

ICE Law and Contract Management Examinations

Examiner's Report 2015

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Moderator's Report

The results this year were slightly above the recent averages achieved, but the success percentage increase for Module 1 was encouraging as was the approximate 50% increase in the number of candidates sitting Modules 1 & 2. However, disappointingly again this year Module 3 attracted only three candidates two of whom unfortunately failed to achieve the required pass mark. This exam requires candidates to have considerable professional experience and a good knowledge of two forms of contract some of which necessarily cannot be gained by study alone. It is also recognised that since the ICE ceased to promote the ICC Form of Contract, hands-on experience of this Form is increasingly more difficult to attain but all the same, the decision-making role of the Engineer is considered a valuable source for obtaining sound contract management skills.

The examiners make useful comments in their reports much of which merits repetition.

For the Module 1 Paper most candidates demonstrated a good understanding of the legal issues and the best answers were well-structured and contained sensible application of the relevant law to the facts. Generally, candidates lost marks because they had not read the question properly and had therefore failed to answer the question that was asked.

For the Module 2 Paper candidates are reminded to use NEC language in their answers including identified and defined terms. Candidates are not expected to write in italics, but capitalisation for defined terms is important.

Equally important is the correct use of verbs. The following have different meanings. 'Accept' and 'approve', 'notify' and 'raise', also 'instruct' and 'request'. The best answers mirror the precise language used in the relevant clause.

Before answering a question, some candidates provided a sometimes lengthy narrative on the advantages and disadvantages of a particular option, when the question did not call for it.

Some candidates planned their answers by first bulleting the relevant clause numbers. This is a good strategy to ensure you have read the question and planned a response in the time available. It also ensures you do not over-answer an early part of a question only to find you need to duplicate that element of your answer for a later part.

Candidates lost marks where parts of the same answer were contradictory; it is always worth re-reading answers to check for contradictions.

For the Module 3 Paper, because of the small number of candidates, it is difficult to generalise but it was clear that candidates who grasped the key issue being examined and focused on it did much better than those who simply repeated the contractual process without considering the real issues. There was much less evidence of candidates pointlessly repeating elements of the question, or unnecessarily regurgitating sections of the contract, which has been a feature of previous years.

The examiners give a considerable amount of time to set and mark papers for a small honorarium and deserve our grateful thanks. The candidates clearly make a considerable effort to assimilate all the material and present commendable scripts whether they pass or not. For those who did not manage to achieve a pass this time we sincerely hope that you will not be deterred from sitting the exam on a future occasion. In this regard, it is also encouraging to note the increased number of approved Organisations offering the ICE Law and Contract Management Courses.

Finally, all the candidates, whether or not they were successful this year must be congratulated for the hard work put into learning all the law and contract they have displayed. We hope that they will be able to put it into use in their daily work and will be encouraged to improve their knowledge and take it to a higher standard in years to come. It is our belief that knowledge and

understanding of civil engineering law and contract procedures are prerequisites to competent project administration and management. Consequently, it is hoped that all candidates will concur with these sentiments and do their part to encourage their colleagues to likewise commit to advancing their own understanding and knowledge of civil engineering construction law and contracts.

Examiner's Report

Pass marks

The pass marks were set at 40% for Module 1, 50% for Module 2 and 65% for Module 3.

Total Number of Candidates taking each Module and % Passing each Module								
	Module 1		Module 2 ICE		Module 2 NEC		Module 3	
	Nr	%	Nr	%	Nr	%	Nr	%
2015	85	70	-	-	105	76	3	33
2014	68	62	-	-	72	79	4	0
2013	42	73	-	-	51	73	3	0
2012	36	83	-	-	42	82	6	33
2011	43	81	2	50	41	53	2	50
2010	34	83	1	100	36	67	7	29
2009	46	83	2	100	44	80	2	0
2008	45	84	2	100	43	83	2	0
2007	28	74	1	0	25	52	5	20
2006	47	74	21	100	25	76	3	33
2005	57	60	14	86	37	73	5	0
2004	51	98	40	70	9	78	3	33
2003	51	80	32	65	7	85	9	67
2002	42	93	30	63	7	71	10	10
2001	40	83	24	55	N/A	N/A	12	42

A certificate is issued to a candidate who passes Module 1, 2, or 3

Copies of the current curriculum, the two case lists and a revised reading list are all available on the ICE website www.ice.org.uk/law or contact the Management Procurement and Law Department, Institution of Civil Engineers, One Great George Street, London SW1P 3AA t +44 (0)20 7665 2116, or [e contractsanddisputes@ice.org.uk](mailto:contractsanddisputes@ice.org.uk)

The following pages are general comments on how the questions were answered and what the examiner was expecting. Each section of each module has a different examiner. Each exam script is then moderated by the LCMEC (Law and Contract Management Examination Committee) to ensure there is consistency between the examiners.

Module 1

Section 1

General comments

Overall, this section was answered reasonably well and the majority of the candidates achieved a pass in this section.

Generally, candidates lost marks because they had not read the question properly and had therefore failed to answer the question that was asked. For example, marks were lost by candidates discussing potential tortious claims where the question referred to breach of contract (and where this part of the exam was about contract law). Many candidates also lost marks by setting out their knowledge about each subject matter including facts of case law rather than applying the knowledge to the problem question.

Most candidates demonstrated a good understanding of the legal issues and the best answers were well structured and contained sensible application of the relevant law to the facts.

Question 1

This was a popular question out of the three and was attempted by over three-quarters of the candidates. The majority of the candidates who attempted this question obtained a pass.

- a) This first part of this question was answered very well with most candidates recognising that it concerned offer, counter-offer and acceptance. However, most candidates missed out on the majority of marks by merely setting out their knowledge of offer and acceptance and failing to apply the law to the facts. Many candidates identified that James' advert was an invitation to treat but lost marks by then talking about Jo, Lesley and Sabina "accepting" his offer.
- b) Candidates here lost marks by talking about formation of contract rather than potential misrepresentation or mistake.
- c) Candidates did well on this question. A common mistake was to set out far too much detail about the types of misrepresentation where there were only four marks capable of being awarded to the answer.

Question 2

Over a half of candidates attempted this question however this question was generally not answered well, only few candidates obtained a pass.

- a) Candidates failed to identify that this question was about liquidated damages and instead discussed contract formation.
- b) This question was about breach of contract. Candidates who did badly on this question simply discussed misrepresentation which was the subject of the next part of the question.
- c) This answer was adequately answered by most candidates. A few candidates missed that this question was about misrepresentation and some discussed negligence and in particular professional negligence, which of course was not relevant as part of the Module 1 exam questions.

Question 3

This was a less popular question out of the three and was attempted by few candidates.

- a) This question was answered very well and most candidates were able to identify the fact that the invitation to tender was not an offer.

- b) This question was answered reasonably well. Candidates lost marks by discussing formation of contract rather than the potential remedies available.
- c) Candidates generally did well on this answer, most identifying that the question was about frustration.

Section 2

General comments

Overall candidates demonstrated a good understanding of the legal principles of tortious liability and applied the facts to those principles.

The majority of candidates passed this section and answers were well structured and thought-out.

Where candidates lost marks it was because they had not read the question properly and therefore answered the wrong question and/or answered the wrong section of the question. If candidates read all parts of the question before attempting to answer, they could consider what to cover in each part.

Some candidates lost marks because they did not provide reference to the relevant case law. The best answers applied the facts to the legal principles with references to the relevant case law.

Question 4

This question was by far the most popular question, with the majority of candidates choosing to answer it. 89% of the candidates who attempted this question obtained a pass.

- (a) The first part of the question was answered very well, with the majority of candidates achieving 4 to 5 marks.
- (b) This question was also answered well. Candidates generally identified that Phil could raise a contributory negligence defence because Kirstie was not wearing a seatbelt. Dr Giles' carelessness in failing to read Kirstie's medical notes properly and the identification therein that she is allergic to morphine amounted to a novus actus interveniens.
- (c) This question was generally answered poorly. Some candidates failed to achieve any marks at all because they failed to identify that Kirstie's pre-existing condition would not affect her ability to recover damages due to the thin-skull rule/ eggshell skull rule. Candidates either discussed foreseeability of harm or contributory negligence.
- (d) This question was answered reasonably well. The majority of candidates identified that Kirstie could bring a professional negligence claim against Dr Giles for six months' loss of earning. Few candidates identified that the defence of contributory negligence would not be available to Dr Giles.

Question 5

This was the least popular question. 60% of the candidates who attempted this question obtained a pass.

- (a) This part was adequately answered by most candidates. The majority of candidates identified that Walter could bring a claim for negligent misstatement against Saul. However, a number of candidates failed to identify the steps required to establish such a claim, and that Walter would be liable for pure economic loss. A lot of candidates wasted time

discussing vicarious liability, when this specific question concerned Walter's rights and remedies against Saul.

- (b) Most candidates identified that it would be unlikely that Walter would be successful with a claim in this scenario. However, some candidates failed to explain why in an adequate manner.
- (c) This question was generally answered well. Most candidates identified that this question concerned vicarious liability.
- (d) This question was not answered well. Only a few candidates were able to identify that in the case of *Hedley Byrne & Co v Heller & Partners Ltd*, 'without responsibility' was sufficient to avoid liability.

Question 6

Approximately half of the candidates answered this question. 55% of candidates who attempted this question obtained a pass.

- (a) Few candidates answered this question adequately. A number of candidates confused this question with a claim under *Rylands v Fletcher*. Candidates who correctly identified that it concerned private nuisance were generally able to identify the relevant issues.
- (b) This question was answered well and the majority of candidates highlighted the remedies available.
- (c) This question was also answered well and a number of candidates referenced the relevant case law.

Module 2

Section 1

General comments

There was a slight fall in the number of candidates passing section 1, down from 78% last year to 75% this year.

Candidates are reminded to use NEC language in their answers including identified and defined terms. Candidates cannot write in italics, but capitalisation for defined terms is important. Equally important is the correct use of verbs. 'Accept' has a different meaning to 'approve'. The use of 'accept' is linked with clause 14.1. Other examples include 'notify' not 'raise', and 'instruct' not 'request'. The best answers mirror the precise language used in the relevant clause.

Often the introduction to a question will specify the main and secondary options. Before answering a question, some candidates provided a sometimes lengthy narrative on the advantages and disadvantages of a particular option, when the question did not call for it. Some candidates planned their answers by first bulleting the relevant clause numbers. This is a good strategy to ensure you have read the question and planned a response in the time available. It also ensures you don't over-answer an early part of a question only to find you need to duplicate that element of your answer for a later part.

Some candidates wrote out the entire question before answering it. This attracts no marks and takes valuable time. A few candidates wrote their paraphrasing of the questions. Where such paraphrasing were incorrect, it resulted in a in a slightly different question being answered, or a loss of emphasis, resulting in reduced marks.

In general candidates should:

- Refrain from writing in the right hand margins of scripts. Margins are for use by the examiners.
- Write your candidate number on the front of the answer script legibly. 5% of scripts this year were poorly or incorrectly numbered.
- Answer the correct number of questions in the correct work-book. Some candidates attempted to answer all four questions in a section one rather than answering two questions only.
- Write legibly. Some scripts became almost undecipherable towards the end of the time allowed. A number of these candidates had unnecessarily wasted time in writing out the question in full before answering it.

Question 1

This question was answered by 90 of the 105 candidates and was the most popular question. It attracted the lowest average score of 14 out of 25. 56 candidates achieved a pass mark in this question, equivalent to 62%.

- a) A great number of marks were lost as many candidates asserted that an early warning was required before a clause 14.3 instruction could be given. Many cited clause 16.4 and appeared to misinterpret the second sentence of this provision as a prerequisite to the giving of an instruction.

The question asked how the *Employer* would get the additional work included. Most candidates correctly explained how the *Project Manager* would do this under clause 14.3. Some candidates incorrectly believed the instruction was provided pursuant to clause 60.1(1).

The final sentence in clause 16.1 makes the point that an early warning, in this scenario, is not required. However marks were awarded where candidates explained how the value of a risk reduction meeting and how it may address any residual arrangements or secondary effects.

- b) Most candidates answered this part of the question correctly. To achieve marks it was necessary to be aware of clause 63.6 and how weather would be the *Contractor's* risk up to the trigger point under 60.1(13).
- c) Awareness of the final paragraph to clause 63.1 was not that widespread. Only a handful pointed out that this provision prevented the 'wait and see' approach. The majority of candidates did however correctly point out that the *Project Manager* was required to reply within 2 weeks. The best answers commented on how risk allowance could be included even if the assessment was taking place after the physical works concluded.
- d) Some candidates dropped marks here by not mentioning the sanction under clause 62.6 or confusing it with the sanction under clause 64.4.
- e) This question was designed to test understanding in relation to the *Project Manager's* assumptions, provided for under clause 61.6. Too many candidates considered the *Contractor* to be justified in attempting to recover some monies given he had stated an assumption in his quotation. Marks were awarded where clause 65.2 was mentioned, with further marks for references to 60.1(17). However few candidates achieved full marks.

Question 2

This was the least popular question answered by just 10 of the 105 candidates. It attracted an average mark of 14.5, and 7 candidates achieved a pass mark.

This question was answered reasonably well. A few observations:

- a) Some candidates incorrectly believed that matters included in the Risk Register, entered in Contract Data, were used to allocate risk. The question was in part designed to draw out the distinction.
- b) All candidates gave reasonable examples here. The question was not looking for technical answers, but phrasing that achieved the relevant risk allocation.
- c) Most candidates correctly explained the risk implications of writing the Works Information in the two differing styles.
- d) Nearly all candidates identified the detrimental impact on cash flow when an *Employer* has drafted the Activity Schedule. Fewer picked up on the benefits to innovation and sequencing that a Contractor-led Activity Schedule may yield, but most touched on the relationship with programme.
- e) Nearly everyone correctly pointed out that there is no concept of percentage completion under main option A. The best answers discussed how a pragmatic *Project Manager* may accept a revised Activity Schedule, but explained that there was no contractual obligation to do so.

