HW - Chapter 7 - Capital Budgeting- Q14

Calculation of the NPV

Year	1	2	3	4	
Sales	966	966	1254	1254	
Material Consumed	-90	-120	-255	-255	
Wages	-180	-195	-255	-300	
Other expenses	-120	-135	-162	-210	
Factory overheads (insurance only)	-90	-90	-90	-90	
Contract Cost Saved	150	150	150	150	
Loss of rent on (opportunity cost)	-30	-30	-30	-30	
Depreciation (as per income tax rules)	-150	-114	-84	-63	
PBT	456	432	528	456	
Profit after Tax (PAT) = PBT x 70%	319.2	302.4	369.6	319.2	
(+) Depreciation'	150	114	84	63	
Cash Inflow after Tax	469.2	416.4	453.6	382.2	
x Discounting Factor	0.877	0.769	0.674	0.592	
Present Value	411.488	320.2116	305.7	226.3	1263.689
(-) Capital Cost					-600
(-) Material Purchased on 1st Day					-60
(-) Compensation Paid					-90

(+) Scrap Value (15 x 0.592)	8.88
(-) Extra Material Purchased at end of 1st year (120 + +165-60) = 105 x 0.877	-92.085
(+) Saving in Material Purchased in Last year (165*0.592)	97.68
Net Present Value	528.1638

1. Material of Rs. 60 was purchased on 1st Day
2. Material consumed for 1st year was 90 lakhs, which will be allowed for tax purposes. Although for cash flows, we need to think, closing stock was 165 and opening stock was Rs. 60. Hence, the company must have paid Rs. 105 extra in year 2.
3. In year 2 and 3, Closing andopenening stocks were the same. Hence no extra cost.
4. In the last year, Closing stock was NIL. Hence, consumption of 255 will be out of opening stock of Rs. 165. That must be less cash flow will be less.
5. Idle time payments means, this must amount was any case committed to be paid. Nothing extra will be paid because of this proposal. That amount becomes irrelevant.
6. Capital gain tax has been ignored. Hence we have assumed that there will be other assets in the block.