Q 1. Pioneer Steels Ltd., is considering three mutually exclusive projects. All of them require an initial cash outlay of Rs.10,000 each and have a life of five years.

(Amount in Rupees)

Year	1	2	3	4	5
Project – A	4,000	4,000	4,000	4,000	4,000
Project - B	6,000	3,000	2,000	5,000	5,000
Project - C	3,000	3,000	3,000	8,000	8,000

You are required to calculate:

a) The Payback of each project.

b) The Average Rate of Return for each project.

Rank the projects in order of their desirability. Comment on the results.

Q 2: An organization has two competing projects A and B. Both these projects need an initial capital outlay of Rs 50 lakhs.

The returns generated by both these projects are given in the following table:

Amount in Rs Lakhs

Year	1	2	3	4	5	6
Project – A	15	15	15	15	15	15
Project - B	30	25	15	10	6	4

Rank these projects based on:

a. NPV Method (Assume a discounting rate of 10%)

b. IRR Method

c. PI Method

Interpret the results.

Q. 3. From the following information on two alternative projects, find out.

a. Net Present value of all three projects if the cost of capital is 10%.

b. Internal rate of return of each of the projects

c. Being a project finance manager, which project you want to invest in?

Year	Project A	Project B	Project C
0	-200000	-250000	-275000

1	80000	50000	80000
2	55000	65000	80000
3	50000	80000	90000
4	50000	95000	90000
5	65000	100000	75000

Q. 4 A firm needs a machinery to expand its Production capacity: It has two option. The annual cash inflow from both the machineries are as follows:

Year	Machinery A	Machinery B
1	22,00,000	19,00,000
2	33,00,000	31,00,000
3	45,00,000	35,00,000
4	46,00,000	41,00,000
5	34,00,000	56,00,000
6	30,00,000	54,00,000

Total Outlay: Machinery A = 1 Crore

Machinery B = 1.15 Crore

You are required to suggest the most feasible machinery to purchase using Discounted payback period method. Discounting rate is expected @11%.

Q.5. A project costs Rs.60000. the stream of earnings before depreciation, interest and taxes (EBIDT) during first year through five years is given in the following table. Assume depreciation of the project on straight-line basis and the corporate tax rate applicable is 30%. Compute the project's Accounting rate of return.

Year	1	2	3	4	5
EBDIT	20000	25000	30000	35000	40000

Q. 6. Project A & Project B are two mutually exclusive projects with identical cost of Rs. 5,00,000 and is expected to generate net cash inflows as shown in the following table for six years. Also at sixth year end the project will have a scrap value of Rs.2,00,000 & Rs. 2,50,000 respectively. Find out net present value of both the project if the cost of capital is 12%. As a finance manager which of the projects you will go for?

Year	0	1	2	3	4	5	6
CF Project A	-500000	80000	100000	150000	160000	150000	140000
CF Project B	-500000	140000	150000	120000	100000	100000	80000

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Q.7 A firm needs a machinery to expand its Production capacity: It has two option. The annual cash inflow from both the machineries are as follows:

Year	Machinery A	Machinery B
1	37,00,000	39,00,000
2	43,00,000	51,00,000
3	55,00,000	44,00,000
4	26,00,000	36,00,000
5	34,00,000	46,00,000
6	25,00,000	64,00,000

Total Outlay: Machinery A = 1 Crore

Machinery B = 1.15 Crore

Assuming:

1. Discounting Rate @11%.
2. Tax Rate @ 30%
3. Depreciation on both machineries is charged @ 10% using WDV method.

You are required to suggest the most feasible machinery to purchase using:

1. Discounted payback period method.
2. NPV
3. IRR