Question 3

This was the second most popular question, attempted by 84 of the 105 candidates, averaging a mark of 15.2, the second highest of all the questions in this section. 75% of candidates achieved a mark of 13 or higher making it the most successfully answered question.

- a) Most candidates achieved 4 of the 6 marks available in this section. Nearly all candidates failed to mention clause 13.8. A mark in lieu was provided for mentioning clause 13.4.

- b) Many candidates thought the *period for reply* was automatically 2 weeks and didn't appreciate it was an identified term and populated in Contract Data part one. Few candidates mentioned the programme requirement under clause 31.2 which requires the *Contractor* to show when he will need acceptances.
- c) Some candidates incorrectly thought that in the absence of a reply from the *Project Manager*, the *Contractor* could initiate a default acceptance similar to the sanctions for quotations. Additionally there was some confusion of the early warning and compensation event provisions as several candidates said they would notify an early warning under clause 60.1(6).
- d) Too many candidates were unaware of clause 13.8 and the *Project Manager's* ability to withhold acceptance for any reason. Some answers swayed back and forth with this and a few mentioned 60.1(9) but appeared to think the *Project Manager* would be in breach and outside the provisions of clause 10.1.
- e) The best answers noted the relevance of clause 26.1 and explained it was not an *Employer's* risk. Far too many candidates cited clause 60.1(19) which was not applicable to the scenario. Clause 60.1(19) should be read in its entirety. It appeared many candidates had ignored the "and which" part of the clause.
- f) Most candidates correctly stated the matter was not a compensation event. Various reasons were given. The most common was that the matter was the *Contractor's* fault. A mark was given for this but the best answer was that it 'is not one of the compensation events stated in this contract'. This avoids a discussion on fault altogether. There was a bit of confusion around the use of the term 'implementation' in the question. Most understood this as relating to the commercial finality of the previous compensation event. Some mistook this as the works themselves. As a consequence a number of candidates mentioned the 8 week timeout in clause 61.3 and limited marks were given for this in lieu of the expected explanation of the clause 61.4 decision.

Question 4

This was the third most popular question attempted by 26 of the 105 candidates, averaging a mark of 16.7, the highest of all four questions in this section. 19 candidates achieved a pass mark of 13 or higher, a 73% success rate.

- a) A number of candidates answered this part incorrectly and cited clause 10.1 and the trust that the *Contractor* should put in the *Employer* during the transfer of title to his excavators etc. A few suggested a z-clause be incorporated to change this clause. Most candidates gave a succinct explanation of the difference between Plant and Materials on one hand, and Equipment on the other.
- b) Some candidates appeared to have misread clause 73.2, interpreting it to mean that so long as the materials were within the areas identified in the Works Information the *Contractor* could take whatever became available. The majority of candidates gave good answers and explained the commercial benefit of ensuring an appropriate statement was included in the Works Information. All candidates knew that the Victorian fixtures were likely to fall under clause 73.1 and explained the process of notification and instruction well.
- c) Some very comprehensive answers were offered to this part which demonstrated excellent knowledge of how in practice the scenario would cause practical issues with administering the people component of Defined Cost. Marks were awarded for well-made

arguments both for and against. Top marks were awarded where a balanced argument was made and a sensible conclusion reached.

- d) A good number of candidates correctly identified that whilst this may help to inform the overall budget of a project, it was not appropriate for the Risk Register. Most answers explained the Risk Register was a management tool for mitigating or avoiding risks. The best answers further identified that pricing the risk register would be ineffective in any case, given clause 63 makes no reference to the Risk Register for evaluation of compensation events.

Section 2

General comments

The average mark for this section was around 14 marks, as last year. Again, this is very encouraging with only a few achieving quite low marks. The following comments are made below to assist:

- Some of the scripts were barely legible.
- In a few instances candidates were unable to provide answer(s) for some parts of questions. Perhaps due to running out of time.
- Some of the spelling was very poor.
- Candidates may not make entries in the column entitled “marks”
- A few candidates offered answers (a), (b) etc. without identifying the question number.
- If candidates provide one short sentence for a question worth 6 marks, that will be reflected in the marks awarded.
- Identifying a subject heading e.g. ‘Collateral warranties’ and nothing further will not attract marks.
- Candidates will find the index useful with provision of some answers – if a candidate is focusing on ‘Defects Date’ for example then the index to the various parts of the contract dealing with this term.
- Wring down parts of the question before providing answers, does not attract any marks, but does waste precious time.
- Answers are required to be written clearly, slow down that bit more if you can.
- If abbreviations are used such as ‘PM’ please state what the abbreviation means at the start of your answer.
- Write in sentences that mean something. Jottings will be awarded no or little marks.
- Allow good spacing between each part of an answer. There is plenty of space in workbooks. Leave six lines at the end of each part answer, allowing you to go back and add to your answer should you so wish.

The number of candidates increased this year to 105, also very encouraging.

Question 5

64 candidates attempted this question, with an average mark achieved of 15.

(a) Most candidates answered well, Quoting the clause number and definition from the contract.

(b) Again, this question was answered well with the candidates being comfortable advising beyond the strict provisions in the contract.

- (c) Answers to this part were mixed. The question was designed to distinguish the difference between something stated as a matter to be included in the Risk Register and something stated to be an Employer's risk.
- (d) This question was reasonably well answered.
- (e) Candidates referred to the relevant parts of the contract, and were answered well.

Question 6

39 candidates attempted this question, with an average mark achieved of 12. Some candidates found this question difficult.

- (a) The question was designed to get the candidates to identify the second part of clause 11.2(2) and thereafter to offer opinion on how they would actually determine completion in this instance.
- (b) This question was designed to elicit a response which you might give to the Contractor where there are clearly problems in his achieving completion.
- (c) This question sought to cite how the contract deals with take-over, the difference between take-over and Completion and how a solution might be devised here to the benefit of all.
- (d) This question was generally well answered. Most candidates referred to clause 80.1 correctly, explaining what it meant.

Question 7

81 candidates attempted this question, achieving an average of 13 marks.

- (a) This question was well answered. The Contractor is not bound contractually by his programme, but a revised programme should be submitted where it deviates from the Accepted Programme.
- (b) Most candidates realised the search provisions were applicable here and the better answers went on to explain what happened upon the outcome of the search.
- (c) This was a general question looking for consideration of clause 13 from the Supervisor's perspective.
- (d) In the absence of a contractual power, the Supervisor cannot notify early warnings.
- (e) This was probably the easiest question in section 2 and good marks were gained for explaining the early warning process and how it might help the parties here.
- (f) Many candidates failed to realise that access could be delayed under clause 43.4 to permit later correction of the Defect.

Question 8

26 candidates attempted this question, achieving an average of 13 marks.

- (a) This part was designed to require candidates to consider why there was a problem (design/materials/workmanship?) and work through the contract accordingly.
- (b) Most candidates answered this part well, referring to the possible risk of there being an error in the design.
- (c) This part was well answered, most referring to the correct clauses and the communications that should take place between the Contractor and Project Manager.
- (d) Generally this was not well answered. Candidates could have questioned what 'significant' means, and stated what the contract clearly allows as the basis for not accepting.

Module 3

Section 1 – Module 3

General Comments

Three candidates took the Level 3 Paper this year. Drawing any statistically sensible conclusions is therefore not impossible. It was clear that candidates who grasped the key issue being examined and focused on it did much better than those who simply repeated the contractual process without considering the real issues. There was much less evidence of candidates pointlessly repeating elements of the question, or unnecessarily regurgitating sections of the contract, which has been a feature of previous years.

Question 1

This compulsory question was not generally well answered. The question concerned changes to the activity schedule to generate cash flow for the Contractor and the Employer's opportunities to set off money in various circumstances from payments that would be otherwise due. This seemed to catch a number of candidates off guard and they resorted to regurgitating the payment process rather than attempting to answer the question posed. There was also a tendency to favour one party or the other without supporting that tendency with an objective analysis of the contract terms. I suspect that the "*moral*" view of the drafters was foremost in their minds in deciding whether or not the activity schedule could be changed, or sums withheld from the contractor. It is important that candidates set aside any prejudice they may have and consider the problem dispassionately. There was some confusion about the different mechanisms for withholding sums because the Contractor missed a key date under clause 25.3, as opposed to the process for delay damages under X7.

None of the candidates mentioned the system for withholding payments under Y(UK)(2) which was a significant omission. One candidate formed the view, which is not supported by the contract that any change to the programme could result in a change to the activity schedule.

Question 2

Question 2 was answered by two of the three candidates. Both answered the question well. The candidates identified correctly that the subcontractors and pre-contract negotiations about them are not necessarily included in the Works Information. Neither candidate drew the conclusion from the wording of clause 26 that a rejection by the project manager for failing to provide the works would be a difficult decision, and that evidence for such a bold step might be hard to come by, exposing the Project Manager open to considerable criticism. Neither candidate identified the possibility of instructing the use of the particular subcontractor, which would solve the Employer's problem in one sense and allow the candidates to explore the ramifications in terms of financial reward for the contractor.

Question 3

No candidates answered Question 3.

Question 4

Only one candidate answered Question 4.

Section 2

General Comments

All 3 candidates answered Questions 5 and Question 8

Question 5 – compulsory

This was a question about the appropriateness of the use of daywork and other methods of valuing additional works and consequential delays.

Two of the candidates did not recognise that daywork would not normally be an acceptable way of valuing the additional work in a measurement contract. Whereas the Contractor provided an estimate based on daywork, that fact does not mean that the Engineer is bound to accept that method of valuation.

Question 8

This question explored the implications of an Engineer instructing a construction technique and compromises that might be required in a contract.

The question asked candidates to draft a letter with detailed heads of claim

- one candidate did not do so
- one candidate prepared general heads of claim rather than those specific to the circumstances of the question. One candidate did not recognise that sometimes compromises have to be made to achieve agreement. One candidate repeated part of the question in the answer. This did not score any marks.

Institution of Civil Engineers
Examination in Civil Engineering Law and Contract Management 2015
Module 1 (English and Scots Law)

Monday 8th June 2015

Time permitted: 14:00 to 17:20 (3 hours 20 minutes)

There are three questions in Section 1 and three questions in Section 2.
Answer **any two** questions from **each section**; a total of **four** questions.
Please answer questions from Section 1 in an answer book provided (Yellow book) and answer Section 2 questions in a **separate** answer book provided (Yellow book).
All questions carry equal marks.

Only un-annotated copies of Statutes and Statutory Instruments may be taken in to the Examination.

References to Cases and Acts should be quoted where possible.

Please indicate on the outside of the answer booklets whether your answers will be in respect of Scots Law.

Institution of Civil Engineers disclaimer; all names and characters in the question papers are fictional and any resemblance to any actual persons or businesses is purely coincidental.

Section 1

Question 1

On Thursday morning, James put an advert on Facebook which read “two tickets to Ed Sheeran concert, £200 or closest offer. Please call me” and left a phone number.

On Thursday afternoon Jo, a friend of James, sees the advert and immediately puts a cheque in the post with a note agreeing to buy the tickets for £200.

On Thursday evening, Lesley sees the advert on Facebook and calls James. She leaves a message on his answerphone saying that she would like to buy the tickets for no more than £175. James calls Lesley back and says that he will accept £180 for the tickets but that the offer is only open until Friday lunchtime. Lesley says she will think about it and let James know.

Lesley later decides to buy the tickets and sends a message to James on Facebook on Friday morning saying “I will buy the tickets for £180”. However, there is a problem with Lesley’s internet and her message is not delivered to James until Friday evening.

Sabina sees the advert on Friday afternoon. She calls James and offers him £175. James has not yet received Jo’s letter or Lesley’s Facebook message. James accepts the offer of £175.

Later that evening James gets home to see Jo’s letter and receives Lesley’s message.

- a) Advise James as to whether he has a binding contract with Jo, Lesley and/or Sabina and on what basis. [12 marks]**

(Assume for the purposes of the rest of the question that no contract has yet been concluded for the sale of the tickets)

Sofia calls James and asks about the seats. James responds “They are great seats”. Sofia says “I would only buy tickets for great seats near the stage; I will give you £200 for them”. James is not certain if the tickets are close to the stage but says nothing further and accepts the offer.

When Sofia picks up the tickets she sees that they are at the back-section of the arena. She refuses to take the tickets because they are not near the stage.

- b) Advise Sofia as to whether she has to take the tickets [9 marks]**
- c) Would your answer be different if James knew that the tickets were at the back-section of the arena and said “yes they are near the stage”? [4 marks]**

Section 1

Question 2

KidsWorld, is in negotiations with Samir, an architect, to design a large indoor play area for children aged 4-10 years old.

KidsWorld is keen to ensure that the play area is opened in time for the summer holidays and therefore ensures that the contract states that the works will be completed by 31 May 2015 and that if the works are delayed then Samir will be liable to pay liquidated damages of £10,000 per week until the works are complete.

The works were completed on 15 July 2015.

a) Is Samir liable to pay the liquidated damages to KidsWorld? [6 marks]

In order for the play area to be profitable it is essential that it does in fact have the capacity to hold 200 children. During negotiations Samir made the following statements:

- 1. This will be the best indoor play area in the country; and*
- 2. My design will ensure that the play area can contain up to 200 children at any one time.*

KidsWorld and Samir enter into a written contract which does not contain either of the above terms.

Unfortunately, the project is not a success and after the play area is constructed it becomes clear that it can only hold 100 children as a result of revisions made by Samir to his design before entering the contract.

b) Does KidsWorld have a claim against Samir for breach of contract as a result of the statements he made during negotiations? [6 marks]

c) Advise KidsWorld on whether they have any other grounds to bring a claim against Samir. [13 marks]

Section 1

Question 3

Alexander is entering a golfing competition in Thailand and needs to buy new golf clubs. He receives an email from Everything Sports saying that there is a sale on sports equipment over the weekend. That weekend Alexander goes into Everything Sports and finds a set of golf clubs in the sale section of the shop which has a sign stating "All items at £50".

Unfortunately, these were put in the wrong section and when Alexander goes to pay he is told that the golf clubs in fact cost £200 and are not included in the sale.

