

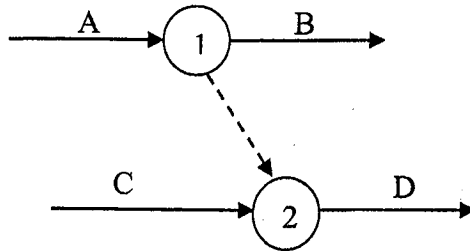
Project Management and Economics
 2nd Year 2nd Semester - 2015
 2015

(02).

Project Network is an arrangement of all activities in a project in their logical sequence and represented by diagram of nodes and arcs which usually starts from left and proceeding to the right.

(a). Explain project critical path. (02 Marks)

(b). Refer the following Activity On Arrow (AOA) network diagram and write down predecessors of activity "B" and "D".



(02 marks)

(c). Draw Activity On Node (AON) Network for the following project activity schedule.

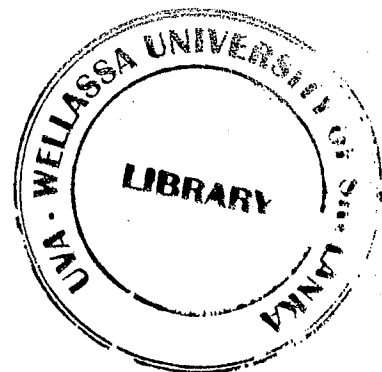
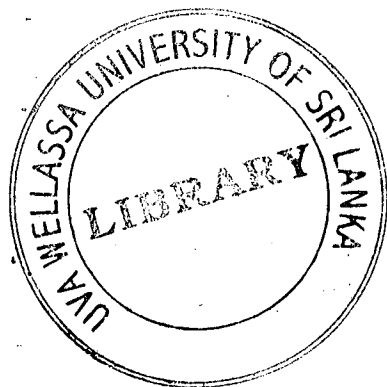
Activity	Preceding Activity
A	-
B	A
C	A
D	A
E	B
F	C
G	E
H	F
I	G,H
J	C
K	D
L	I,J,L

(12 Marks)

(Total 16 Marks)

20

20



(3).

(a). ABC (Pvt) Ltd is planning to automate their production process. Estimated useful life of the automated plant is 20 years and the company's maximum desired payback period is 7 years. Estimated Project Investment is Rs. 8,000,000.

Annual cash inflows and outflows associated with the automated production plant:

Annual cash inflow	Rs. 7,500,000
Annual cash outflows:	
Cost of raw material	Rs. 4,000,000
Salaries	Rs. 1,000,000
Maintenance & other expenses	Rs. 500,000

You are required to:

- (i). Calculate payback period of above automation project. (02 marks)
- (ii). Should ABC (Pvt) Ltd acquire this automation, according to the payback analysis? Justify your answer. (03 marks)

(b). Mackie (Pvt) Ltd is planning to purchase new machine to be attached with the main manufacturing plant. The machine will cost Rs.1,000,000 and will result Rs.500,000 net cash flow annually.

The useful life of the machine is 5 years. The management wants a 20% return on this investment.

You are required to;

- (i). Compute net present value (NPV) for above project. (05 marks)
- (ii). Should the machine be purchased? Justify your answer according to NPV analysis. (06 marks)

(Total 16 marks)

(4).

Project manager must have a combination of skills including technical credibility, administrative credibility, ability to detect unstated assumptions and resolve conflicts, as well as more general management skills.

- (a) Explain major tasks and roles of a Project Manager. (08 marks)
- (b) Describe "Matrix Project Organization" stating advantages and disadvantages of the structure. (08 Marks)

(08 Marks)

(Total 16 marks)

2015

(03). Market demand and supply for Fried Rice are given below

Price (Rs)	Quantity demanded (Qd)	Quantity supplied (Qs)
100	70	30
200	60	40
300	50	50
400	40	60
500	30	70
600	20	80

- i. Plot the market demand and supply in a graph and find the equilibrium price and the quantity. (2 marks)
- ii. If a price ceiling is imposed at Rs. 100, discuss the impact on Fried Rice market. (2 marks)
- iii. If a floor price is imposed at Rs 500, discuss the impact on Fried rice market (2 marks)
- iv. Due to a labour union action, supply of Fried Rice decreased by 20 units at each price. Plot the new demand and supply and discuss the changes in Fried Rice Market (4 marks)
- v. If government impose a specific tax of Rs 1.00 for each unit, find the new equilibrium price and quantity and discuss the impact on Fried Rice market. (6 marks)

(Total 16 marks)

(04).

Assume the consumption function for an economy is given by

$$C = 42 + 0.8Y_d$$

Where C = consumption and Y_d = disposable income.

The tax function is $T = 0.1Y$

and investment is fixed at 150 and government expenditure is fixed at 200.

- (a). Find the equilibrium level of output for this economy. (3 marks)
- (b). What is the government expenditure multiplier (income multiplier) in this case? (3 marks)

20

Now assume that the economy is opened and a foreign trade is introduced into the analysis. Exports are fixed at 103 and the import function is defined as $M=0.05Y$

(d). Find the new equilibrium level of output. (3 marks)

(e). What is the export expenditure multiplier (income multiplier) in this case? (4 marks)

(f). Is the government running a budget surplus or deficit at this level of output? (3 marks)

(Total 16 marks)

(5).

Briefly explain any **Four** of the following (4 marks for each)

- i. Opportunity Cost
- ii. Price Elasticity of Supply
- iii. Change in Demand and change in Quantity Demanded
- iv. Study of Macroeconomics
- v. Weaknesses in National Income Accounting
- vi. Different exchange rate regimes in Sri Lanka
- vii. Recent Economic Growth in Sri Lanka

(Total 16 marks)

