THE PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY

DEPARTMENT OF ARCHITECTURE AND CONSTRUCTION MANAGEMENT

CM 124 – CONSTRUCTION ECONOMICS FINAL EXAMINATION - 2023

ARCHITECTURE 1 & CONSTRUCTION MANAGEMENT 1

TIME ALLOWED: 3 HOURS

INSTRUCTIONS TO CANDIDATES:

1. You have 10 minutes to read the Paper. You must not begin writing during this time.

2. There are four sections (A, B, C, D, E). Make sure that you have a total of 8 pages. The total marks awarded for this exam paper is out of 100.

3. ALL ANSWERS MUST BE WRITTEN IN THE ANSWER BOOKLET. Please, write your name and ID on the answer booklet now.

4. Text books and notes are not permitted in the examination room. Cheating is an offence and offenders will be penalized.

5. Mobile phones are not allowed.

SECTION A: MULTIPLE CHOICE QUESTIONS   (20 MARKS)

INSTRUCTION: Circle the letter of the most appropriate answer. If you make a mistake, put a cross (x) on the incorrect answer and circle the correct answer.

1. The supply curve has a positive slope because:

    a. economist have traditionally drawn it this way
    b. it should be distinguished from the demand curve
    c. at lower prices firms can produce more
    d. higher prices are necessary to cover higher costs of production

2. When there is a general increase in demand:

    a. the demand curve shifts toward the origin of the graph
    b. the demand curve twists clockwise
    c. the demand curve shifts away from the origin of the graph
    d. the demand curve cannot be plotted on the graph

3. When income increases more of these goods will be demanded. These types of goods are called:

    a. giffen goods
    b. complementary goods
    c. substitute goods
    d. normal goods

4. A dual economy refers to:

    a. double coincidence of wants
    b. an economy that contains both cash and barter system
    c. two affordable combinations of goods
    d. the government and private sector

5. Full employment means:

    a. all resources are underutilised
    b. labour is fully utilised
    c. increased in aggregate demand
    d. all factors of production are fully used

6. If the rate of interest decreases:

    a. less money will be borrowed
    b. people will be reluctant to borrow
    c. this has the effect of stimulating the economy
    d. this decreases money supply.

7. Liquid Assets Ratio:

    a. is the percentage of deposits that the banks must hold to meet customer demand
    b. is the percentage of lending that the banks make to the public
    c. cash that is available for deposit as 'special deposit'
    d. rate at which cash is converted into liquid form

8. Injections are:

   a. expenditures not spend directly on domestically produced goods
   b. consumption expenditure and investment expenditure
   c. savings and imports
   d. liquid as cash transactions

9. A deficit in the balance of trade means that

   a. the capital account in the balance of payment is positive
   b. exports are greater than imports
   c. imports are more than exports
   d. transfers and official reserve accounts are negative

10. Which of the following statement is true?

    a. A peak occurs at the start of an economic contraction
    b. A trough occurs at the start of an economic decline
    c. A peak occurs when economic activity starts to increase
    d. A recession occurs when economic activity starts to decrease

11. If the export and import index is 204 and 215 respectively, what is the terms of trade?

    a. 100
    b. 95
    c. 105
    d. 110

12. Frictional employment exists when:

    a. there is a fall in aggregate demand
    b. workers are seasonally unemployed
    c. workers lacked the skills necessary to be employed
    d. potential GDP exceeds real GDP

13. Reducing taxes would:

    a. increase revenue
    b. reduce per capita income
    c. decrease aggregate demand
    d. stimulate the economy

14. Opportunity cost is the

    a) same as economic cost
    b) best thing that you have chosen.
    c) same as dollar cost
    d) land, labour and capital

15. The Bank of PNG is responsible for the country's:

    a. fiscal Policy and monetary policy
    b. budgetary Policy only
    c. monetary policy only
    d. wage policy only

16. Inflation is:

    a. the general fall in the aggregate demand in an economy
    b. downward movement in the average level of prices.
    c. general increase in the price level
    d. necessary to deflate the economy

17. In this type of economic system, the government directs the allocation of resources:

    a. command economy
    b. capitalism
    c. laissez-faire economy
    d. a mixed economy

18. Producing above the production possibility frontier means that

    a. no productive resources are wasted
    b. resources are either use inefficiently or are under-utilized
    c. no output combinations can be obtained as there are not enough resources
    d. the output is attainable.