- a) **Is there a contract between Alexander and Everything Sports to buy the golf clubs for £50?** [7 marks]

Alexander decides to buy the golf clubs online. Alexander's search brings up Danny, an online seller, who will sell and deliver a full range of golf clubs for £75. Alexander purchases this set from Danny.

Unfortunately, Danny does not deliver the golf clubs and Alexander is unable to buy a new set in time. He therefore is unable to enter the golfing competition and loses out on potentially winning the £5,000 prize.

- b) **Advise Alexander as to the potential remedies that he has against Danny.** [14 marks]
- c) **Would your answer be different if Alexander had paid £75 to buy the golf clubs and they have been destroyed in a fire before Danny had been able to deliver them?** [4 marks]

Section 2

Question 4

Phil is driving his son Don to school. He is running late. He gets 5 minutes down the road and remembers that Don has swimming today and he has forgotten his swimming bag. He quickly goes back to get it but as a result is running even further behind schedule. To try and make up the time, he drives faster and goes 30 miles per hour over the speed limit.

Phil's mobile phone rings and he picks it up. It is his wife Carol asking him where he is because the school has called her wondering why Don has not arrived at school. Phil fails to see Kirstie coming around the corner, driving to work, and he crashes into her.

Phil and Don suffer minor injuries but Kirstie is severely injured breaking her arms, shoulder and numerous other bones because she suffers from a rare condition that means her bones are weak and are susceptible to breaks. Kirstie was not wearing a seatbelt at the time of the crash. Kirstie is treated in hospital for her injuries by Dr Giles, the doctor on duty at the nearest hospital. Dr Giles fails to notice on Kirstie's medical records that she is allergic to morphine, which he gives to Kirstie to treat the pain. Kirstie has an allergic reaction to the morphine and as a result her recovery time is doubled. Whilst Kirstie makes a full recovery she has been unable to work for twelve months due to her injuries.

Kirstie is self-employed and wishes to recover her loss of earnings.

- a) **What claim could Kirstie have against Phil? What would Kirstie have to demonstrate to be successful?** [5 marks]
- b) **What defences, if any, can Phil raise to avoid liability for the full twelve months of earnings?** [8 marks]
- c) **Will Kirstie's pre-existing condition affect her ability to recover damages?** [3 marks]
- d) **Advise Kirstie on the extent she can recover her loss of earnings by way of a damages claim against Dr Giles?** [9 marks]

Section 2

Question 5

Walter, a retired chemistry teacher, inherited his mother's house and all its contents a year ago when she died. When he was cleaning out the house, he found an old porcelain bowl which he had not seen since he was a child. He remembered his mother saying that they could never use it as it was far too valuable and she must have kept it in the attic ever since. Walter did not particularly like the bowl and he took it down to the regional antiques show to get it valued.

Better Valuer Antiques Ltd had a stand at the show and Saul, a well-known antiques expert and employee of Better Valuer Antiques Ltd, was providing valuation advice at the show. Walter told Saul that he wanted to sell the bowl and asked Saul to advise him on how much it was worth. Saul advised Walter that the bowl was a common Chinese design and it was only worth £50. As a result of Saul's advice, Walter later sold the bowl to Jesse for £50.

Walter was watching TV a week later after the show and saw in the news that Jesse had sold the bowl at auction for a record £30,000,000 to an anonymous bidder as the bowl was a "one of a kind" Chinese bowl from the Ming dynasty.

At the next antiques show, Better Valuer Antiques Ltd handed out leaflets to people waiting in the queue before they received Saul's valuation advice. The leaflet reads "All valuation advice is given without responsibility".

- a) **Advise Walter of his rights and remedies, if any, against Saul?** [14 marks]
- b) **Would your advice be different if Saul was Walter's brother-in-law and Saul had given his advice at the local pub after a few drinks?** [3 marks]
- c) **Against which other party/parties, if any, could Walter bring a claim?** [4 marks]
- d) **If Saul had given the same advice to Walter at the next antiques show where the disclaimer leaflets were handed out, would the disclaimer mean that Saul could avoid any potential liability?** [4 marks]

Module 1 Points for answer

Section 1

Question 1

- a)
 - James' advert was an invitation to treat; Pharmaceutical Society of Great Britain v Boots. (2 marks)
 - Therefore, Jo's letter sent with £200 was an offer. (1 mark)
 - There is no binding contract with Jo. (1 mark)
 - James' advert was an invitation to treat and so Lesley's call saying that she would buy the tickets for no more than £175 is an offer. (1 mark)
 - James' call to say he will accept £180 is a counter offer. (1 mark)
 - Lesley's message on Facebook would count as acceptance of the offer and therefore a binding contract but it was communicated out of time because the time for acceptance had passed when the message was delivered. (3 marks)
 - Postal rule doesn't apply to instantaneous communications; Entores v Miles Far East (1 mark)
 - Sabina's offer over the phone was a valid offer which James accepted. There is a binding contract with Sabina (2 marks)
- b)
 - The statement that they are great seats is opinion and not fact so is not a misrepresentation; Bisset v Wilkinson (3 marks)
 - Generally silence does not constitute a misrepresentation; Fletcher v Krell (2marks)
 - Acknowledgment that this may be a potential mistake rather than misrepresentation. (1 mark)
 - Where the mistake is to quality then it will generally not count as a mistake; Bell v Lever Bros (2 marks)
 - Sabina probably has to take the tickets (1 mark)
- c)
 - That statement would be misrepresentation as it's false, factual and induce Sabina into the contract (3 marks)
 - So Sabina would be able to refuse to take the tickets (1 mark)

Question 2

- a)
 - Liquidated damages could be a penalty clause. (1 mark)
 - Discussion as to whether the sum of LDs is a genuine estimate of the level of damages that was likely to be suffered by late opening of play area (objective test). The test for a genuine pre-estimate is whether there is a substantial discrepancy between the level of damages stipulated in the contract that was likely to be suffered. Alfred McAlpine Capital Projects v Tile Box Ltd (2005) (4 marks)
 - Candidates should reach a reasonable conclusion as to whether KidsWorld will be able to enforce the liquidated damages clause. (1 mark)
- b)
 - Candidates should consider whether the statements are representations or

contractual terms. (1 mark)

- The first statement should be dismissed as mere puff (1 mark).
- If KidsWorld communicated the importance of the second statement to Samir then it may be a term of the contract as they appear to have relied on it: *Bannerman v White* (1861). (2 marks)
- The parole evidence rule should be considered – that since the contracting parties have reduced their agreement to a single and final writing, extrinsic evidence of past agreements or terms should not be considered when interpreting the contract: *Henderson v Arthur* (1907). (2 marks)

- c) **[13 marks]**
- Candidates should identify that KidsWorld may have a misrepresentation claim against Samir. (1 mark)
 - A misrepresentation must be of fact and not opinion (*Bissett v Wilkinson* (1927)). Samir's first statement was an opinion but his second was of fact. (2 marks)
 - A misrepresentation must be false, and both statements made by Samir were untrue. (2 marks)
 - A misrepresentation must also be relied upon by the other party and induce them into entering the contract. Some discussion of whether KidsWorld was induced to enter the contract based on the statements (2 marks).
 - Candidates should consider the types of misrepresentation and apply them to the scenario. The first statement is likely to be innocent misrepresentation under s2 (1) of the Misrepresentation Act 1967. It may also come under Negligent misrepresentation at common law where the defendant carelessly makes a representation while having no reasonable basis to believe it to be true. (3marks)
 - The test for fraudulent misrepresentation should be applied (when one makes representation with intent to deceive and with the knowledge that it is false). Candidates should acknowledge that the test for fraud is very narrow and difficult to prove: *Derry v Peek* (1889). The position at both the time the statement was made and at the time the contract was concluded should be considered. (3 marks)

Question 3

- a) **[7 marks]**
- The display of goods on shelf is not an offer but an invitation to treat (*Pharmaceutical Society of Great Britain v Boots Cash Chemists (Southern) Limited* (1953)). (2 marks)
 - An advertisement is usually made to invite the customer to make an offer and is not intended to be a binding offer, (*Carlill v Carbolic Smoke Ball Co* (1893)), (2 marks)
 - Alexander made the offer when he took the clubs to the till and Everything Sports did not accept the offer to sell the clubs for £50. (2 marks)
 - There is no valid contract. (1 mark)
- b) **[14 marks]**
- The starting point again is that Danny is in breach of an express term of

the contract to deliver the golf clubs. (2 marks)

- Contractual damages compensate the innocent party for the loss which he has suffered as a result of the breach of contract. The objective of damages in contract is to place the innocent party in the position he would have been in had the contract been performed. (2 marks)
- Remoteness - damages cannot be recovered where the loss which the innocent party has suffered is too remote a consequence of the other's breach of contract. The current law on remoteness was laid down in *Hadley v Baxendale* (1854). (2 marks)
- The innocent party can recover damages for its losses: (2 marks)
 - which arise naturally from the breach; and
 - were in the reasonable contemplation of the parties at the time of the contract as the probable result of the breach.
- Alexander would almost certainly be able to recover the cost of the golf clubs (£75); (1 mark)
- The loss of potential winnings (£5,000) is unlikely to fall within the first limb of *Hadley v Baxendale* as Alexander would still have to win the competition to have received the prize. Candidates should also discuss whether Danny is likely to have known that Alexander was going to enter the competition and would potentially lose out on winning the prize (2nd limb of *Hadley v Baxendale*). It is unlikely that Alexander would be able to recover the £5,000. (5 marks)

- c) • Where an item essential to the contract - which has been expressly identified - is destroyed, through no fault of either party, it can be set aside as impossible to perform, as established in *Taylor v Caldwell*. (2 marks) [4 marks]
- The contract would be frustrated and Alexander would be able to recover his £75. (2 marks)

Question 4

- a) • Candidates should identify that Kirstie could bring a claim for negligence against Phil (1 mark) [5 marks]
- Candidates should identify, applying the facts to the principles that:
 - (1) Phil owes other road users, including Kirstie, a duty of care to ensure that they do not suffer harm (1 mark)
 - (2) Phil breached his duty of care by speeding and being on the phone whilst driving (2 marks)
 - (3) Phil's breach of duty caused Kirstie to suffer injury (1 mark)
- b) • Candidates to identify that: [8 marks]
- (1) Kirstie would be contributory negligent for failing to wear a seatbelt which would likely reduce damages by approx. 25% (2 marks)
 - (2) Dr Giles carelessness in failing to read Kirstie's medical notes properly to identify that she is allergic to morphine amounts to a *novus actus interveniens*. (2 marks)
- Candidates should identify that Phil cannot be held liable for the further

injury caused by Dr Giles following the principles of *McKew v Holland*. Phil can only be liable for the period in which Kirstie would have been unable to work if the further injury caused by the allergic reaction to the morphine had not occurred. Therefore, candidates should identify that Phil could only be liable for 6 months loss of earnings. (4 marks)

- c) • Candidates should identify that Kirstie’s pre-existing condition will not effect Kirstie’s ability to recover damages due to the thin-skull rule/ eggshell skull rule decision in *Smith v Leech Brain* (1962) that you must take your victim as you find him. **[3 marks]**
- d) • Candidates to identify that Kirstie can bring a professional negligence claim against Dr Giles for failure to correctly read her medical records resulting in treating her with morphine. (2 marks) **[9 marks]**
- candidates to identify the test in *Bolam* and that Dr Giles act/omission fell below the standards of the reasonable doctor. (2 marks)
 - candidates to identify that Dr Giles liability will be the extended time that Kirstie is unable to work i.e. 6 months rather than the full 12 months as ‘but for’ Dr Giles’ negligence the original recovery would still have occurred. (3 marks)
 - The defence of contributory negligence would not be available as Kirstie’s failure to wear a seatbelt had no causal effect of the further injury caused at the hospital. (2 marks)

Section 2

Question 5

- a) • Candidates should identify that Walter could bring a claim against Saul for the tort of negligent misstatement. (1 mark) **[14 marks]**
- Candidates should explain, applying the principles to the facts, that in order to succeed in a claim against Saul, Walter would have to prove that:
 - Saul owed Walter a duty of care; (1 mark)
 - Saul breached that duty to take care by falling below the standard of care of a reasonable expert valuer; (1 mark) and
 - Walter has suffered loss that was caused as a result of Saul’s breach of duty. (1 mark)
 - Candidates should set out the principles of *Hedley Byrne & Co Ltd v Heller & Partners Ltd*: (1 mark)
 - Candidate should identify that a duty of care will exists where:
 - a “special relationship” of sufficient proximity exists between Saul and Walter; (1 mark)
 - Saul knew, or ought to have known that Walter would rely on the valuation advice without further enquiry; (1 mark) and
 - Walter must have relied on the valuation advice and that reliance must be reasonable. (2 marks)
 - Applying the facts to the principles, candidates should explain that there is likely to be a special relationship between Walter and Saul as Saul knew

the purpose of the advice being sought. Saul has freely given his advice in a professional expert capacity and used his skill and experience to value the bowl. Walter has reasonably relied on that advice. (4 marks)

- Candidates should identify that if successful in a claim against Saul for negligent misstatement, Saul will be liable to Walter for pure economic loss. (1 mark)
- b) • Candidates should identify the difference between social and professional advice. **[3 marks]**
- They should explain that where advice/opinion is given in a social setting they are unlikely to establish that reliance is reasonable. (1 mark)
 - As Saul gave the advice to his brother –in-law at the pub after a few drinks, and this was a social setting, it would be unreasonable for Walter to rely on Saul’s advice therefore Walter would be unsuccessful with a claim for negligent misstatement. (2 marks)
- c) • This question concerns vicarious liability. **[4 marks]**
- Candidates should identify that Walter will also likely to have a cause of action against Better Valuer Antiques Ltd because they would be vicariously liable for Saul’s advice as an employer is vicariously liable for torts of employees committed in course of their employment. *Limpus v London General Omnibus Co (1862)*. (4 marks)
- d) • Candidates should explain that no duty of care will be found to be owed where the terms on which someone is prepared to give advice or make a statement excludes any assumption of responsibility. (1 Mark) **[4 marks]**
- Candidates should identify that in *Hedley Byrne v Heller* “without responsibility” was sufficient to avoid liability. Therefore, as a disclaimer has been issued, it is unlikely that Saul and Better Antiques Ltd assumed responsibility for the advice and therefore there is unlikely to be a “special relationship” so to be able to avoid liability. (3 Marks)

