

# APEAS<sub>LTD</sub>

**ARCHITECTS' PROFESSIONAL EXAMINATION AUTHORITY IN  
SCOTLAND Ltd.**

**THE EXAMINATION IN PROFESSIONAL PRACTICE &  
MANAGEMENT: PART 3, 2007**

**QUESTIONS for CANDIDATES**  
**All questions should be attempted**

**All the characters, locations and incidents contained in this Paper are fictitious. The projects, if based on live events, have been amended to conceal specific identity.**

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## QUESTION 1

Write **brief** notes on the following six questions:

- 1.1 What should be the construction industries priorities in making its contribution to the reduction of global warming?
- 1.2 Explain the reasons a contractor needs mobilisation time?
- 1.3 What is meant by the term 'lean construction'?
- 1.4 What do you understand by the term 'Post Occupancy Evaluation'?
- 1.5 List the responsibilities of the client, excluding domestic clients, under the 2007 CDM Regulations.
- 1.6 What is the provision for dispute resolution within architectural appointments?

End of Question 1

## QUESTION 2

### Title of Architect

#### Memo

**To:** Candidate

**From:** Miriam

As part of our fresh image we are getting new business cards printed. The proofs arrived yesterday and yours describes you as 'Assistant Architect'. I was talking to Jill who thinks we are describing you incorrectly. What do you think? Can you suggest an alternative?

Jill is concerned that we are contravening the ARB Code and I would like you to prepare a presentation for the office describing what you understand by ARB's regulation of the title "architect"? Why is the title regulated? Do you think it should be? I read in a professional paper a suggestion that the function of architect should be protected as well as the title. What do you think?

Jill has also pointed out that you have been signing Architect's Instructions and payment certificates. What are the implications and limitations in relation to contract administration? Should the office have QA procedures to cover this?

End of Question 2

## QUESTION 3

### Health and Safety

#### Memo

**To:** Candidate

**From:** John Young

You will be aware of Helen Goldie's accident last week.

I asked Helen to complete a full set of 'as existing' GA drawings for our project at the old watermill. To finalise the drawings she carried out a survey of the basement floor. During the survey she badly sprained and grazed her ankle when a section of rotten floor gave way. We had no idea that Helen had gone on site, but fortunately the client's security guard was able to come to her assistance, and took her to the Casualty Department.

Helen has been told to rest for 2 weeks but I suspect the matter will not end there. She has taken legal advice and has suggested that we are responsible under legislation.

As a result of this we now urgently need to review Health and Safety within the Practice – I have been meaning to compile a practice health and safety policy but have not as yet managed to make a start.

Can you begin by addressing a suitable policy for site visits? Can you identify what would constitute good practice, and following this, can you research what our liabilities as employers are.

Is Helen correct in her assertion that we are responsible for her accident as her employer?

Miriam and Duncan have for some time asked me to take responsibility for practice health and safety matters, and take on board the position of safety officer. Again I have not had time to progress this. I am meeting Miriam and Duncan later today to discuss Helen's accident, so in addition to the above, and in order that I can discuss further, can you set out the role and responsibilities that I should assume as Health and Safety officer?

End of Question 3

## QUESTION 4

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## Energy Regulations

### Memo

**To:** Candidate  
**From:** John Young  
**Date:** 20 August 2007

We have been commissioned by Green Investments Ltd to design a new speculative 3000 m<sup>2</sup> office block on a brownfield site on the outskirts of Cityburgh.

It is a wonderful site with brilliant views on three sides to the river and the mountains beyond. As the views are one of the main reasons why the client chose the site they wish to provide as much glass in the building as possible. Despite their name, Green Investments do not want to spend a fortune on what they call 'quirky green add-ons' to the building and, just like any speculative developer, require to maximise their financial return on the site.

Can you advise me on what processes and checks we would have to undertake to be confident that our outline design will be capable of complying with the current building regulation standards on energy conservation? I have been told that the building will need an Energy Certificate when complete. Can you advise me what this entails?

Also Cityburgh's Planning Department, as you know, have just introduced their new Sustainability Standards. Amongst other things they ask that 80% by area of each building element is to achieve an 'A' rating as set out in the Green Specification Guide and that 10% of the building's energy requirements are to be supplied from renewable sources. Please give a brief outline of the implications along with some guidance on what is currently considered to be the most appropriate low and zero carbon technologies for a development of this type.

End of Question 4

## QUESTION 5

### Planning and related bodies /issues

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**Memo**

**To:** Candidate

**From:** John Young

We have been approached by Grand Ideas plc who are interested in developing the old Baltic Dock, for a range of uses, including a new hotel, a shopping centre and two ten storey blocks of flats. The site which Grand Ideas plc proposes to acquire has already been cleared except for a listed lighthouse, which is no longer in use. The harbour walls are a scheduled monument and the inner section of the dock has been partly reclaimed. There is a disused fuel storage depot at the east end of the dock which will have to be removed. The new seafront tram will terminate beside the dock. Grand Ideas plc have started developing proposals in conjunction with a London firm of master planners and are now looking for a local design team to develop the ideas and take them forward.

I need to be fully briefed when I meet Stuart Grabbit of Grand Ideas plc next week. Please can you prepare briefing notes outlining all the planning, and related bodies, statutory consultees and any other consultees, which I should be aware of when I meet Stuart Grabbit? I understand that the planners are keen on community consultations. What would be the best time in the development process to initiate these and how would we go about such consultations?

End of Question 5

**QUESTION 6**

**Evaluation/Architects Certificate**

**Memo**

.....6.....

