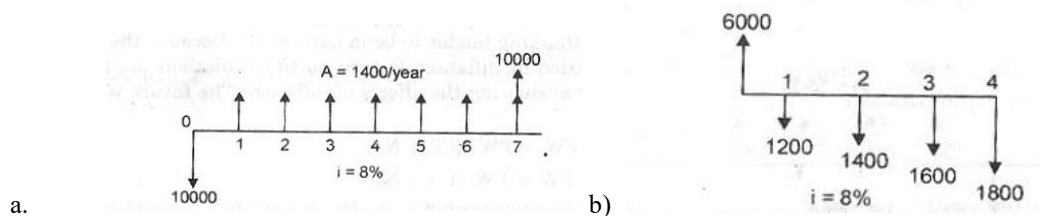


1 Determine the PW of the following proposal when the MARR is 15% also depict cash flow diagram for the same.

	Proposal A
First cost	10000
Expected lift	5 years
Salvage value	-1000
Annual receipts	8000
Annual expenses	4000

2 Find the Future Worth in each of these situations



3 Evaluate machine XYZ on the basis of Pw method when MARR 12%

	Machine XYZ
FIRST COST	13000
USEFUL LIFE	15 YEARS
SALVAGE VALUE	3000
ANNUAL OPERATING COST	100
OVERHAUL END OF 5 <sup>TH</sup> YEAR	200
OVERHAUL END OF 10 <sup>TH</sup> YEAR	550

4 A construction company is going to purchase several light-duty trucks. Its MARR before taxes is 18%. It is considering two makes, and the following relevant data are available

i. Which type of truck should be selected when the repeatability assumption is appropriate?

	Godrej	Reliance
Investment (first) cost	10000	15000
Salvage value at the end of life	2000	3000
Annual out of pocket cost	4000	3000
Useful life	3 years	5 years

5 Autocon company is evaluating three robots for possible use in its assembly operations (only one robot will be purchased). Data associated with three robots are as follows:

	Robot A	Robot B	Robot C
First cost Rs.	55000	58000	53000
Operating & maintenance cost rs.	3000/year	4500/year	4000/year
Expected incomes	40000/year	44000/year	38000/year

Estimated salvage rs.	4000	6000	4000
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6 Certain service can be performed satisfactorily either by process R or S has a first cost of rs.8000 an estimated service life of 10 years no salvage value and annual net receipts of rs.2400 the corresponding figures for process s are 18000 after 20 years salvage value equal to 20% of first cost and rs.4000. assuming min attractive rate of return of 15% before income taxes. Find the FUTURE of each process and specify which you would recommend. Use the repeatability assumption

	PROCESS R	PROCESS S
FIRST COST	8000	18000
LIFE	10	20
SALVAGE VALUE	0	3600
ANNUAL NET RECEIPTS	2400	4000
I	15	15
F	?	?

7 Monthly amounts of rs.200 each are deposited into an account that earns 12% nominal interest, compounded quarterly. After 48 deposits of rs.200 each, what are the future equivalent worth of the account? State your assumptions.

8 What is the maximum amount that you could afford to bid for a bond with a face value of res.5000 and a coupon rate of 8 % payable semiannually, if your minimum attractive rate of return is 10%? The bond matures in 6 years.

9 The purchase of new bull will reduce the labour cost for maintenance by rs.15000 per year. The price of the bus is rs.93000 and its operating costs will exceed those of present equipment by rs.250/month. The salvage value is expected to be 18000 in 8 years. Should the bus be purchased when the current interest rate is 7%?