Question 6

- a) • Candidates should identify that John and Sarah can bring an action against DW Ltd in private nuisance (1 mark). **[16 marks]**
- Candidates should identify that John and Sarah can bring an action for private nuisance and not an action for public nuisance, because the noise and vibration affects their individual interests in their land and does not interfere with the rights of the public at large. (2 marks)”
 - Candidates should identify that John and Sarah can bring a claim for private nuisance as they have a direct proprietary interest in the land as the owners of the Property (2 marks)
 - Candidates should identify that John and Sarah’s claim is for loss of amenity (the noise and vibration is causing loss of enjoyment of John and Sarah’s proprietary interest. Substantial noise and vibration is an actionable nuisance (2 marks)

- Candidates should identify the concept of what is 'reasonable user' of a property and conclude whether it is reasonable for DW Ltd to make noise and vibration in their property in normal business hours in contrast to evening and weekends (4 marks)
 - Candidates should identify there is no liability in nuisance for damage which is not reasonably foreseeable (Cambridge Water Co) and identify whether John and Sarah's damage is reasonably foreseeable (3 marks).
 - Candidates should identify that a private nuisance generally involves an ongoing or repeated harm. As the building works have been continuing for 4 years would likely establish an ongoing or repeated harm. (2 marks)
- b) Candidates should identify that John and Sarah could claim for: **[6 marks]**
- injunctive relief to require DW Ltd to abate the continuing nuisance and to prevent its recurrence; and/or
 - damages to compensate them for their loss of amenity. (3 marks)
 - Candidate should identify that Sarah is unlikely to be able to recover the full amount of her hotel bills at the Ritz as she has a duty to mitigate her losses (British Westinghouse Co) (3 marks)
- c) Candidates should identify that Lui will not be able to bring a claim for private nuisance as he has no direct proprietary interest in the property (Hunter v Canary Wharf [1997]) (3 marks) **[3 marks]**

Institution of Civil Engineers

Examination in Civil Engineering Law and Contract Management 2015

Module 2 NEC (English and Scots Law)

Monday 15th June 2015

Time permitted: 14:00 to 17.20 (3 hours 20 minutes)

There are four questions in Section 1 and four questions in Section 2.
Answer **any two** questions from **each Section**; a total of **four** questions.

Please answer questions from Section 1 in an answer book provided (Green book) and answer Section 2 questions in a **separate** answer book provided (Green book).
All questions carry equal marks.

You may consult un-marked copies of the NEC3 Engineering and Construction Contract (ECC), NEC3 Engineering and Construction Subcontract (ECS), Statutes, CDM Regulations and CESMM4.

All questions must be answered using NEC3 Contracts.

Please indicate on the outside of the answer booklet whether your answers will be in respect of Scots Law.

Section 1

Question 1

On an ECC main Option A contract the *Employer* has met with the Environment Agency which is insisting that the Works Information be changed to include an additional drainage ditch.

- a) **How would the *Employer* get this additional work included in his contract? Comment also on whether an early warning is necessary.** [6 marks]

The additional work will take place during the coming winter. The *Contractor's* quotation forecasts the Defined Cost plus Fee at £12,500. This figure includes a £2,500 risk allowance for snow and wet weather that has a significant chance of occurring at the Site but that would not be sufficient to qualify under 60.1(13).

- b) **Is the *Contractor* able to make such allowances in his quotation?** [2 marks]

The *Project Manager* decides to 'wait and see'. He plans to hold off replying to the *Contractor's* quotation until the works are done. The *Project Manager* believes he can then either accept the quotation or, in the event the weather is fine instruct a revised quotation based on actual Defined Cost plus Fee instead.

- c) **Can the *Project Manager* wait and choose to base the assessment on the actual Defined Cost of the work already done?** [7 marks]

In another part of the *works* the *Project Manager* instructs a change in the Works Information, omitting a small outbuilding. Part of this work was due to be undertaken by a Subcontractor. The *Project Manager* notifies a compensation event and instructs quotations. The Activity Schedule lump sum for the building is £20,000. The forecast Defined Cost plus Fee for the building is assessed at £12,000.

- d) **What might the *Contractor* do in the event his quotation is not replied to within 2 weeks?** [3 marks]

In the same quotation the *Contractor* states an assumption that "...the relevant area of the Site will not be inundated by flood waters above 350mm AOD...". He argues that given flooding is not a weather event, he has no protection for this risk and it is not practicable for him to price it. The quotation is accepted and the compensation event implemented.

- e) **Subsequently, the area floods to a height 450mm AOD and the ditch works are prolonged resulting in an additional £4,500 of Defined Cost. Why might the *Contractor* struggle to recover the additional Defined Cost?** [7 marks]

Section 1

Question 2

- a) Under an ECC main Option A explain two ways, other than X clauses, in which the *Employer* could allocate to themselves the risk of additional specific events. [4 marks]

On the same contract you are advising the *Employer* on how different styles of drafting the Works Information can impact on risk allocation. The *works* include the construction of pad foundations. The Site Information includes limited geotechnical information however the ground is stated to be deep clay.

- b) In short sentences, give examples of how the Works Information may be written for the pad foundation excavation work on i) a performance basis and ii) a specific design basis. [2 marks]
- c) Explain the impact to risk allocation owing to the choice of a performance specification versus a design specification on an ECC main Option A contract. [6 marks]
- d) Explain two advantages under main Option A of allowing the *Contractor* to decide both the activities on the Activity Schedule as well as pricing it. [6 marks]

A *Contractor* is tendering for a main Option A contract to construct a major reinforced concrete bridge. To date he has only ever worked with bills of quantities. The *Contractor* includes an Activity Schedule with his Contract Data part two that is obviously taken from a bill of quantity summary page he has used to estimate the work.

- e) How might this disadvantage the *Contractor* during the contract? [7 marks]

Section 1

Question 3

- a) For what reason(s) could the *Project Manager* withhold acceptance of the appointment of a Subcontractor proposed by the *Contractor*? [6 marks]

The *Project Manager* is too busy working on urgent matters to consider the *Contractor's* submission in respect of the appointment of a Subcontractor.

- b) How long would the *Project Manager* have to reply to the *Contractor's* submitted proposal? [4 marks]
- c) What could the *Contractor* do in the event the *Project Manager* fails to reply? [2 marks]

The *Project Manager* replies within the time allowed but withholds acceptance, explaining that the *Employer* fell out with the Subcontractor on another project last year following unacceptable and unsafe workmanship.

- d) Can the *Project Manager* give this as a reason for withholding acceptance? [3 marks]

A Subcontractor's excavator breaks-down which delays planned Completion by 2 days and results in additional Defined Costs of £8,000. The *Contractor* notifies the event as a compensation event. The break-down occurred whilst the Subcontractor was excavating material that was the subject of an earlier compensation event implemented some 3 months ago.

- e) Is the *Contractor's* notification of a compensation event for the break-down of the excavator valid? Explain your answer. [4 marks]
- f) How should the *Project Manager* reply? What could the *Contractor* do in the event the *Project Manager* does not reply? [6 marks]

Section 1

Question 4

You are advising a local highway authority which is seeking a tender for an ECC main Option A contract. A number of the tenderers have not used NEC3 before and have written in with the following clarification questions. Prepare a brief advice note to the highway authority on how it might respond to each.

- a) **“We are most unhappy with clause 70.2 which states the title we have to our excavators, dumpers and other plant passes to the *Employer* once it is brought within the Working Areas. Title to plant should surely remain ours at all times!”** [5 marks]
- b) **“Can we remove the concrete and other materials that are excavated from the old highway - we have another project where we could make use of them? We note there may also be some Victorian fixtures relating to the old railway crossing and we would like to keep these too if we find them.”** [7 marks]
- c) **“Our head office is only 1 mile from the proposed Site. We would like to add it to the *working areas* and locate our project team in it. Would this be acceptable?”** [6 marks]
- d) **“Contract Data part two requires us to list items we wish to include in the Risk Register, however we note there is no pricing column. Can we add one so we have an agreed price to use in a clause 60.1(14) compensation event?”** [7 marks]

Section 2

Question 5

A contract is awarded using ECC Option C with secondary Options X2, X18, X20 and Y(UK)2. Within Contract Data part one there were some matters listed which the *Employer* wanted to be included in the Risk Register. One such matter was 'Subcontractor insolvency'. The *Contractor* added no further matters within Contract Data part two that he wanted to be included in the Risk Register.

- a) **What is the role of the Risk Register and what information does it contain?** [4 marks]
- b) **Who updates the Risk Register; when is it reviewed; and is there anything to stop the parties adding more columns to the Risk Register for things like severity and likelihood?** [5 marks]

One of the Subcontractors became insolvent during the *works*. The *Contractor* notified a compensation event under clause 60.1(14) stating this was an *Employer's* risk by virtue of listing this in the Contract Data part one.

- c) **As *Project Manager*, how do you respond and what are the other matters which concern you?** [6 marks]

Part way through the contract, the *Employer* wants to delete one of the Key Performance Indicators as it believes the target stated in the Incentive Schedule is now too generous.

- d) **Does the contract allow this?** [3 marks]

Without specific reference to this particular contract;

- e) **What are the processes for including, setting, reporting and paying for Key Performance Indicators?** [7 marks]

Section 2

Question 6

You are the *Project Manager* on the construction of a new asset for a client using ECC Option B including secondary Option X7.

- a) **If the Works Information is silent on the work the Contractor is to do by the Completion Date, how will you determine when Completion occurs?** [7 marks]

The end of the *Contractor's* financial year is fast approaching and the *Contractor* is very keen to get a Completion certificate from the *Project Manager*. Many members of the *Contractor's* staff have a good bonus resting on this. Late on a Friday afternoon, the *Contractor* considers the whole of the *works* to be complete and notifies this to the *Project Manager* in writing, asking for a Completion certificate. Most of the landscaping is still to be done, no as-built drawings have been submitted to the *Project Manager* and the *Project Manager* has heard from the *Supervisor* that quite a few tests on the new drainage system have failed.

- b) **What action do you take upon receipt of notification from the Contractor?** [7 marks]

A short while after receipt of the *Contractor's* notification, the *Employer's* asset operational team are demanding from the *Employer* that the asset is taken over as soon as possible, even though that team is aware that there are still some *works* to be carried out by the *Contractor* to achieve Completion.

- c) **What is the process for taking over parts of the works and what other parts of the contract are affected by take over?** [7 marks]
- d) **If third party damage occurs to a part of the works taken over by the Employer, what happens in this instance?** [4 marks]

Section 2

Question 7

You are the *Supervisor* on an ECC contract. You have been off from work poorly for the first couple of days this week and get back to find that the *Contractor* has carried out some modification works earlier than shown on the Accepted Programme.

- a) **Can the *Contractor* do this and why?** [3 marks]

You really wanted to observe the modification works and it's important to get this right. These works are now covered over and you are concerned as to the quality.

- b) **What parts of the ECC are available to you here to address your concerns?** [5 marks]
- c) **How does the *Supervisor* comply with the communication process in any actions he takes?** [5 marks]

You re-read the Works Information and note that the *Contractor* was obliged to take photographs of the steelwork before the modification works took place. You ask the *Contractor* for the photographs who says he couldn't take any as there had been a break-in on Site the night before and the camera was stolen. You would like to notify an early warning to the *Contractor* straight away to discuss this further; your concerns about the quality of the modification works are even stronger now.

- d) **Can the *Supervisor* notify an early warning in this instance?** [2 marks]
- e) **Describe the early warning process and how it might help the parties here.** [7 marks]

After Completion, the *Contractor* notifies the *Supervisor* of a Defect under clause 42.2. The *Contractor* advises that the replacement part will take some 6 weeks to be supplied and fitted. It is an imported item. However, the *defect correction period* is 4 weeks.

- f) **What is the position under the contract and how might any difficulty be overcome in practice?** [3 marks]

Section 2

Question 8

On an ECC Option A *Contractor*-designed contract some testing is undertaken on some access gates. These are installed in the *works* but a week later the *Supervisor* is reviewing the test results which show the gates are not in accordance with the requirements of the Works Information. Completion of the whole of the *works* is a few months away.

- a) **What happens now and are there any alternatives?** [10 marks]
- b) **Would your answer be any different if these were *Employer*-designed *works*?** [3 marks]

The *Contractor* seeks to appoint as a Subcontractor a firm they have worked with on a number of occasions as a Subcontractor. The *Project Manager* replies to the *Contractor* stating that he has never heard of this organisation before and is concerned as they are being considered for undertaking a key part of the *works*.

- c) **What could the *Project Manager* do regarding this proposed Subcontractor?** [6 marks]

The *Contractor* says that if the *Project Manager* objects to this proposed Subcontractor he would incur significant additional cost which he would seek to recover as a compensation event.

