

THE PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY
THE DEPARTMENT OF ARCHITECTURE & CONSTRUCTION MANAGEMENT
FIRST SEMESTER EXAMINATION
THIRD YEAR BACHELORS IN BUILDING
BL 332 – BUILDING SYSTEMS

Room: L2
Date: Tuesday 2nd November 2021
Duration: 3 hours
Time 12.50 to 4.00 pm

Information to Candidate

1. You have 10 minutes to read the paper. Do not begin writing during this period.
2. Fill in the Attendance Slip with your name and student I.D. number now.
3. There are fourteen (14) questions and you are to answer all questions.
4. ALL ANSWERS MUST BE WRITTEN IN THE ANSWER BOOK (S) PROVIDED.
5. Each Question must be answered starting on a New Page.
6. Notes, Textbooks and Electronic devices are **NOT ALLOWED** in the Exam Room.

WRITE YOUR NAME AND ID NUMBER CLEARLY ON THE FRONT PAGE. DO IT NOW.

TOTAL MARKS = 121 MARKS

- Question #1 (10 marks)
List the five (5) methods in deep excavation.
- Question #2 (10 marks)
Describe the two (2) methods of deep soil mixing.
- Question #3 (10 marks)
Differentiate between a shovel and a backhoe excavator.
- Question #4 (10 marks)
Differentiate between a percussion and a rotary grinding.
- Question #5 (5 marks)
Describe the technique of central concrete mixing.
- Question #6 (10 marks)
List and describe two (2) types of cranes in modified crane for heavy lifting.
- Question #7 (4 marks)
List two (2) types compressor application.
- Question #8 (10 marks)
Differentiate between a single and a double action steam pile driving.
- Question #9 (8 marks)
List the four methods in excavation support.
- Question #10 (10 marks)
Differentiate between a formwork and a falsework.
- Question #11 (3 marks)
Define these terminologies
- a) Quality assurance (3 marks)
 - b) Quality control (3 marks)
 - c) Total quality management (3 marks)
- Question #12 (5 marks)
What is the objective of a "Standard Technical Specification"
- Question #13 (5 marks)
What is the objective of the Health & Safety Regulation in construction?
- Question 14 (15 marks)
List and describe three (3) factors in plants, equipment and materials storage on site.

End of Exam