



- Candidates are required to answer **ALL** the questions.
- Questions must be answered in **SEQUENCE**. Ensure that your answers are clearly **NUMBERED**.
- This is a **CLOSED BOOK** paper. No notes, supplementary documents or online referencing is permitted.
- All answers must be **in your OWN words** where appropriate.
- Note that your answers may be submitted to a **PLAGIARISM detection service** if deemed necessary.
- Where answers are duplicated between candidates, plagiarised or copied, **ZERO** marks will be granted
- Total marks for paper one – **150 marks**
- Pass mark – a minimum of **50%** in each of the two papers
- Time allocation – **3 hours**

**QUESTION 1**

*10 marks*

1.1	Which form of South African law dictates the ownership of land	(2)
1.2	Which document serves as proof of land ownership?	(2)
1.3	Define the following property types in your own words:	
1.3.1	Sectional Title	(3)
1.3.2	Freehold / Full Title	(3)

**QUESTION 2**

*20 marks*

	You were approached by a potential client Mr Ebrahim Sithole to design a new factory. Note that this will be Mr Sithole's first construction project, and he has asked that you assist with determining the appropriate project scope.	
2.1	Identify FOUR (4) items you would include in a risk assessment of the new potential project to see if it is a good fit for your company (2 marks each).	(8)
	You have advised Mr Sithole that a Construction Health and Safety Officer will need to be appointed as a consultant on the project during work stage 5.	
2.2	List FOUR (4) duties of a Construction Health and Safety Officer (2 marks each).	(8)
	The civil engineer appointed on the project has advised Mr Sithole to implement Building Information Modelling protocol to streamline communications between the members of the professional team.	
2.3	In your own words explain what is meant by "Building Information Modelling". (4 marks for explanation)	(4)

**QUESTION 3**

*14 marks*

Mr Phill Daniels recently bought a property in Green House Residential Estate. Mr Daniels has approached you to provide the architectural services for the development of his new house.		
While you are commencing with your services, Mr Daniels contacts you for advice as he believes that the neighbour's boundary wall and carport have encroached onto his stand. He has asked that you appoint the relevant professional to provide a report to prove that the neighbour has encroached on his stand.		
3.1	Which document shows the registered site boundaries of Mr Daniels' stand?	(2)
3.2	Which professional would you approach to conduct a survey and produce the report?	(2)
Mr Daniels informed you that the Estate agent mentioned that there is a servitude that runs along the western boundary of the stand. He also requests some clarification on the implications of a servitude.		
3.3	List TWO (2) documents that could potentially be referenced to confirm the extent of the servitude registered on the stand (2 marks each).	(4)
3.4	In your own words, explain the following aspects of a servitude:	
3.4.1	Who owns the rights to a servitude? (3 marks)	(3)
3.4.2	What limitations may a servitude place on Mr Daniels' right to develop his property? (3 marks)	(3)

#### QUESTION 4

17 marks

The National Building Regulations and Building Standards Act (Act 103 of 1977) sets out requirements to ensure that buildings are designed and built in such a way that they provide a safe and healthy environment for their occupants.		
4.1	In your own words, explain the following options to ensure compliance to the minimum requirements prescribed by the National Building Regulations (NBR):	
4.1.1.	Rational Design (3 marks)	(3)
4.1.2.	Deemed to Satisfy method? (3 marks)	(3)
4.2	In your own words, give an example of when you would make use of a Rational Design instead of the requirements of the Deemed to Satisfy method to achieve approval. (4 marks for example)	(4)
4.3	Provide the full name and code number of the set of documents that sets out the minimum standards that need to be satisfied for the Deemed to Satisfy method?	(2)
4.4	You have decided to specify a new type of structurally insulated building panel for the walls of one of your designs. In addition to the Rational Design method, name the certificate that you would submit for local authority approval?	(2)
4.5	Provide the full name of the form required to accompany local authority submission to indicate whether the Deemed to Satisfy or Rational Design method was used to satisfy requirements and functional regulations?	(3)

<p>You have been appointed by Mr Bongani Zulu for full architectural services (stages 1 – 6) for the development of his new office complex in Umhlanga. The complex consists of six (6) identical, two-storey office units.</p>		
<p>The client has asked if there is a possibility for you to discount your architectural fees, as you only had to do one design for the six units.</p>		
5.1	Write a letter in response to his request with an explanation of how it would affect the architectural professional fees in each of the standard architectural work stages (3 marks for the explanation, 1 mark per stage).	(9)
<p><i>Bestest Build</i> has been appointed under the JBCC Principal Building Agreement (edition 6.2) to construct the office development.</p>		
<p>The contractor has sent an email stating they have encountered foundations of a previously demolished structure as well as large boulders that were concealed when they started to clear the site. <i>Bestest Build</i> has asked that you provide a contract instruction and approve additional fees that has resulted from this oversight from the architectural professional.</p>		
5.2	In your own words, compile a letter to respond to <i>Bestest Build</i> . Your letter should include the following in your own words:	
5.2.1	An explanation of a latent defect. (3 marks for explanation)	(3)
5.2.2	In your own words provide an indication of the extent of the latent defects liability period with references to the applicable clauses of the JBCC Principal Building Agreement. (1 marks clause, 2 marks for explanation)	(6)
<p>Mr Zulu indicates that he plans to sell the office complex after two (2) years. He asks whether the latent defects liability period would be transferred to the new owner.</p>		
5.3	Provide an answer to this question as well as an explanation in your own words. (3 marks for explanation)	(3)
<p>The contractor notifies you that four of his employees have tested positive for Covid. Herewith is an extract from his email sent on 16 September 2021:</p> <p style="padding-left: 40px;"><i>“Please note that on 15 September 2021 four of my employees received a positive Covid test. As a precaution, the rest of our team will be isolating as we make use of the same transport and work in close contact on a day-to-day basis.</i></p> <p style="padding-left: 40px;"><i>Please note that this serves as a notice that a claim for extension of time will be submitted.”</i></p>		
<p>In your own words, compile your letter of response to the contractor’s email that includes the following:</p>		
5.4	A summary of what is required of <i>Bestest Build</i> to submit a valid claim for a revision of the date for practical completion. Indicate the clauses you would expect them to refer to. (1 mark clause, 2 marks for explanation)	(10)
5.5	The client has indicated that he would like to appoint his cousin Benjamin Flynn to construct and install the landscaping.	
5.5.1	Identify which standard form of contract you would propose for his appointment. Provide the full name, edition, and year of publication.	(3)
5.5.2	Draft a contract instruction to the contractor <i>Bestest Build</i> , instructing him to appoint Benjamin Flynn’s company <i>Flynn Gardens (Pty) Ltd</i> for the landscaping. Indicate the relevant clauses. (2 marks clauses, 4 marks instruction)	(6)