- d) **Could such additional cost be recoverable?** [6 marks]

Module 2 Points for answer

Section 1

- a)
 - *Project Manager* to administer not the *Employer*. [1 mark] [6 marks]
 - *Project Manager* would instruct a change to Works Information under clause 14.3. He would at the same time, although separately, notify a compensation event under clauses 61.1 and 60.1(1). He would also instruct quotations. [3 marks]
 - The *Project Manager* would not need to issue an early warning if he acted immediately. If the giving of the instruction was delayed, e.g. the work required some design, then the *Project Manager* should notify an early warning to the *Contractor*. [2 marks]
- b)
 - Yes, clause 63.6 allows for inclusion of risk allowances for cost and time for matters which have a significant chance of occurring and are at the *Contractor's* risk. This level of weather would not trigger a compensation event and so it is valid for consideration as it is the *Contractor's* risk. [2 marks]
- c)
 - No, the final paragraph in clause 63.1 prevents the *Project Manager* and the *Contractor* from playing out a 'wait and see' strategy. [1 mark] [7 marks]
 - In any case he must reply within 2 weeks. His proposed action is not in accordance with clause 10.1 or 62.3. [2 marks]
 - The objective is to achieve closure of the matter in a timely manner and move on. The date of the clause 14.3 instruction divides the work already done from the work not yet done. [2 marks]
 - In this case all the work will be done after the clause 14.3 instruction and so all of it must be assessed as forecast Defined Cost. The *Contractor* would be entitled to clause 63.6 risk allowances regardless of when the quotation was submitted or replied to. [2 marks]
- d)
 - The *Contractor* may remind the *Project Manager* under clause 62.6 by notifying him of his failure to reply. If the *Project Manager* does not reply to this notification within two weeks, his quotation is treated as if it was accepted. [3 marks]
- e)
 - The *Project Manager* may state assumptions under 61.6 when he instructs the *Contractor* to submit quotations. The contract does not provide for the *Contractor* to state assumptions. [3 marks] [7 marks]
 - Clause 65.2 states that once a compensation event is implemented it cannot be revised. [2 marks]
 - If the *Project Manager* had stated assumptions then a further, related compensation event would be notifiable (clause 60.1(17)) that corrects the assumption and would pick up the additional Defined Cost plus Fee. [2 marks]

Question 2

- a)
 - The *Employer* could add entries into the 'Additional *Employer's* risks' section of Contract Data part 1. This would make these risks the *Employer's* under clause 80.1 and they would also qualify as compensation events through 60.1(14). [2 marks]
 - The *Employer* could add additional compensation events through Z clauses. [2 marks]**[4 marks]**
- b)
 - i) Excavate to achieve a CBR of 5%. **[2 marks]**
 - ii) Excavate for pad foundations of 4m² to a depth of 1.8m.
- c)
 - If the Works Information is drafted on an outcome or performance basis then the depth of excavation would be at the *Contractor's* risk. [2 marks]
 - The *Contractor's* Activity Schedule Price would need to include for the risk that the ground was soft but only up to the point where the *Contractor* could notify a 60.1(12) compensation event. [2 marks]
 - In the event the Works Information specified a depth and the depth was not sufficient, then the Works Information would need to change and this would trigger a compensation event for the difference. [2 marks]**[6 marks]**
- d)
 - The *Contractor* is not stifled by the apparent method, order or sequencing that an imposed Activity Schedule may infer. [1 mark]
 - The *Contractor* may have different methods of working that may not relate to the activities the *Employer* schedules. For example the *Employer* may make reference to assembly on site, whereas the *Contractor* may plan to assemble units off site. [2 marks]
 - Cash flow. Leaving the *Contractor* to define the activities on the Activity Schedule will probably result in better cash flow. [1 mark]
 - Imposing the activities on the *Contractor* may mean certain activities are not completed within a payment interval. This may mean the *Contractor* has to build financing costs into his Prices. [2 marks]**[6 marks]**
- e)
 - The Price for Work Done to Date only includes Prices for completed activities. There is no concept of percentage complete activities. [2 marks]
 - If e.g. all reinforced concrete was included as a single activity, the *Contractor* would not be entitled to any payment in relation to any of this until he had completed all of it. [2 marks]
 - The Activity Schedule can be revised if the *Contractor's* planned method of work is changed at his discretion. However in this case there is no change to his method of working so it is unlikely the *Project Manager* would accept his revision. [3 marks]**[7 marks]**

Question 3

- a)
 - Reason given in clause 26.2 that their appointment will not allow the *Contractor* to Provide the Works. Marks are awarded for suitable example or acknowledgement of limitations. [2 marks]
 - Clause 26.3 and clause 13.4 - more information is needed to assess the submission fully. In reality 26.3 is more to do with the acceptance of the conditions of subcontract, but practically this amounts to the same thing. [2 marks]
 - Clause 13.8 - any reason, however withholding for a reason not in the contract may be a compensation event (clause 60.1(9)). [2 marks] [6 marks]
- b)
 - There is no period for reply given in clause 26 and so the *period for reply* would apply in accordance with clause 13.3. [2 marks]
 - The *period for reply* is identified in Contract Data part 1. [1 mark]
 - The *Contractor* should also show on each programme he submits for acceptance the date when he needs acceptances in order to Provide the Works. Subcontractor proposals would fall under this requirement in clause 31.2. [1 mark] [4 marks]
- c)
 - If the *Project Manager* fails to reply within the *period for reply* then the *Contractor* could notify a compensation event of type 60.1(6). [2 marks] [2 marks]
- d)
 - Yes, clause 13.8 allows the *Project Manager* to withhold an acceptance for any reason. [1 mark]
 - Withholding acceptance for a reason not in the contract may result in a compensation event – clause 60.1(9). [2 marks] [3 marks]
- e)
 - No. The *Contractor* is responsible for providing the works as if he had not subcontracted. Clause 26.1 further makes clear that the contract applies as if a Subcontractor's equipment were the *Contractor's*. [2 marks]
 - It would be interesting to see which of the compensation events listed under clause 60.1 that the *Contractor* felt had occurred. None of the listed compensation event would apply. [2 marks] [4 marks]
- f)
 - Under clause 61.4 the *Project Manager*, [1 mark]
 - should notify the *Contractor* of his decision within one week, [1 mark]
 - that the event is not one of the compensation events stated in this contract. [1 mark]
 - In the event he gets no reply the *Contractor* may notify the *Project Manager* of his failure. [1 mark]
 - If the *Project Manager* fails to reply within two weeks of this notification the event is treated as a compensation event and the *Contractor* may act as though he had been instructed to provide quotations. [2 marks] [6 marks]

Question 4

- a)
 - The *Contractor* has confused 'Plant' to mean his excavators and other machinery. [1 mark] [5 marks]
 - Plant and Materials is defined in 11.2(12) and are items intended to be included in the works. [2 marks]
 - The *Contractor's* excavators, dumpers etc. would be Equipment as defined in 11.2(7), so they need not worry. [2 marks]
- b)
 - Clause 73.2 states that the *Contractor* only has title to materials from excavation as stated in the Works Information. [2 marks] [7 marks]
 - If the *Employer* was happy for, or indeed wanted the materials to be removed, then the Works Information should clearly say so / require it. This may be desirable to ensure tender pricing is normalised. [2 marks]
 - The *Contractor* has no title to objects of value or historic or other interest within the Site – the railway fixtures would fall within this if found. [1 marks]
 - Clause 73.1 is very clear in this respect and the *Contractor* should notify the *Project Manager* of such objects when they are found and the *Project Manager* then instructs how to deal with them. [1 mark]
 - Such instructions may qualify as a compensation event under clause 60.1(7). [1 mark]
- c)
 - This is unlikely to be acceptable. The definition of Working Area in clause 11.2(18) only relates to those parts of the *working areas* which are necessary for Providing the Works and used only for work in this contract. [2 marks] [6 marks]
 - This makes it strictly possible to include the head off in the *working areas*, however specific parts of the head office would need to be identifiable as separate to the rest of the office for the defined term of Working Areas to apply. [1 mark]
 - This would likely be complicated and impracticable to administer – e.g. the use of the Schedule of Cost Components for things like, charges for utilities and deciding which of the *Contractor's* employee's costs are recoverable under the Schedule of Cost Components and which are deemed to be included in the Fee. [3 marks]
- d)
 - No. The Risk Register is a management tool not a contract document. It is not used to allocate risk. [2 marks] [7 marks]
 - Clause 60.1(14) has nothing do with the Risk Register. It relates to *Employer's* risks – clause 80.1 that may have been added to in Contract Data part 1. [2 marks]
 - NEC does not facilitate the use of provisional sums or provisional assessments for risk. It is essential the *Employer* considers and makes provision for contingency, but this is not reflected within the *Contractor's* pricing. [2 marks]

- Putting a value against risks identified in the Risk Register would only cause confusion. Compensation events are assessed in accordance with clause 63 and the Risk Register plays no part in this. [1 mark]

Section 2

Question 5

- a) **[4 marks]**
- The Risk Register is defined in clause 11.2(14). It is a register of the risks which are listed in the Contract Data (as noted by the *Employer* and *Contractor*) and the risks which the *Project Manager* or the *Contractor* has notified as an early warning matter.
 - The Risk Register includes a description of the risk and a description of the actions which are to be taken to avoid or reduce the risk.
 - The Risk Register is basically used as a risk management tool, consisting of the matters both Parties decided at tender stage, together with any subsequently notified early warnings. It is therefore a live document.
- b) **[5 marks]**
- Clause 16.1 states that the *Project Manager* enters early warning matters in the Risk Register, though is silent on who puts the Contract Data parts one and two matters on it.
 - At any risk reduction meeting, which can be initiated at any time by either *Project Manager* or *Contractor*, those attending make and consider proposals for how the effect of the registered risks can be avoided or reduced (clause 16.3, 1st bullet); they also decide which risks have now been avoided or have passed and can be removed from the Risk Register (clause 16.3, 4th bullet).
 - Clause 16.4 states that the *Project Manager* revises the Risk Register to record the decisions made at each risk reduction meeting and issues the revised Risk Register to the *Contractor*.
 - Clause 11.2(14) states a minimum amount of information that is to be shown on the Risk Register, two columns stating a description of the risk and a description of the actions which are to be taken to avoid or reduce the risk. Nowhere does it state that only these requirements must be stated, so it is up to the *Project Manager* and *Contractor* if they feel that other columns could be added to the Risk Register to allow them to better manage the contract.
- c) **[6 marks]**
- Any such matters stated in Contract Data part one and two do not contractually allocate such risk to either Party. In the main, clauses 60.1 (compensation events) and clause 80.1 (*Employer's* risks) are the parts of the contract that allocate risk to the Parties.
 - If the *Project Manager* decides that the event notified by the *Contractor* is not one of the compensation events stated in the ECC (which is likely in this case), he notifies the *Contractor* that the Prices, Completion Date and the Key Dates are not to be changed (clause 61.4).
 - The major concern here is of course the insolvency of the Subcontractor. Has there been an early warning to date by the *Contractor*? If not, why not The

Project Manager should then notify an early warning and instruct a risk reduction meeting. There are no substantial facts here for us to make any sensible conclusions. But other issues may include; is the work on the critical path; can a replacement Subcontractor be appointed quickly; might there be any additional Defined Cost; are there any Disallowed Cost; failure by the contractor to notify an early warning; and so on?

- d) • The contract does not permit this. Clause X20.5 allows the *Employer* to add a Key Performance Indicator and associated payment to the Incentive Schedule but may not delete or reduce a payment stated in the Incentive Schedule. [3 marks]
 • The *Employer* therefore should be satisfied at tender stage that the target itself is realistic but also that the payment stated is appropriate.

- e) • Key Performance Indicators (KPIs) are included in the contract if secondary Option X12 or X20 is stated in Contract Data part one, 1st bullet. With Option X12, they are a sub-provision within the partnering provisions. [7 marks]
 • If X12 is included, the KPIs are set at tender stage by the *Employer* and a Partner (which may be the *Contractor* in our case) is paid the amount stated in the Schedule of Partners if the target stated for a KPI is improved upon or achieved. A KPI and associated payment to the Schedule of Partners may be added, but a payment stated in the Schedule of Partners may not be deleted or reduced. There are no KPI reporting provisions in Option X12 for the KPIs. The payments are made as part of the 2nd bullet in clause 50.2 when assessing the amount due.
 • If X20 is included, the KPIs are set at tender stage by the *Employer* and the *Contractor* is paid the amount stated in the Incentive Schedule if the target stated for a KPI is improved upon or achieved. A KPI and associated payment to the Incentive Schedule may be added, but a payment stated in the Incentive Schedule may not be deleted or reduced. At the intervals stated in the Contract Data, the *Contractor* reports to the *Project Manager* his performance against each of the KPIs and include forecast final measurement against each indicator. The payments are made as part of the 2nd bullet in clause 50.2 when assessing the amount due.

Question 6

- a) • Completion is a core clause and is defined in clause 11.2(2). [7 marks]
 • Usually, for Completion to take place, the *Contractor* must have done all the work which the Works Information states he is to do by the Completion Date. The *Contractor* must also have corrected notified Defects which would have prevented the *Employer* from using the *works* and Others from doing their work.
 • In this case the Works Information does not state what work the *Contractor* is to do by the Completion Date and therefore Completion is when the *Contractor* has done all the work necessary for the *Employer* to use the *works* and for

Others to do their work. This is stated in clause 11.2(2).

- The *Project Manager* will need to decide, in accordance with clause 10.1 and 11.2(2):
 - what work is necessary to be done for the *Employer* to use the *works* and
 - what work is necessary to be done for Others to do their work.
 - Clearly there is a degree of subjectivity in the fall-back position of clause 11.2(2) and it would likely be far better for all if the requirements for the state of Completion were particularised in the Works Information at tender stage.
 - Some thoughts for the *Project Manager* would be:
 - are as-built drawings or O&M manuals necessary for the *Employer* to use the *works*?
 - is it clear what work Others will be doing and therefore what work the *Contractor* must do in advance?
 - The key word here is necessary, not desirable.
 - The *Contractor* does not need to notify the *Project Manager* that he considers Completion has been achieved, instead it is up to the *Project Manager* by clause 30.2 to decide the date of Completion.
- b) **[7 marks]**
- This is not a valid notification under the contract. Clause 30.2 required the *Project Manager* to decide the date of Completion.
 - As explained in part a of this question, in this case the Works Information does not state what work the *Contractor* is to do by the Completion Date and therefore Completion is when the *Contractor* has done all the work necessary for the *Employer* to use the *works* and for Others to do their work. This is stated in clause 11.2(2).
 - So the sorts of questions here for the *Project Manager* to answer are:
 - Can the *Employer* use the *works* without the landscaping or the as-built drawings being done? 'Maybe' springs to mind here, but it's difficult to guess for example the scale of landscaping here.
 - Can the *Employer* use the *works* even though there it seemed to be problems on the drainage system? On the face of it 'no' surely is the answer here, but again we do not have sufficient facts here to make a sensible decision.
 - It is not clear from the facts just how substantial these problems are but on the face of it Completion does not seem to have occurred.
 - It seems there might be a mis-understanding about what Completion looks like in the absence of clear requirements in the Works Information. Further, the drainage problems may delay Completion so the prudent course of action for the *Project Manager* would be to notify an early warning and hold a risk reduction meeting as soon as possible. Whatever decisions are made can be actioned by the parties and the *Project Manager* would be in a better position to respond to the Completion certificate request from the *Contractor*.
- c) **[7 marks]**
- Takeover is detailed in clause 35.
 - The *Employer* may use any part of the *works* before Completion has been

certified. This will result in takeover of that part occurring unless there is such a reason stated in the Works Information or it suits the *Contractor's* method of working. This is stated in clause 35.2.

