

THE PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY
THE DEPARTMENT OF ARCHITECTURE AND CONSTRUCTION
MANAGEMENT

FIRST SEMESTER 2021 EXAMINATION

BL 581: PROFESSIONAL PRACTICE

ROOM: STUDIO 1 (ST1)
DATE: Tuesday 08th June, 2021
TIME: 12:50 – 4:00pm
DURATION: 3 HOURS

Instruction to Examinee:

1. You have 10 minutes to read the question paper. You must not begin writing during this time.
2. **ALL ANSWER MUST BE WRITTEN ON THE ANSWER BOOKLET (S) PROVIDED.**
3. **WRITE YOUR NAME AND IDENTIFICATION NUMBER CLEARLY ON THE FRONT PAGE OF THE ANSWER BOOKLET (S) AND ATTENDANCE SLIP. DO IT NOW.**
4. No reference materials are allowed in the examination room.
5. There are six (6) questions in this examination paper. You are required to answer all questions.
6. Materials to be supplied by students:
 - a. Writing implements
 - b. Erasures
 - c. Correction Fluid
7. No mobile phone is allowed in the examination room.

TOTAL MARKS = 100

Question 1 (20 marks)

The Catholic Church in Wau, Morobe Province has engaged Golden Construction Ltd to build double classroom for its community school and a new house for the local priest. Construction is 90% complete and Golden Construction Ltd has started to clean up the site and getting ready to complete the buildings ready for the official handover, and leave the site in 4 weeks' time. The Principal of a nearby High School some 500m away from the church area is planning to construct two (2) double classrooms and (2) new dormitories for the students. All funds and drawings are in order. You have been engaged by the school as their consultant for their proposed infrastructure programme. The Principal has expressed his keenness to engage Golden Construction Ltd, to undertake the proposed works.

As a consultant to the school for this project you are required to advise the school board the most appropriate method of tendering for the project. Give reasons why you have selected the proposed form of tendering, discussing the advantages and disadvantages of the method you have selected.

Question 2 (20 marks)

The Walum Development Authority (WDA), a commercial arm of the Walum Local Level Government Council (WLLGC) has obtained funding of K800,000.00 for the construction of the new fresh produce market facility. In September 2020, they submitted their drawings done by a registered architect to the Building Board for approval and gained the necessary approvals in January 2021. The Council President proposed that his construction company would be able to complete the construction of the new facility within 6 months and at the same time save the Council K200,000.00 by building the new market for K600,000.00. If you were employed by the WLLGC as a Project Manager to manage this project, what would you advise the Council and the President before proceeding with the proposed works. To your knowledge the WLLGC/WDA has a poor reputation in implementing past projects. If the works were to proceed, what form of tendering process would you recommend and state the reasons for your recommendation.

Question 3 (10 marks)

Briefly outline why Continuous Professional Development (CPD) is considered so important within the construction industry.

Question 4 (10 marks)

Identify ten possible ways under which professional negligence could occur within a construction project.

Question 5 (20 marks)

Contractor Zb Ltd won a contract for the construction of a high set 5 bedroom house on post for the Lae Yacht Club Manager at Voco Point. The Construction Program shows that on the 11th June 2021, excavation will be carried out for the post footings. On Saturday 05th June 2021 ZB Ltd dug a few holes for the post footings and found out that 600mm below the ground is all solid rock throughout the site. Contractor Zb Ltd called up a meeting for Wednesday 09th June 2021 for a decision to be made. Concrete footings drawings are approved by the

Structural Engineer, Physical Planning Board and the Building Board is 600mm square x 700 deep.

You have been engaged as a Project Manager by Zb Ltd to manage the project. You went through the documents and found out that they have not allowed for it in their tender bid. It was not captured in the Provisional Sums.

As a Consultant to Zb Ltd what would you advice and recommend in terms of the works and costs to the management. Discuss also who will be meeting the cost. You will also advice Zb Ltd the way forward.

Give reasons of your advice and recommendation(s).

Question 6 (20 marks)

Contractor Zb Ltd has prepared a bid for the construction of a new 20x3 bedroom staff houses for Unitech. The Client requires that the Contractor submits a Contraction Program in the Bid.

You have been engaged as a consultant by Zb Ltd to be a Project Manager for a number of projects in Lae. On your first week in office, you were tasked to go through the Bid before submission the following day at 3:00pm. On that morning you received quotations from 3 suppliers for the hire of backhoes to carry out excavation work for the project which Zb Ltd has been waiting for 2 weeks.

When you went through the Construction Program prepared by ZB Ltd, you noticed that Zb Ltd showed in their Bid that excavation work will take 6 weeks.

Quote 1 from XL Strong Ltd

Machinery, operator and shipment at a cost of K1,400.00 per day.

Work will complete in 6 weeks.

Machinery will take a week to ship from Wewak to Lae.

XL Strong Ltd advised that the operator is currently on leave and it will take him 2 weeks to get from his remote island to nearby airport.

Quote 2 from Jay Earth Ltd

Equipment and Operator available at a cost of K1,500.00 per day.

According to Jay Earth Ltd, work will take 8 weeks.

Jay Earth Ltd is based in Mt Hagen.

Machine can be moved to Lae in 5 days based on weather. Transportation cost to Lae is included in the quotation

Quote 3 from Mango Construction

Equipment and Operator available at a cost of K1,600.00 per day.

According to Mango Construction, work will take 8 weeks

Jay Earth Ltd is based in Lae.

As a Consultant to Zb Ltd what would you advice and recommend to the management before the Bid is submitted to the Client at 3pm. Give reasons of your advice and recommendation(s).