

**THE PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY**  
**THE DEPARTMENT OF ARCHITECTURE & BUILDING**  
**SECOND SEMESTER EXAMINATION**  
**FIFTH YEAR BACHELORS IN BUILDING**  
**BL 542 – BUILDING ECONOMICS**

Room: L2

Date: Monday 14<sup>th</sup> October 2022

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. ALL ANSWERS MUST BE WRITTEN IN THE ANSWER BOOK (S) PROVIDED.
4. Each Question must be answered starting on a New Page.
5. 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 = 400 MARKS**

**Question #1**

Differentiate between these design variables "storey height" and "total height of a building".  
(40 marks)

**Question #2**

Identify three (3) building elements and compare its' cost to a hospital facility against an educational facility.  
(120 marks)

**Question #3**

List and elaborate on four (4) key macro-economic objectives.  
(120 marks)

Design Process												
Cost Planning & Control												
Pre-contract Cost Control								Post Contract Cost Control				
Cost	Limit	Cost			Plan	Cost			Analysis			
A	B	C	D	E	F	G	H	J	K	M	N	
Inception	Feasibility	Outline Proposal	Scheme Design	Detail Design	Production Information	Bill of Quantities	Tender Action	Project Planning	Construction	Completion	Feedback	
Briefing		Sketch Plan		Working Drawings				Site Operations				
		Outline design plans		Detail design plans	Production information drawings		Contract drawings					
	Confirmation of cost limit	Prepare cost of possible solution	Cost checks						Cost monitoring			
		Agree outline cost plan		Final cost checks								

**Question #4 - Refer to above diagram**

List and identify four (4) categories in this diagram where data from a cost analysis may be utilized and elaborate on it.  
(120 marks)

End of Exam