- Assuming the take over goes ahead, the *Project Manager* certifies the date upon which the *Employer* takes over those parts of the *works* and its extent within 1 week of that date (clause 35.3).
- If the *Project Manager* certifies takeover of a part of the *works* before both Completion and the Completion Date then this will be a compensation event under clause 60.1(15). And the Contractor would be entitled to an allowance for any effect this has on the Prices and the Completion Date.
- As a result of such take over, clause X7.3 requires the *Project Manager* to decide if the amount of delay damages should be reduced (which would cover the event of delay in completing the remainder of the *works*). The adjustment is made according to the benefit to the *Employer* of taking over the part of the *works* as a proportion of the benefit to the *Employer* of taking over the whole of the *works* not previously taken over.
- An *Employer's* risk (in clause 80.1 but note there are a few exceptions) is loss of or wear or damage to the parts of the *works* taken over by the *Employer*. Until that point such responsibility sat with the *Contractor*. There is therefore a change of risk profile as a result of, and at the point of, take over.
- From a practical point of view if takeover of parts of the *works* is definitely required by the *Employer* then the sensible approach would be for the *Project Manager* to notify an early warning under clause 16.1. A risk reduction meeting should be held to ensure take over can be safely and properly achieved without too much of an impact upon the *Contractor*.

- d)
- There is no evidence that the *Contractor* is responsible for third party damage.
 - Any loss of or wear or damage to the parts of the *works* taken over by the *Employer* (with a few stated exceptions) will be an *Employer's* risk under clause 80.1. We are also assuming here that the *Contractor* in no way caused or contributed to the third party damage.
 - Clause 82.1 states the *Contractor* promptly replaces loss of and repairs damage to the *works*, Plant and Materials. This responsibility for the *Contractor* runs until the Defects Certificate has been issued and applies unless otherwise instructed by the *Project Manager*. So the *Project Manager* has some flexibility on who puts right such damage and can make an informed decision accordingly.
 - This will be a compensation event by virtue of clause 60.1(14) "an event which is an *Employer's* risk stated in the contract".

[4 marks]

Question 7

- a)
- The *Contractor's* main obligation is to Provide the Works in accordance with the Works Information (clause 20.1). If there is a constraint in the Works Information then such constraints must be complied with and shown on the Accepted Programme. There is no indication of any such constraint in this question so the *Contractor* is free to Provide the Works as he sees fit.
 - If the programme seems out of date then clause 32.2 allows the *Contractor* or the *Project Manager* to instigate the requirements for a revised

[3 marks]

- programme to be submitted.
- b)
 - The accepted programme should reflect the Contractors intentions however he is not obliged to follow them exactly.
 - At this moment, there are no indications of any Defects in the modification works.
 - The *Supervisor* has the power to instruct the *Contractor* to search for a Defect. This could include doing tests which the Works Information does not require. This is as stated in clause 42.1.
 - Clause 27.3 requires the *Contractor* to obey an instruction given by the *Supervisor* which is in accordance with the contract.
 - Should a Defect be found during the search, then the *Contractor* corrects under clause 43.1.
 - If the *Supervisor* instructs the *Contractor* to search for a Defect and no Defect is shown, then a compensation event arises under clause 60.1(10).
 - A possible further route would be to advise the *Project Manager* of the problem and ask the *Project Manager* to notify an early warning under clause 16.1. Perhaps the matter would be that due to this potential problem Completion could be delayed.**[5 marks]**
- c)
 - Communications are dealt with under clause 13.
 - Each communication, which includes instructions, is communicated in a form that can be read, copied and recorded. This is stated in clause 13.1. The *Supervisor* must follow this requirement and cannot give verbal instructions.
 - The *Supervisor* replies to a communication from the *Contractor* within the times stated in the contract and if none are stated, within the *period for reply*. This is as stated in clause 13.3.
 - The *Supervisor* should note that any notifications which the contract requires are communicated separately from other communications, clause 13.7.**[5 marks]**
- d)
 - Clause 16.1 names only the *Contractor* and the *Project Manager* as being able to notify early warnings under the contract. The *Supervisor* would have to speak with the *Project Manager* and get him to notify any such early warnings.**[2 marks]**
- e)
 - The early warning process is detailed in clause 16.
 - Clause 16.1 covers the matters that give rise to early warnings that must be notified by the *Project Manager* and *Contractor* as opposed to those only notified by the *Contractor* if he so chooses. It is for the *Project Manager* to enter each early warning in the Risk Register
 - Either the *Project Manager* or the *Contractor* may instruct the other to attend a risk reduction meeting, under clause 16.2.
 - There are 4 stated actions in clause 16.3, the most important being making and considering proposals for how the effect of the registered risks can be avoided or reduced and seeking solutions that will bring advantage to all those who will be affected.
 - In clause 16.4 the *Project Manager* revises the Risk Register to record the decisions made at each risk reduction meeting.
 - The sort of discussions would most likely concentrate on the technical aspects of this problem. In the absence of any photographic records, what do people recall as the state of the existing works when they were uncovered and before the modification took place? How was the**[7 marks]**

modification works carried out? Were any additional tests carried out by the *Contractor* on these works that were not required in the Works Information? Perhaps the importance of these modification works need to be explained to all to help understand what might happen if they were not properly constructed. As a result of answering these sorts of questions, then those attending the risk reduction meeting would decide what can be done to solve any problems that will bring advantage to all those who will be affected.

- f)
- Clause 43.4 should help in this scenario. It is for the *Project Manager* to arrange for the *Employer* to allow the *Contractor* access to and use part of the *works* which the *Employer* has taken over. The point being that after take over the access to the *Contractor* is effectively revoked.
 - There is no obligation to follow the accepted programme exactly as it is written.

[3 marks]

Question 8

- a)
- The cause of the fault could be design, materials or workmanship, for example. As the design is carried out by the *Contractor* then the Defect would seem to be the *Contractor's* responsibility. There is no need for the *Supervisor* to instruct the *Contractor* to search for a Defect as this has been established through the testing process. It appears that there is a Defect under clause 11.2(5).
 - It could be that an early warning (under clause 16) might also be prudent here, especially as Completion is approaching. It's difficult to appreciate the scale of the problem here but these are the sorts of things running through the minds of the parties.
 - The *Supervisor* should notify the *Contractor* of the Defect, and the *Contractor* is required to correct it before the end of its *defect correction period*. This period begins at Completion for Defects notified before Completion. An exception may be where the failure is so serious that the *Employer* is prevented from using the *works*, as clause 11.2(2).
 - If the *Contractor* does not correct a notified Defect within its *defect correction period*, the *Project Manager* assesses the cost of having the Defect corrected by other people and the *Contractor* pays this amount. The *Employer* is not obliged to have the Defect actually corrected by this method.
 - As an alternative to the above, the *Project Manager* and *Contractor* may each propose to the other that the Works Information should be changed so that a Defect does not have to be corrected, under clause 44.1. If the proposal is acceptable under clause 44.2, the *Project Manager* gives an instruction to change the Works Information, the Prices and the Completion Date accordingly.
- b)
- If the *works* were *Employer*-designed, the *Supervisor* and *Contractor* would act in the same way as described above if the Defect was caused by or the responsibility of the *Contractor*. The only concern from the *Employer's* perspective might be that the design of the gates in some way was the cause of the problem. If that was the case, then the *Contractor* would not

[10 marks]

[3 marks]

have done anything wrong and the *Project Manager* would need to give further instructions on how to deal with the matter. This would most likely result in a compensation event arising under clause 60.1(1).

- c) [6 marks]
- The *Project Manager* has the choice of rejecting or accepting a Subcontractor, as stated in clause 26.2.
 - In accepting the Subcontractor, the *Contractor* is still responsible for performing the contract as if he had not subcontracted, as clause 26.1.
 - Where the *Project Manager* does not want to accept the proposed Subcontractor, the *Project Manager* has contractual reasons for this. A reason as stated in clause 26.2 for not accepting the Subcontractor is that his appointment will not allow the *Contractor* to Provide the Works. There is no material evidence here to support this consideration.
 - Perhaps the *Project Manager* could find out more about the Subcontractor, the *Contractor* could evidence good previous workings or the *Project Manager* and *Contractor* could even both meet with them.
 - If the *Project Manager* has concerns about a Subcontractor he should not accept them but if he uses a reason for not accepting that is not stated in the contract then this will be grounds for a compensation event under clause 60.1(9).
- d) [6 marks]
- If the *Project Manager* withholds acceptance for a reason stated in the contract, it is not a compensation event. This is stated in clause 13.8, there would be no compensation event and no additional costs would be recovered by the *Contractor*.
 - The reason stated in clause 26.2 for not accepting a Subcontractor is that its appointment will not allow the *Contractor* to Provide the Works.
 - It would be prudent for the *Project Manager* to find out exactly what 'significant' means. Perhaps the criticality of the subcontract package and the importance of the works to the *Employer* might justify a more cautious approach and the *Employer* might be happy to pay more money in this instance.
 - Being led by the potential additional money is not a reason to accept (or not) the proposed Subcontractor in itself. If the *Project Manager* has not heard of this Subcontractor it is likely be a compensation event under clause 60.1(9).

Institution of Civil Engineers
Examination in Civil Engineering Law and Contract Management 2015
Module 3 (English and Scots Law)

Monday 15th June 2015

Time permitted: 14:00 to 17.20 (3 hours 20 minutes)

There are four questions in Section 1 based on NEC3 Contracts and four questions in Section 2 based on ICC Conditions of Contract.

Answer **Question 1** and one other from section 1 in the answer book provided (Blue book) *and* answer **Question 5** and one other from Section 2 in a **separate** answer book provided (Blue book).

All questions carry equal marks.

You may consult un-marked copies of the ICC Conditions of Contract Measurement version August 2011, ICC Conditions of Contract for Design and Construct version August 2011 and ICC Conditions of Contract Target Cost Version August 2011. The CECA/FCEC form of Sub-Contract, NEC3 Engineering and Construction Contract (ECC), NEC3 Engineering and Construction Subcontract (ECS), NEC3 Engineering and Construction Short Subcontract (ECSS), Statutes, CDM Regulations, CESMM4.

You should answer all questions assuming that the contracts were entered into before 1st September 2011. All questions involving NEC3 Contracts must be answered using the NEC3 Engineering and Construction Contract.

References to Cases and Acts should be quoted where possible.

Please indicate on the outside of the answer booklets whether your answers will be in respect of Scots Law.

Institution of Civil Engineers disclaimer; all names and characters in the question papers are fictional and any resemblance to any actual persons or businesses is purely coincidental.

Section 1 Compulsory

Question 1

You have been approached by the *Project Manager* of an NEC Project. It's an NEC Option A Contract between Blag-it Construction and Flog-it-at-Christmas Retail. The work began last June and was due to be finished by 17 March this year. It is now 1 May. Originally there were four activities for this £30m Contract:

1. Clear Site and Construct Foundations, £7.5m;
2. Complete Structure, £7.5m;
3. Complete Fit Out, £7.5m; and
4. Final Completion including commissioning, £7.5m.

The Contract includes Option X7 with £1m damages per week. There is one key date, which is completion of the facade at the front of the building by 26 November.

Trust on site is at a low ebb. Mr Chancer of Blag-it Construction asked for the activity schedule to be amended to include an additional 250 items. His justification for this was "*The cashflow is killing me.*"

Mr Flog, the Managing Director of the *Employer's* organisation has refused to countenance the changes saying that his bank had signed up for the lump sum payments in the activity schedule. He didn't provide any evidence of this and Mr Chancer told the *Project Manager* that it was none of his business anyway. The *Project Manager* has steadfastly refused to countenance the adjusted activity schedule and Blag-it Construction's applications for payment now contain a significant sum as interest on unpaid sums.

Mr Chancer has submitted an application for payment based on the revised activity schedule. It values the works at £45m. The application includes:

1. All work completed on the structure and much of the fit out including some commissioning of the lower floors; and
2. A number of compensation events, which the *Project Manager* is convinced have no validity. These events have been rejected by him but Blag-it Construction continues to maintain their claim, which includes the costs of a six month extension to the Completion Date.

The *Project Manager*, who is retained by Flog-it-at-Christmas Retail on an NEC PSC Option E Contract, has submitted applications for enhanced payment because of his extra time in dealing with this issue.

In addition, Mr Flog is demanding the *Project Manager* authorises additional payment for:

1. £2.5m as a consequence of the facade being late;
2. £4m for reimbursement of delay damages; and
3. The additional cost being incurred by the *Contractor* in Project Management.

Mr Chancer has said that payment for none of the 3 claims can be withheld because it is “*out of time*” and anyway, the damages cannot be withheld because of the outstanding compensation events.

The *Project Manager* asks your advice on how to proceed in relation to:

- a) The appropriate basis for payment on the activity schedule. **[7 marks]**

- b) The validity of withholding the sums for:
 - I. missing the Key Date in respect of completion of the facade; **[9 marks]**
and
 - II. delay damages **[4 marks]**

- c) How the *Employer* might recover the payment he is making to the *Project Manager* because of the hassle the latter is receiving from Blag-it Construction. **[5 marks]**

Section 1

Question 2

The Contract is an NEC Option B Contract. During the tender process the *Contractor* had submitted a list of a number of sub-contractors that he said he intended to use on the works. The impressive qualifications and experience of the sub-contractors influenced the *Employer's* decision to award the Contract to the *Contractor*. Work began on site. The *Contractor* provided a programme for acceptance promptly. At the first site meeting, the *Project Manager* noticed that one of the vans parked on the job was from one of the sub-contractors and that his men seemed to have begun work on site. The *Project Manager* asked the *Contractor's* foreman about this and was told the sub-contractor had started work. The *Project Manager* subsequently pointed out to the *Contractor* at the meeting the requirements to have sub-contractors approved.

