HW - Chapter 7 - Capital Budgeting- Q12

Determination of Cash inflows

Particulars	(Rs.)
Sales Revenue	1,20,000
Less: Operating Cost	22,500
	97,500
Less: Depreciation (Rs. 2,00,000 – Rs. 18,000)/8	22,750
Net Income	74,750
Less: Tax @ 30%	22,425
Earnings after Tax (EAT)	52,325
Add: Depreciation	22,750
Cash inflow after tax per annum	75,075
Less: Loss of Commission Income	36,000
Net Cash inflow after tax per annum	39,075
In 8th Year :	
New Cash inflow after tax	39,075
Add: Salvage Value of Machine	18,000
Net Cash inflow in year 8	57,075

(i) Calculation of Net Present Value (NPV)

Year	CI after tax	DF @10%	PV of Cash inflows (Rs.)
1 to 7	39,075	4.867	1,90,178.03
8	57,075	0.467	26,654.03
			2,16,832.06
		Less: Cash Outflows	2,00,000.00
	NPV		16,832.06

(ii) Calculation of Profitability Index

Profitability Index= PV of inflows ÷ PV of outflows = 2,16,832.06 ÷ 2,00,000 =1.084

Advise: Since the net present value (NPV) is positive and profitability index is also greater than 1, the hospital may purchase the machine.