**QUESTION 6**

15 marks

You were appointed by Mrs Karen van der Merwe for the full architectural services (stages 1 – 6) for her new house in *Pride Rock Estate*. *Kamari Construction* was awarded the tender and the Joint Building Contracts Committee (JBCC) Principal Building Agreement (edition 6.2) was duly signed. *Kamari Construction* is currently busy with the construction.

6.1	Mrs van der Merwe has contacted you to indicate that she has taken measurements on site and that her dressing room is 50mm smaller than on the plans.	
	With reference to the relevant JBCC PBA clause(s), who is responsible for ensuring that the building is set out according to the plans you have drawn up?	(3)
6.2	Over the weekend of the 31 <sup>st</sup> of July, one of her friends was walking through the site with her. Her friend and pointed out that it looks like the nails used in the timber trusses were not according to regulation. Herewith is an extract from Mrs van der Merwe’s email as received on Monday 2 August 2021:  <i>As you know, Kamari Construction has made numerous mistakes on my house. Not only did they set out the house incorrectly, but over the weekend it came to my attention that they fail to comply with certain building standards.</i>  <i>I would therefore like to inform you that I have lost confidence in Kamari Construction’s ability to complete my house. I would like to cancel the contract with immediate effect.</i>	
6.2.1	According to the JBCC PBA does she have a valid reason to terminate the contract? Provide the reasons for your answer with reference to the relevant clauses within the agreement. (1 mark answer, 3 marks explanation, 2 marks clause)	(6)
6.2.2	In your own words, write a letter in response to Mrs van der Merwe’s email, advising her on what the correct protocol would be to follow in this situation according to the JBCC PBA. Indicate the clauses within the agreement on which you rely. (2 marks clauses, 4 marks letter)	(6)

**QUESTION 7**

25 marks

You have been approached by Mr Aarav Kumar to provide the full scope of an architectural professional’s services (work stages 1 to 6) for the design and construction of a new office addition at his home. Mr Kumar asks if you could provide initial layout drawings at risk, which he could take to the bank to secure funding.

7.1	In your own words, write a response to Mr Aarav Mr Kumar to explain why you would prefer not to do work at risk. (2 marks per reason)	(4)
7.2	What type of agreement would you propose signing if you were to provide initial layout drawings to the client, which could be utilized to secure the relevant funds? Provide a reason for your answer. (2 marks answer, 2 marks explanation)	(4)
The client has indicated that even though they were able to secure funds for the project, the budget is very tight. He has indicated that he would like to appoint you for partial services only, for work stages 1 to 4.2.		

7.3	7.3.1	In your own words explain to the client why you would advise against continuing with construction without the oversight of a Principal Agent and architectural professional during work stages 5 and 6. (4 marks)	(4)
	7.3.2	Provide a breakdown of the essential functions usually included in work stages 5 and 6. (3 marks per stage)	(6)
7.4	If the client were to go ahead without a Principal Agent to administer the contract during stage 5, identify which standard form of contract you would advise him to use. Provide the full name, edition and year of publication.		(3)
7.5	In your own words, caution the client on who may suffer if a contract is poorly or unwisely prepared? (4 marks)		(4)

**QUESTION 8**

9 marks

You have been appointed to design an addition for John Watson at their house in Franshoek. At the first meeting, the client provided the previously approved plans for his house as well as a proposed brief for the intended additions.		
8.1	To whom does the copyright of the previous drawings and documentation belong? (2 marks)	(2)
8.2	What is your responsibility with regards to copyright towards the first architect? (3 marks)	(3)
You are currently employed at <i>Architects Are Us</i> as a registered architectural professional. You have just completed the designs of a house for Mr Ben Garcia who is a client of <i>Architects Are Us</i> . Over the weekend you run into Mr Garcia. He proposes that you should open your own architecture practice where after you should continue working on his project privately.		
8.3	In your own words, explain to him why this would not be possible, referring to the copyright of the work you have done while employed at <i>Architects Are Us</i> . (4 marks)	(4)

*end of examination paper two*