After the *Project Manager* read out the provisions of Clause 26 in the Contract, the *Contractor* asked the *Project Manager*:

“What do you want me to do, send him home while you approve him?”

The *Project Manager* did not get drawn into this argument. Subsequently the *Contractor* provided a list of names of sub-contractors that they either were already using or intended to use. The *Project Manager* has noticed that the programme submitted by the *Contractor* does not explain which sub-contractor is doing what operation. He has refused to accept the programme for this reason.

The list provided includes two sub-contractors that have given the *Project Manager* concerns:

1. Bust-it is a sub-contractor that the *Project Manager* knows from previous work. They were not one of the sub-contractors that the *Contractor* had originally proposed and were doing work not intended to be sub contracted. The *Project Manager* understands them to be in a difficult financial state and his previous experience of them is that their workmanship is very poor.
2. Cheaper Blokes Limited – this sub-contractor is carrying out work which was on the pre-contract list of sub-contractors. It is for a very important part of the work but they were not the original sub-contractor proposed. There is no explanation as to why this sub-contractor is being proposed.

The *Project Manager* accepted the other sub-contractors on the list except for the above two, which he discussed with the *Employer*. The *Employer* is particularly frustrated that the *Contractor* intends to use a sub-contractor other than one that was proposed at tender stage.

The discussions with the *Employer* have been ongoing for two months. The *Project Manager* has now received a notification of a compensation event from the *Contractor* for failing to reply within the period stated. The *Project Manager* is worried about the effect of all this.

Explain what the *Project Manager* should do in relation to:

- | | | |
|----|--|-------------------|
| a) | The original list of sub-contractors and the programme rejection; | [10 marks] |
| b) | Bust-it; | [5 marks] |
| c) | Cheaper Blokes Limited | [10 marks] |

Section 1

Question 3

You are the *Project Manager* on an NEC Option C Contract for the construction of a new warehouse for a prominent local business, the Managing Director of which is a popular local politician and businessman. The works began inauspiciously with a tragic accident on site when a young operative was seriously injured. The HSE investigation identified operative error of specialist equipment as the cause and there was a considerable amount of discussion that the driver had been under the influence of alcohol when the accident occurred. The driver had a reputation as a hard drinker and after the accident was off work for “*stress related matters*” for a number of months. He returned to work recently and when you visited the site one morning you noticed that he smelled strongly of alcohol and you prevented him from starting work, telling him to go home. You followed this up with an email to the *Contractor* telling him that you did not want to see the operative back on site again. When you met with the *Contractor’s* agent, he protested that the man in question had been exonerated in an employment tribunal enquiry and that he had no other work for him. He also said that replacing the operative would take three or four days and that no work on site could continue during that time.

- a) **What are the contractual implications of telling the operative to go home, and how would you deal with this matter?** [10 marks]

You are walking around the site with the Managing Director of the *Employer* when he notices on site what he thinks is the foreman of one of the sub-contractors. The Managing Director takes exception to this man and indicates that he has had difficulty with the individual, having caused the Managing Director a lot of problems. He tells you to have him removed from site and makes it clear that you are to prevent him from working on the site again. The Managing Director’s parting shot is “*I will not have that man about me, get rid of him immediately.*” The man is actually the owner of the sub-contractor.

- b) **What would you do in relation to this matter and what ramifications do you expect?** [7 marks]

The Works Information requires the *Contractor* to design the office layout for the administrative areas of the building. The Works Information is framed in general terms and describes the number of offices required. The *Contractor* has submitted his design for acceptance with regularly sized offices that conform to the grid pattern of the building. You discuss the submitted design with the *Employer* and he states that his own office is too small and the offices for the junior members of staff are too large. He reminds you that this had been discussed pre-contract and you realise that it is a constraint that had not been properly expressed in the Works Information. The *Contractor* is pursuing you to have the design accepted since he wants to begin work in this area and he has already purchased modular internal frames for the design that he has submitted.

- c) **As the Project *Manager* how would you deal with this?** [8 marks]

Section 1

Question 4

A *Contractor* is awarded an NEC Option A Contract for the construction of a warehouse. The Contract includes secondary option X7 and the commencement date is 1 January. The interest rate in the Contract Data is set at 1% over base. The work is due to be complete on 30 June. The Contract progresses as follows:

- 1 January: *Contractor* starts work.
- 14 January: *Contractor* submits his programme for acceptance.
- 31 January: the *Project Manager* issues his First Certificate with the Price for Work done to date reduced by 25%. The note on the Certificate refers to Clause 50.3.
- 14 February: the *Project Manager* writes to the *Contractor* rejecting his programme. The *Project Manager's* stated reason is that "*The operational statements are rubbish and the HSE would never accept them. You haven't even said who some of the subbies are.*" The *Contractor* writes back shortly afterwards explaining that he cannot give the names of all the sub-contractors yet since they have not been procured and they have to do the method statements for their work. The *Project Manager* responds "*Well that's your problem then.*" The *Contractor* refuses to submit another programme because he says the *Project Manager* is wrong in his rejection. Consequently, the *Project Manager* continues to refuse to certify the full amount of Price for Work Done to Date.
- 14 March: The *Contractor* maintains he has reached the formation level during a site inspection for foundations, the *Project Manager* instructs the *Contractor* to excavate an extra depth of 3½ metres on average across the site. The *Project Manager* says that this is because the ground conditions are inappropriate. In the instruction, the *Project Manager* refers to the Works Information which requires the *Contractor* to dig to "*a proper formation level*". The *Contractor* maintains that the formation is fine at the level to which he had originally excavated and issues a compensation event notification. The *Project Manager* dismisses this. The *Contractor* refuses to comply with the *Project Manager's* instruction for two weeks over the Easter holidays.
- 1 April: the *Contractor* begins work on the additional excavation "*under protest*".
- 1 May: the *Contractor* refers the compensation event to adjudication and continues with the works.
- 1 June: the *Contractor* has excavated to the new formation level and in effect reaches the same position as he had been at on 14 March before the instruction was issued by the *Project Manager*. The programme is therefore 2½ months behind. On the same day the Adjudicator decides that the instruction was a compensation event. Consequently the *Project Manager* asks for a quotation for the compensation event.
- 21 June: the *Contractor* provides a quotation including for the 2½ months extension of time and his additional costs from 14 March.

- 14 July: the *Project Manager* rejects the quotation stating “*The programme to which it refers is not accepted.*” The *Project Manager* requires the *Contractor* to submit a revised quotation “*in accordance with the Contract*”. The *Contractor* points out that since there is no Accepted Programme this would be impossible and the *Project Manager* does not respond.
- 31 July: the *Contractor* discovers that his valuation is reduced by delay damages as well as the 25% that he has not certified since the beginning of the Contract.

The *Contractor* has come to you for advice. Advise him in relation to:

- a) **The withholding of money because of the rejection of the Programme.** [6 marks]
- b) **The *Contractor's* options in relation to the compensation event.** [14 marks]
- c) **The application of delay damages.** [5 marks]

Section 2 Compulsory

Question 5

An ICC Measurement Contract for a new car components factory requires the construction of twelve large reinforced foundations on various parts of the Site. The Employer is responsible for the design of the Works. The Contract drawings show the formation level for all the foundations at 50.000 metres AOD. During the excavation of the first foundation the Resident Engineer (RE) is concerned that the formation level has soft spots and may not be suitable for the loads to be imposed on it.

a) What should the RE do? [8 marks]

Following the excavation of additional trial pits at the twelve locations of the foundations the Contractor is instructed to excavate all foundations to a suitable level as instructed by the RE. The Contractor is asked to provide an estimate of the cost of the additional work on the assumption that all the foundations will be 2 metres deeper (48.000 m AOD). The Contractor provides an estimate based on daywork and the Engineer issues a variation in response. Subsequently, only half of the foundations are excavated to the new depth, three are 1 metre deeper and three are 1 metre shallower.

b) How should the Engineer value the additional work [8 marks]

The Contractor claims for a delay of 7 weeks made up as follows:

- 1 week – standing whilst awaiting instructions on the soft spot
- 3 weeks – excavating trial pits
- 3 weeks – additional excavation and backfilling

Payment of full site preliminaries is requested in addition to daywork payments for plant, operatives and materials used.

c) How should the Engineer proceed? [9 marks]

Section 2

Question 6

You are assessing tenders for the design and construction of a new electricity substation. The tender documents are based on the ICC Target Cost contract and your client has highlighted the fact that the site is subject to regular vandalism and theft.

The £5.5 million, most economically advantageous tender, submitted by Megatron Ltd, has two options for managing and insuring against this risk:

1. To maintain the Contractor's existing level of excess on their All Risk Insurance (£20,000 for each event) and provide 24 hour security at a cost of £2,000/week for the 40 week contract.
2. To take out an endorsement to the Contractor's All Risks Insurance for a lower level of excess for this contract (£5,000 for each event) for a one off premium of £100,000

The contract caps allowable insurance excess cost at £5,000/event.

- a) Advise your client of the benefits and risks of each of the two alternatives and make a recommendation with your reasons [13 marks]**

The specified transformers required for the substation are manufactured in France by the Employer's framework supplier. They have a manufacturing lead time of 10 months and will cost 1.5 million Euros. The Employer wishes the transformers to be ordered to avoid delaying his programme and proposes to issue a letter to Megatron Ltd saying that he intends to award it the contract and asking them to place an order for the transformers with its framework supplier.

- b) Draft a plan for the letter of intent setting down the essential elements of the letter and your thinking about them, for discussion with your client [12 marks]**

Section 2

Question 7

Explain to a prospective Employer the main areas of difference between the ICC Design and Construct version and the ICC Measurement version by reference to specific clauses. [25 marks]

Section 2

Question 8

Under an ICC Measurement Contract, the Contractor has completed the construction of a road tunnel underneath a major river using cut and cover and bolted segmental techniques. The Contractor was responsible for the design of the tunnel. A plastic slotted drainage pipe cast into the structural base of the 800m long cut and cover sections of the tunnel was deemed inadequate by the Engineer's Representative due to increased leakage of infiltration flows. As a result, the Engineer refused to issue a Certificate of Substantial Completion until the pipe was replaced with a drainage channel and heavy duty grating.

The Contractor proposed diamond saw cutting from the top of the base slab to remove the pipe but the Engineer instructed that the pipe should be reamed out. The Contractor registered his concerns about the instruction, complied with it for the first 100m but then stopped as extensive cracks were appearing in the slab. The Contractor reverted to his original method and carefully cut out the pipe for the remaining 700m. The base slab for the first 100m had to be broken out and replaced, involving extensive temporary works to support the walls and roof slab. The alterations have caused the Contractor to incur additional cost, delay and disruption.

- a) **Advise the Contractor of his entitlement under the Contract and prepare a draft letter with detailed heads of claim.** [12 marks]

The leakage from the bolted segmental section of the tunnel is greater than the specified amount and the sump pumping system designed by the Employer cannot cope with the inflow. The Engineer has recommended withholding the remaining retention monies (£7.5 million) for this failure to meet the specification. The Contractor has proposed upgrading the pumps and control system at an estimated cost of £500,000 and paying for the additional running costs estimated to be £10,000/year at current costs for 100 years, the design life of the tunnel.

- b) **Advise the Employer on his entitlements and the Contractor's proposal under the Contract.** [13 marks]

Module 3 Points for answer

Section 1

Question 1 Compulsory

This question deals with various issues concerning payment under Option A including the use of the activity schedule and the contractual systems for withholding payment.

- a) This question examines the requirements for amending the activity schedule and how Clause 54 operates to allow this. It allows the candidate to look at both Clause 54 and also the requirement on the *Project Manager* to consider the impact of any changes. The conclusion should identify that any changes should be related to changes in work method and that should be the basis for change, not cashflow. There is no obligation on the *Project Manager* to change the schedule. Candidates might discuss the role of risk management and early warning in this issue and the risk of influence on the *Project Manager* by the client. The better answers are likely to dismiss both. The answer should mention the Clause 50.4 requirement on the *Project Manager* to consider applications. **[7 marks]**
- b) This question deals with the *Project Manager's* duties concerning sums to be retained from the amount otherwise due to the *Contractor*. This includes examination of Clause 50.2, 3rd bullet, Y(UK) 2.3 and X7. Candidates should conclude that Y(UK)2 should be of little application if Clause 50.2 has been properly administered since the assessment (including deductions) is the notified sum and no further deductions are necessary.
- I. deals with missing conditions and Clause 25.3. The main points being: **[9 marks]**
- The date of the *Project Manager's* assessment, which needs to be reached within four weeks of achieving the condition. This date is not stated in the question so the candidates should explore the options; and
- The process the *Project Manager* should follow in carrying out the assessment including the burden of proof and the level of evidence required. The point being, the Contract is unclear.
- II. is a simple consideration of Clause X7 and should conclude that the *Project Manager* should assess the payment including the damages. The alleged uncertain status of the Compensation Events is contractually irrelevant. **[4 marks]**
- c) This question requires the candidates to examine potential breach of **[5 marks]**

contract by the *Contractor* and whether it has occurred. It also requires the candidate to consider the Contract's approach to set off in these circumstances and whether any sum that may be due is incorporated by the *Project Manager* under Clause 50.2 or directly by the *Employer* using Y(UK)2.

Question 2

This question concerns the Clause 26 process for appointment of sub-contractors as well as issues concerning the breakdown of administration of the contract around accepted programmes, compensation events and risk management.

