question tended to produce near maximum marks for those candidates who were seriously attempting answers.

Part b) posed problems for many, with answers going off into discussion of dynamic code testing – completely ignoring the guidance in the question itself which is concerned with control techniques in stages prior to dynamic testing. Many answers consisted of a single general response that was repeated over three different stages. In quite a few cases the candidates re-used answers from part a) to this question – showing a lack of understanding or the difference between process and product quality.

In general candidates fared better in this question given higher marks from part a) with many responses from b) not gaining maximum marks due to a lack of adequate explanation, marks tended to come from identifying three possible techniques and offering some knowledge of the purpose of the technique and few gaining marks for an explanation.