**To:** Candidate

**From:** Elliot North

Please find attached the contractor's second application for payment under the Phase 2 contract. As you know the client has elected not to employ a Quantity Surveyor for the fit out contracts, and our appointment has been extended to manage the valuation process.

The contractor's first application for 40% of the contract value was duly processed and an interim certificate issued for the full amount claimed.

We don't appear to have a set down contract admin procedure for dealing with such applications for payment: we usually follow the figures given to us from the QS within the normal appointment structure.

Therefore, could you have a look at the contractor's application, and give me your suggestions for how we should appropriately deal with the valuation process. Can you draft a set practice procedure that we can adopt for similar projects, confirming a proposed methodology and the timescales defined in the contract for the issue of interim certificates.

The client is closely scrutinising the financial management of the contracts so we need to be careful.

What are this risks to the Practice if we over certify?

The contractor has also contacted me regarding the completed Phase 1 on the issue of liquidated damages.

The Phase 1 contract is currently 6 weeks past the due completion date with at least another 2 weeks likely before completion is achieved. The contractor has informed me that he considers that the employer is in breach of contract because the client has deducted liquidated damages, to the defined amount stated within the contract appendix, from the payment due to the contractor in line with our last certificate. The contractor did not receive the appropriate notice and is therefore threatening to suspend operations on site.

## **QUESTION 6 (continued)**

I am not sure if this position is correct. Can you research the contractual protocols for the recovery of L&A damages and draft a letter to the client informing him of the situation?

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## **Contractor's Application for Payment**

Application for payment No 2

Date 23<sup>rd</sup> April 2007

Contract Value      £200,000

Application for 80% contract value	£160,000
Deduct previous payment – Certificate No 1 dated 31 <sup>st</sup> March 2007	£80,000
Net	£80,000
VAT	£14,000
Net total	<b>£94,000</b>

End of Question 6

## **QUESTION 7**

### **Novation**

#### **Memo**

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**To:** Candidate  
**From:** Miriam  
**Date:** 28 August 2007

I have been called to a meeting next week with Tower Valley H.A. and their solicitors, to reconsider the procurement route for the project. The Solicitors seem to be encouraging Tower Valley to go down the D&B route, with novation, although this is new to them.

I know that you have been studying D&B contracts and design team novation for your forthcoming Part 3 Exam and I would appreciate your assistance in providing a report on the issues & processes, to help our Clients in understanding these.

Please can you cover in summary the following:

1. What is a D&B contract?
2. What is novation?
3. How will novation be implemented?
4. How do liabilities change pre- and post- novation?
5. How will novation to the Contractor be likely to affect our roles and responsibilities for site inspections and contract administration?
6. Will our client need to make further appointments?
7. What are the advantages and disadvantages of D&B to the Client?

Please can you let me have this by Friday.

Thanks,

Miriam.

End of Question 7

## **QUESTION 8**

### **Trends in commissioning architectural projects**

#### **Memo**

.....9.....

**To:** Candidate  
**From:** John Young  
**Date:** 24 August 2007

I have downloaded from the Official Journal of the European Union (OJEU) website a contract notice for an architect-led team for a new office building for Cityburgh Council. I have attached a copy of the notice (*in the Scenario to the Practice Examination – under the heading Specific Background to Questions*). I think we should make an attempt to win this project.

Having had a quick look at the notice it is clear that it requires the architect to be the lead-consultant with all other consultants working as sub-consultants. What criteria should we apply to the selection of the design team?

What are the risks that would arise due to our role as lead-consultant and how could they be mitigated?

How would this role as lead-consultant vary from what we do normally? Would we require any additional fees to undertake this role and if so what percentage should we consider?

To win this project we expect that the overall team would have a combined fee of no more than 10%. What proportion of that fee do you think we should try to secure remembering that we need to ensure that all team members need to deliver an effective service?

End of Question 8

## **QUESTION 9**

### **Profitability.**

#### **Memo**

.....10.....

**To: Candidate**  
**From: John Young**  
**Date: 22 August 2007**

I attach copy of PMS Consultancy's draft Project Programme for your perusal.

Please can you study this, let me know of any comments which you feel appropriate and any modifications which you might recommend, then provide an overmarked revised draft.

Bear in mind that the Client wants to achieve good quality in design and construction, befitting an HQ office status, and that the Client's funders will require good cost certainty at pre-tender cost-check stage.

Please can you also suggest allocation of personnel to each activity based on the Project Managers programme, estimate the time input of each, then calculate probable overheads and resultant profit.

How is the profit shaping up based on the Project Managers programme?

What might you suggest to improve the profit?

End of Question 9

.....11.....

## **QUESTION 10**

### **Succession Planning**

#### **Memo**

**To:           Candidate**

**From:       John Young**

You will be aware that the Practice has recently been advertising both locally and nationally for Architects with a minimum of 3 years experience. The response has been disappointing with few suitable candidates applying. I am concerned that the Practice is “out of touch” with the current aspirations of young Architects, e.g. is the practice structure, which was altered 4 years ago, conducive to attracting talented people? Should we consider amalgamation as a way of developing expertise? Do GFY offer sufficient incentives?

As you have now been with GFY for nearly 3 years and have a committed involvement in both work and social aspects of the office, can you please examine from the perspective of an aspiring young professional our current office structure and management principles. Please can you then prepare an advisory paper on how GFY can attract and retain experienced quality staff, grow them in their competencies, and encourage them to become partners.

End of Question 10  
**END OF PAPER**