19. An example of tertiary production would be

    a. growing cattle
    b. tourism and hospitality
    c. Solomon tuna
    d. dam construction

20. Cheque deposits

    a. are also referred to as term deposit
    b. can be withdrawn at any time
    c. can be withdrawn when interest is due
    d. are narrow money

SECTION B: TRUE OR FALSE   **10 MARKS**

Write "T" for true and "F" for false on the space provided.

1. _____ The difference between a country's invisible exports and imports is referred to as balance of payments.

2. _____ Opportunity cost is sometimes referred to as economic cost.

3. _____ Macroeconomics deals with concerns such as the inflation and the level of employment.

4. _____ The law of diminishing returns states that in the short-run all cost are variable.

5. _____ Secondary production involves industries that provide services.

6. _____ In the capitalist economy the state owns the means of production.

7. _____ If demand for a good is perfectly inelastic that means e = 0.

8. _____ Leakages in the circular flow of income is equal to S+ T + M.

9. _____ Variable costs are constant regardless of the level of firm's output.

10. _____ A rise in the circular flow of income may result in increased unemployment.

SECTION C: SHORT ANSWER QUESTIONS   12 MARKS

1. List the four factor incomes paid to the households in the circular flow of income and expenditure: 4 marks

    a) _____

    b) _____

    c) _____

    d) _____

2. Which of the four factors of production are the following?   4 marks

    a)   Yonki dam _____
    b)   Papindo Trading Ltd _____
    c)   An Architect _____
    d)   Copper deposits at OK Tedi _____

3. List the four phases of the trade (or business) cycle: 4 marks
    a) _____
    b) _____
    c) _____
    d) _____

SECTION D: LONG ANSWER QUESTIONS   16 MARKS

Instruction: Write briefly to answer the following questions.

1. Briefly explain how the following instruments of monetary and fiscal policy can be used to reduced unemployment?   (10 marks)

    (a) Interest rate policy
    (b) Budget deficit

2. What is public finance?   (6 marks)

SECTION E: CALCULATIONS

42 MARKS

(12 marks)

Q1. Suppose you have been given the following information about the market for rental housing in your suburb.

Rent (Kina per month)	Quantity demanded	Quantity supplied
100	20, 000	0
150	15, 000	5, 000
200	10, 000	10, 000
250	5, 000	15, 000
300	2, 500	20, 000
350	1, 500	25, 000

(a) What is the equilibrium rent?
(b) What is the equilibrium quantity of rented housing?
(c) Now suppose that a rent ceiling of K150 a month is imposed in the housing market:
    (i)   What is the quantity of housing demanded?
    (ii)   What is the quantity of housing supplied?
    (iii)   Is there excess demand for or excess supply in this situation? and
    (iv)   What is the quantity of shortage or surplus?

Q2. Study the following demand schedule.

6 marks

A firm's demand schedule for tapes is as shown:

Price (K/Tape)	Quantity sold/day (Tapes/week)
9	8
8	12
7	16
6	20
5	24
4	28
3	32
2	36
1	40

REQUIRED: Use the point elasticity method to calculate the price elasticity of demand for the tapes indicated and interpret your result.

a) a fall in price from K9 to K8
b) an increase in price from K1 to K2

Q3. The table below shows the CPI for a country called Tropic Guinea. Use the base year to calculate the rate of inflation for years 2011 and 2012. (6 marks)

TROPIC GUINEA: Consumer Price Index: 2010 - 2013		
(1) Year	(2) CPI	(3) Inflation rate (% per year)
2010	100	
2011	130	....
2012	135	....
		....

Q4. The table below shows current price GDP. You are to calculate the GDP at constant prices, then interpret your results. Use the base year index to calculate for years 2011 and 2012.

6 marks

Year	GDP *market price (K' (millions)*	Price index	Constant GDP
2009 – 10	470 250	100	....
2010 – 11	487 350	120.9	....
2011 - 12	365 455	134.7	....

Q5. Use the value added approach to calculate GDP.

6 marks

Stages of production	Value of output (K)	Value added (K)
1. Logs	42 000	
2. Sawn Timber	48 000	
3. Table	68 000	

Q6. The following table shows the production possibilities for Port Land and New Found Land in a year. Determine the commodity that each country should produce. 6 marks

PRODUCTION POSSIBILITIES OF PORTLAND:

Copra   Pawpaw

40 units   0 units
0 units   120 units

PRODUCTION POSSIBILITIES OF NEWFOUNDLAND:

Copra   Pawpaw

25 units   0 units
0 units   50 units