



ISHU IB DP Programme Entrance Test

Business and Management 30 min

Suparman Fish (SF)

Gepa Suparman owns and operates four fishing boats in Indonesia. There is a growing demand for canned (tinned) food, including cans of fish. Gepa wants to enter the secondary sector by opening a small factory producing cans of fish.

Gepa’s business will be called *Suparman Fish (SF)* and will be a private limited company. Gepa will own all of the shares. The factory will be located in a village three miles from the harbor. Because unemployment is high in the village, Gepa should easily find workers for the new factory. In addition to the manager’s salary, workers’ wages, and the cost of fish, supplies, and cans, *SF* will have the semi-variable cost of electricity.

Gepa has prepared a four-month cash-flow forecast based on the following information:

- opening balance month 1: \$ 15 000.
- month 1: sales revenue of \$ 1000, increasing by 20 % per month.
- manager’s salary: \$300 per month.
- workers’ wages: \$ 175 per worker per month.

Month	1	2	3	4
Number of workers	2	3	4	5

- variable costs (fish, supplies, and cans) are equal to 40 % of sales revenue.
- semi-variable cost of electricity: fixed cost of \$100 per month, plus a variable cost of \$0.10 per kilowatt hour (kwh). Month 1 usage: 100 kwh, increasing by 10% each month.

	Month 1	Month 2	Month 3	Month 4
Sales revenue	1000.0	1200.0	1440.0	1728.0
Payments				
Manager’s salary	300.0			
Workers’ wages	350.0			
Variable costs	400.0			
Electricity fixed	100.0			
Electricity variable	10.0			
Total payments	1160.0			

1. Compute payment for months 2 – 4 and input them into the table above using information from the case.
2. Draw a graph, representing total payments dynamics for Superman Fish.