OPEN BOOK EXAMINATIONS

The main difference between open and closed book examination questions is the way that they use theory. An open book question provides the candidates with the theory the question is examining and then asks them to demonstrate their ability to apply the theory to a scenario. A closed book question will require the candidate to state the theory from memory. In this respect, the open book examination is closer to the working environment where the employee has access to manuals and examples of past work to draw on.

An open book question will rarely use the words ‘describe’ or ‘state’ or even ‘explain’ since these words usually preface a question which requires the candidate to recall a theoretical approach from memory.

An open book question can precisely specify the approach the examiner wishes the candidate to follow. A business analysis question can state the requirement for a root definition to include CATWOE elements thus ensuring that the candidate is aware of the examiner’s requirement.

Although the extent to which the examiner needs to include the theory in the question can vary according to the received knowledge about a specific topic or area, good examining practice requires the theory to be explicitly stated to ensure candidates, new examiners and new moderators clearly understand the question. Put in simple terms, a question which assumes that a candidate will know, for example, four different methods of fact finding (interviews; observation; questionnaires & special purpose records) and then apply them to a scenario, is a less well-crafted question than one which states precisely the methods that the candidate should select from. The answer in this latter case will explicitly require the candidate to justify the method selected with reasons ‘drawn from the scenario’. This does not prevent the examiner from developing questions which require the candidate to select a method to be applied to a scenario – but it does require the examiner to specify the set of methods from which the selection should be made.

There are many examples of good open book examining practice which are encountered in the present BSD scheme. One unique benefit of the BSD scheme is its ability to draw ideas and approaches from on an ever widening group of examiners. The examples here are only intended to act as suggestions of an approach and should not be taken as a template.

The first part of the syllabus for Business Organisation¹ is as follows:

1.1 Business Organisations

- Types of Organisation (Gov Depts, Limited Companies, Charities, etc)
- Organisation Structures (Hierarchical, Functional, Matrix, Virtual, Project)
- Corporate mission statement (purpose/examples)
- Business strategy (purpose and content)

Questions targeted on this part of the syllabus might be approached as described below.

¹ http://www.bcs.org/BCS/Products/Qualifications/ISEB/Areas/BusSysDev/modules/Module4.htm
Types of Organisation. The candidate is required to demonstrate an understanding of the difference between for example a PLC, a charity, a sole trader and a government body. This is a challenging topic to examine in an open book context because it is taught descriptively. An examiner might develop a scenario involving more than one type of organisation and ask a candidate to identify the different organisation types in it. A question might specify a longer list of types and ask a candidate to identify the types involved in the scenario and indicate the evidence in the scenario to support their selection. The scenario would then refer indirectly to the organisation types by including, for example, references to issues affecting shareholders in one organisation & trustees in another & government directives in a third one.

Organisation Structures (Hierarchical, Functional, Matrix, Virtual, Project) This is an easier topic and the examiner can again state these four types of organisation structure and ask the candidate to match the scenario to a structure or even recommend one for the organisation or compare the impact two different structures might have on the organisation.

Mission Statement. Candidates can be asked to write a mission statement and the examiner can state the acronym they want the candidate to base the mission statement on (eg. SMART) since the candidate would have access to this in their notes.

Business strategy (purpose and content) In a Business Organisation paper this topic could be examined using a version of the Porter/McFaran/O’Brien grid shown below. The question then asks the candidate to identify strategic information systems targets within the context of the supplied scenario.

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<thead>
<tr>
<th>Customers</th>
<th>Suppliers</th>
<th>Competitors</th>
<th>Entrants</th>
<th>Substitutes</th>
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<td>Differentiation</td>
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<td>Low cost</td>
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<td>Innovation</td>
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<td>Growth</td>
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<td>Alliance</td>
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<tr>
<td>Other</td>
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</tbody>
</table>
Sample Question 1

The grid above (O’Brien 2005) shows five competitive forces which may impact upon a business and six types of competitive strategy which could be adopted to counteract the impact of each force. Pick four cells in this grid and briefly state the nature of the IS strategy that the company described in the scenario could adopt to gain a competitive advantage in the area concerned and suggest why this strategy is appropriate to the type of organisation in the scenario.

Each topic in the syllabus has some theory associated with it or defining it and the questions should be constructed so that the theory can be stated and the candidate can apply this theory to the circumstances described in the scenario. Where the syllabus is providing definitions, ‘management information’ for example, the candidate can be asked to show their understanding of the term by identifying management information requirements related to the scenario or to one of the functions identified within the context of the scenario.

Some practitioners are developing generic questions for every aspect of the syllabus. The variation in each question and each answer is then dependent upon the detail provided in the scenario. This approach leads to more uniform examining standards as the prevailing theories become better defined and recognised. Generic questions become the training medium for the topic and trainees develop their skills by applying these theories to varied scenarios in the same way that candidates are trained in topics such as entity modelling and dataflow diagramming.

Defining a set of generic open-book questions for each syllabus or topic in business systems development is an ambitious target. Developing a library of questions helps to confirm the core knowledge for the subject and provides new participants with a useful resource when they begin to create papers. Equally, defining the questions which may be applied to the syllabus will increase the consensus on the theory that the BSD scheme and associated practitioners hold as core topics to exam. A further illustration of an open book approach for the System Design and Implementation paper is included to suggest the type question which could be added to such a library.

5 Implementation and Testing

5.1 Implementation planning and preparation
5.2 Methods of changeover
5.3 Systems review
5.4 Testing principles

Sample Question 2

Approaches to implementation have been defined (Yeates & Wakefield 2004) as phased, parallel, pilot or direct.

(a) Explain how a phased implementation might be used to implement the proposed system and state the advantages and the disadvantages this method would incur for this organisation.

2 http://www.bcs.org/BCS/Products/Qualifications/ISEB/Areas/BusSysDev/modules/Module2.htm
b) The company has decided that a parallel run of the new system will not be beneficial to them. Why do you consider they have come to this decision for this particular system?

c) What problems, specific to this system, might they encounter if they elect to use a direct changeover approach.

d) What would you recommend as the most sensible approach to the implementation of this system and state your reasons for making this recommendation.

Conclusion

The BSD examination approach breaks new ground in examination techniques. Although the use of open book examinations has been tried in various institutions the notion of the consensual development of a subject through this form of examining and auditing of exam papers is innovative. Currently the BSD examination system is estimated to be drawing on the expertise of over one hundred practitioners from industry, academia, consultancy and training. The increasing demand for certification, accreditation and proof of capability that the ISEB is experiencing must be matched by a realistic method of assessing these capabilities. Historically, examination practice has relied heavily on memorising facts and the definition of terms. This 'meta examination' approach offered by the BSD scheme is an important step towards a more realistic and meaningful way of delivering assessment which will benefit both the candidates and the industry they serve.

Refs.