TEST SERIES
CAPITAL BUDGETING

(Max. Marks- 30)

Q1. A Company is currently considering the replacement of a machine originally costing Rs.50,000. The current book value of the machine is NIL and it can continue for another 6 years after which it will have NIL salvage value. The cost of new machine is Rs.2,10,000 but it will require another Rs.30,000 to install it. New machine is also likely to last 6 years with no salvage value.

The projected profits from the existing and new machine are as under:

Year	Expected After Tax Profits	
	Existing Machine Rs.	New Machine Rs.
1	2.00,000	2,40,000
2	2,50,000	3,10,000
3	3,10,000	3,50,000
4	3,60,000	4,10,000
5	4,10,000	4,30,000
6	5,00,000	5,10,000

The tax rate is 40%. The company uses straight line method of depreciation and the same is allowed for tax purposes. Cost of capital is 12%. If the new machine is purchased, the existing machine can be sold for Rs.25,000.

Advice the company about the feasibility of the proposal.

($PVAF_{12,\,6}$ — 4.111)

($PVF_{12,\,n}$ = 0.893, 0.797, 0.712, 0.636, 0.567, 0.507)

(10 Marks)

Q2. On the basis of the data given below calculate:

(i) ARR on projects A and B;

(ii) Payback period for A and B.

(Depreciation has been charged on straight line basis and estimated life span of both projects is 5 years):

Data:

Item	Project A	Project B
Cost	Rs.56,125	Rs.56,125

Net Income after depreciation and taxes:

Year	Rs.	Rs.
1	3,375	11,375
2	5,375	9,375
3	7.375	7,375
4	9,375	5,375
5	11,375	3,375

(10 Marks)

Q3. A company issued 15% debentures of face value Rs.1000 at a floatation cost of 1% and for a discount of 5% but the principal is repaid in 5 equal annul installments along with interest so that nothing is outstanding after 5 years. Calculate the IRR of the Debt.

(5 Marks)

Q4. State whether following are True or False: (with reasons)

- Compounding and Discounting are same.
- NPV is preferred over PI. **(5 Marks)**
- Payback technique does not serve any purpose.
- Sunk costs are taken as costs of capital budgeting proposal.

Product Cannibalization costs are considered as outflows for decision making.