- a) This concerns the need to submit sub-contractor names before their appointment and operational statements in the Accepted Programme. The answer should include some discussion of the implications of the Accepted Programme along with the information that the *Project Manager* may seek and should be explained by reference to Clause 31.2 and the powers of the *Project Manager*. The answer should also include identification that all that is required by Clause 26.2 is the name of the sub-contractor and discuss the test involved for rejection. **[10 marks]**
- The answer should conclude that the *Contractor* was wrong to appoint without acceptance but that the bar to acceptance is low although not automatic. The *Project Manager's* silence when faced with the question from the *Contractor* allows candidates to discuss estoppel. Candidates might also discuss remedies for the *Employer* if the *Contractor* ignores the requirement to have sub-contractors accepted, that failure to accept the programme does not seem justified might also be explored and its likely effects mentioned.
- b) This concerns the test for rejection and the *Project Manager's* knowledge associated with the sub-contractor. The *Project Manager's* other options should also be explored, including discussing the issue through Clause 16 not the management process. The answer should reach a reasoned decision, probably that rejection is not justified and would amount to an instruction which would be a Compensation Event. **[5 marks]**
- c) This concerns a number of related issues and centres on the status of the pre-tender submissions. Candidates should identify the importance of the named sub-contractors being in the Works Information and the implications of them either being in it (and so if the *Contractor* failing to use them is a defect) or not (and so what obligation is on the *Contractor* to use them or otherwise). Explanation of this should include issues related to both options. **[10 marks]**

Question 3

- a) The first part of this question deals with the relationship between Health and Safety Law and Clause 24.2. The answer should identify that the *Project Manager* has the right to exclude any employee of the *Contractor* under Clause 24.2 as long as he has stated his reasons. The answer should indicate that the *Contractor* may have an entitlement to claim a compensation event pursuant to Clause 60.1(1) since the exclusion is placing a constraint on the *Contractor* which did not previously exist. However, the *Project Manager* may decide under Clause 61.4 that the compensation event has resulted from a fault of the *Contractor* which may mean that time and money is not extended. Candidates should identify that two events have occurred:
1. The initial dismissal; and
 2. The subsequent ban on returning.
- The implications of each differ.
- The better answer may also include the level of evidence to be provided and examine how the cost of excluding the employee might give rise to an extension of time for completion and additional costs claimed by the *Contractor* and the extent to which recovery can be made for the people costs under the schedule of costs components as a Defined Cost under Clauses 11 to 23 of the NEC Option C Contract.
- b) This question provides a more focused reason for exclusion. The candidates should surmise that it is unlikely to be a fault of the *Contractor* and so will almost certainly give rise to a compensation event. The answer should include discussion of the relevant contractual clauses mentioned above and also the implications of the exclusion amounting to that of an entire sub-contractor. The better answers should identify that the loss of profit potentially suffered by the sub-contractor, if they were to claim under Clause 60.1(14) of the Contract, means that it would amount to a breach of contract but the only entitlement to cost under the Schedule of Costs components might exclude the usual route for a loss of profit claim. This will depend on the terms of the sub-contract.
- c) This looks at how the *Project Manager* operates the system for controlling design and whether it is a change of design. It is complicated by an element of culpability by the *Project Manager*. The answer should explore the obligation to accept the *Contractor's* design under Clause 21 of the Contract and that a failure to accept this for any other reason would become a compensation event under Clause 60.1. Alternatively the *Project Manager* should state the additional change in an instruction. The answer should include that the *Contractor* is in breach of Clause 21.1 since he has commenced obtaining the frames without the design being approved and explore whether that is recoverable as a compensation event or whether it is a disallowed cost under Option C.

Question 4

- a) This revolves around the *Project Manager's* obligation to accept the programme or otherwise. The candidates should identify that the programme is being rejected for a reason not stated in the Contract. Clause 50.3 does not require a programme to be accepted but merely to contain the information which the Contract requires. The candidates should identify that the naming of sub-contractors is not a requirement in Clause 31.2 and if it is in the Works Information, the *Contractor* should comply with it. Operational statements per Clause 31.2, 8th bullet, should be complied with. The withholding of the Price for Work Done to Date will entitle the *Contractor* to interest under Clause 51.2 and the best answers may discuss whether the interest rate is an adequate remedy for the Late Payment of Commercial Debts Act and consequently allow the *Contractor* an additional recovery. The candidates should also examine whether the *Project Managers* actions are a breach of contract by the *Employer* and discuss the implications of any notification being issued beyond the eight week period in Clause 61.3. They should also identify that there may be no loss to the Contractor beyond the finance charges, which would not be recoverable through the Schedule of Cost components anyway. The likely conclusion is that the *Contractor* is entitled to recover all of the additional monies plus interest. **[6 marks]**
- b) The proper quotation procedure requires the candidates to examine the detail of the rejection system for compensation events quotations. Candidates should examine the requirements of Clause 62 and note that the lack of an accepted programme makes this particularly difficult. Candidates should identify that the appropriate course of action is for the *Project Manager* to make his own assessment based on the programme that he has. Candidates may mention Clause 16.1 and the pointlessness of it following the adjudication process. The elements of the event need to be split between delay and cost for which the *Contractor* may be culpable (for example, not obeying the instruction for two weeks) and the rest. Burden and level of proof may be discussed and the relevant elements of Clause 63. **[14 marks]**
- c) The candidates should identify that the *Project Manager* is correct to withhold damages under X7.1 and that the appropriate remedy is through interest with repayments under Clause 7.3. Candidates may also note that the *Project Manager* has no option to withhold under this Clause since there is no “*on account*” compensation mechanism. The ridiculousness or otherwise of this should only be addressed in passing. **[5 marks]**

Section 2

Question 5 Compulsory

This is a question about the appropriateness of the use of dayworks and alternative ways of valuing additional works and consequential delays.

- a) The RE's actions will depend on the size and extent of the soft spots and the powers delegated to the RE by the Engineer (Clause 2(4)) **[8 marks]**

As the Employer is responsible for the design the RE should advise the Employer of the issue. This may be done through the Engineer. The designer may wish to visit the Site.

An instruction could be given to carry out further investigation and/or testing of the load bearing capacity of the formation. This could involve excavation of boreholes or trial pits. The original investigation should be reviewed in the light of the new information

If the soft spots are small an instruction might be given to excavate them and backfill them with suitable material. If the soft spots are large and extensive a lower formation level may be required for the foundations with backfilling to the original level or a change in design of the foundation. The latter could have implications on the design of the factory.

It may be appropriate to suspend the works whilst the designer decides what action is required (Clause 40).

- b) Daywork would not normally be an acceptable way of valuing this type of work, even if the Contractor is working to the guidance of the RE as far as depth to be excavated. Valuation should be carried out in accordance with Clause 52. **[8 marks]**

The Contractor should submit his estimate for the additional works based on rates or prices in the contract, his estimate of the delay and the associated costs. The Engineer should review the estimate and accept them or negotiate on the money and/or time submitted.

Failing agreement the Engineer can set the value of the variation or fix rates for the work

- c) The RE should ask the Contractor to produce a resourced and linked programme, with critical path to show the true extent of both critical and non-critical delays. **[9 marks]**

Upon receipt or beforehand if the Engineer has sufficient information already (unlikely) the Engineer would make an assessment of the delay caused by the additional works (Clause 44(2)), grant an interim extension of time for completion of the Works (Clause 44(3)) or inform the Contractor otherwise with reasons.

Assessments at the due date for completion (Clause 44(4)) and within 28 days of the issue of the Certificate of Substantial Completion for the Works follow (Clause 44(5)).

The length of the extension might not be for all of the 7 weeks claimed. If not the Engineer should explain why not to the Contractor.

Throughout this process the Engineer should keep the Employer informed about any additional costs or delays in completion of the Contract. The latter is particularly important as the Employer may be arranging for another contractor to build the factory and the site might not be available to hand over at the planned date.

Question 6

- a) This is a question about care of the works (Clause 21), insurance of the works (Clause 22), insurance excess (Clause 25) and understanding of the risks associated with alternatives offered during tendering.

[13 marks]

The Contractor has offered two options for dealing with the risk of vandalism and associated insurance.

Option 1 seeks to prevent vandalism by employing additional security. For the 40 week contract this would amount to £80,000. The contractor carries the risk of vandalism or theft as it is not listed as an Excepted Risk in Clause 20(2) and the cost of any incident of up to £20,000 would be borne by the Contractor in this case. In this option, the Employer carries the risk of extended security costs if the contract overruns and an extension of time is awarded. The benefit of this option is that the Contractor bears the risk of vandalism for events up to £20,000 and these costs are not recoverable from the Employer. It should be noted that this option would require an amendment to the contract conditions which currently state that insurance excess is capped at £5,000 per event.

Option 2 does cap the insurance excess at £5,000, meaning that an incident above £5,000 would be covered by the joint insurance required under Clause 22. However, the cost to the Employer is an additional £100,000 to cover the Contractor's additional insurance premium costs. If this premium is paid the Employer would not incur any further costs should incidents arise.

So, the Employer could pay £100,000 and be certain of not incurring any other costs or pay for security estimated at £80,000, but which could vary up or down. The breakeven point would occur if a 10 week extension of time was granted on this 40 week contract. How likely is that?

The recommendation should identify that the lower cost Option 1 comes with some risks and opportunities but if the Employer wants certainty of cost, Option 2 would give it.

- b) Letters of intent are not without risk to the parties and should not be entered into lightly. Faraday does not have to agree to the Employer's request. The contents should be discussed and agreed. The plan for the letter of intent should contain the following elements:

[12 marks]

- A statement that the Employer intends to award the contract to

Faraday Ltd, subject to any constraints such as signing of a formal contract agreement.

- The reasons for issuing the Letter of Intent (transformer long lead in time)
- Details of the work and/or services required – in a case like this the Employer would have been in discussion with his framework supplier for the transformer offloading and storage may be required.
- The cost of the work, possibly with a cap or limit, payment terms and assurance of payment for completion of the work whether or not a contract is awarded.
- Method of calculating Faraday’s costs and any agreed fee (overheads and profit)
- The timescale for completion of the work – in this case delivery of the completed transformer to site
- Any sureties if required – particularly if stage payments to the manufacturer of the transformer are involved
- Clarity on who bears the risk of currency exchange rates on the cost of the transformers, for example payment in Euros not £ Sterling
- Other terms and conditions, for example the terms and conditions of the main contract to be awarded could apply to the letter.

Question 7

- a) The primary difference between the two versions is that the Contractor is responsible for design in the Design and Construct (D&C) version whereas in the measurement version the Contractor does not have design responsibility for the permanent works unless specified.

[25 marks]

Definitions Clause 1

Clause 1(1) Definitions contain a number of items which indicate some of the key differences

Measurement Version	Design and Construct Version
Engineer and Engineer’s Representative	Employer’s Representative Contractor’s Representative
Specification, Drawings	Employer’s Requirements
Bill of Quantities, Tender Total	Contractor’s Submission

Employer’s Representative Clause 2

The Employer’s Representative administers the D&C version, compared to the Engineer in the Measurement version.

The Employer’s Representative has a duty to act impartially in respect of certain clauses as listed in Clause 2(6) whereas the Engineer must act impartially for all the terms of the contract.

Information and Interpretation Clauses 5, 6, 11

The D&C version is far more extensive on the provision of information from the Employer and the process for the Contractor to request further

information required for the design and or construction of the Works.

Contractor's Obligations Clause 8

The D&C version includes specific provisions around the Contractor's design responsibility, such as statutory design checks and quality assurance for both design and construction.

Adverse Conditions and Instructions Clauses 12, 13

The versions are similar in the obligations of the Employer's Representative and of the Engineer in these circumstances. However, in the D&C version the Employer's Representative does not have the authority to instruct the Contractor on how the physical conditions or artificial instructions are to be dealt with.

Alterations and Valuation Clauses 52, 53

Changes to the contract requirements in the D&C version are alterations whereas in the measurement version they are variations. In the event of failure to agree the valuation of alterations in the D&C version, the Employer's Representative makes a fair and reasonable valuation. In the Measurement version there are more prescriptive requirements for variations taking into account the nature of the work and the rates and prices in the Bill of Quantities.

Question 8

This question explores the implications of an Engineer instructing a construction technique and compromises that might be required on the contract.

- a) The Contractor has to determine whether the slotted pipe as originally constructed was fit for purpose. It might have been adequate with low infiltration flows but not now. If the Contractor accepts responsibility for increased leakage then the cost of upgrading the drainage system would fall to him. However, the Engineer instructed the reaming out of the pipe, which caused extensive damage to the structure and proved to be impractical. **[12 marks]**

Heads of Claim for additional costs due to instruction to ream out existing drainage pipe (Clause 53) would include:

- Direct cost of reaming out 100m of pipe
- Direct cost of remedial works caused by reaming out the pipe – replacement of base slab with new drainage channel and grating and temporary works to support sides and roof of the tunnel
- Prolongation evidenced by a revised linked and resourced Clause 14 programme with critical path
- Any disruptions arising from the previous heads of claim

Less credit for the cost of replacing the pipe with channel using the same methodology as the other 700m of tunnel.

- b) The Engineer's obligations to certify payment of retention monies are covered in Clause 60(6). The Engineer can only withhold certification of a sum which represents the cost of the remaining work or liability not the **[13 marks]**

£7.5 million recommended by the Engineer.

Assuming the Contractor has done everything possible to stop the leaks in the tunnel and the leaks will not reduce the life expectancy of the tunnel, the only practical solution is for the Employer to accept a variation in specification for a suitable price reduction. If the solution is accepted the Contractor would carry out the remedial work, namely larger sumps, new pumps and controls, at his own cost.

The Employer is best placed to calculate the additional operating costs (power consumption, equipment replacement and maintenance costs). Allowances should be made for future cost escalation.

The Contract does not envisage this situation, it requires the Contractor to replace the defective work but clearly it would be prohibitively costly to construct another tunnel and may well bankrupt the Contractor, which could put the Employer in an even worse position. What sometimes results instead is a negotiation between the Employer and the Contractor, with the Engineer advising the Contractor on the merits and whole life costs of the proposed solution.

Payment terms should also be negotiated, for example a single sum now for the Employer to take on the liability for the changes or annual payments with the risk of the Contractor defaulting? Surety in the form of a guarantee or bond from the Contractor should also be provided if a single sum is not agreed.