

**AF-106**

April-2025

**B.B.A., Sem.-VI****CC-314(1) : Advanced Financial Management****Time : 2:30 Hours]****[Max. Marks : 70**

1. (A) Devarshi Company Ltd. is considering replacing an existing machine with a new machine costing ₹ 2,00,000. The existing machine was purchased three years ago for ₹ 80,000 and is being depreciated as per the straight-line method over its eight years' life. It can currently be sold for ₹ 90,000 with no transport cost. The new machine would cost ₹ 40,000 to install and would be depreciated over five years. The management believes that the new machine would have a salvage value of ₹ 20,000 at the end of five years. The management also estimates an increase in net working capital requirement of ₹ 31,000 as a result of expanded operations with the new machine and at the end of two years additional machinery for ₹ 24,000 has to be installed to make the new machinery workable. The cost of additional machinery will be written off as depreciation over the remaining three years. The company is taxed at a rate of 50% on normal income and 20% on capital gains. The company's expected after-tax profit for the next five years with the existing machine and with the new machine respectively are given as follows :

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Year	With Existing Machine ₹	With New Machine ₹
1	3,40,000	4,20,000
2	4,00,000	3,60,000
3	3,60,000	4,00,000
4	4,40,000	4,40,000
5	3,80,000	5,00,000

- (a) Calculate the net investment required for the new machine.
- (b) If the company's cost of capital is 15%, determine whether the new machine should be purchased. The present value of Re 1 at the discount rate of 15% for the first five years is given below.  
0.870, 0.756, 0.658, 0.572 and 0.497.

**OR**

(B) Answer the following question, each carries 7 marks :

- (1) Jaydeep Company Ltd. is considering the purchase of the new machine, with a view to increasing its production capacity. The data relating to the machine are as follows :

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Particulars	Machine
Initial Investment	2,80,000
Net Earnings before depreciation and taxes :	
At the end of 1 <sup>st</sup> year	1,80,000
At the end of 2 <sup>nd</sup> year	1,80,000
At the end of 3 <sup>rd</sup> year	1,00,000
At the end of 4 <sup>th</sup> year	80,000

**Additional Information :**

- The life of machine is expected to be four years.
  - Taxation is to be regarded as 50% of profit.
  - Depreciation is to be charged on both the machines on the Straight Line Method.
  - Evaluate the project at a 12% rate of interest by Net present value method.
  - Discount rate table of Rate of return is 12%: 1<sup>st</sup> year: 0.893, 2<sup>nd</sup> year: 0.797, 3<sup>rd</sup> year: 0.712, 4<sup>th</sup> year: 0.636.
- (2) One project of Meet Co. Ltd. is doing poorly and is being considered for replacement. Three mutually exclusive projects X, Y and Z have been proposed. The projects are expected to require ₹ 6,00,000 each, having an estimated life of 5 years, 4 years & 3 years respectively. The anticipated cash flows after taxes but before depreciation for three projects are as follows :

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Year	X	Y	Z
2020	₹ 1,60,000	₹ 2,00,000	₹ 2,40,000
2021	₹ 2,00,000	₹ 2,50,000	₹ 2,80,000
2022	₹ 2,40,000	₹ 2,00,000	₹ 1,60,000
2023	₹ 2,60,000	₹ 1,50,000	—
2024	₹ 2,80,000	—	—
Company's rate of return	12%	12%	12%

Present value of ₹ 1 at 12% discount rate is as follows :

Year	Present value (of ₹ 1)
2020	0.893
2021	0.797
2022	0.712
2023	0.636
2024	0.567

You are requested to rank each project by applying the method of Net Present Value, suggest which machine is most profitable.

2. (A) Answer the following question, each carries 7 marks :

(1) Fagun creation wants a project to be put into operation with effect from 1<sup>st</sup> March, 2025 and the management desires to know the quantum of working capital required to finance the project. The company management provides the following information. Production during 2025 is expected to be 2,00,000 units. The percentage of production cost to selling price has been as under :

Material 50%

Labour 20%

Overheads 10%

Following further particulars are available :

- Raw materials are expected to remain in stores for an average period of one month before being issued to production.
- Finished goods are to stay in the warehouse for two months on average before being sold.
- Each unit of production will be in process for one month on average.
- Credit allowed by creditors in respect of purchase of raw materials is 1 month.
- Debtors are allowed two months' credit from the date of the sale of the goods.
- The selling price is fixed at ₹ 9/- per unit.

Prepare an estimate of the Working Capital Requirement from the above information.

- (2) The Prinsi Products Ltd. operates a normal working day of eight hours. There are 25 working days in a month. Production costs per month are as follows :

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	₹	₹
Raw materials		4,00,000
Direct labour		2,00,000
Overheads:		
Fixed	1,50,000	
Semi-variable	75,000	
Variable	75,000	3,00,000
Net profit		1,00,000
Sales		10,00,000
Raw materials are in stock on average for	1 month	
Materials are in process on average for	1/2 month	
Finished goods are in stock on average for	1 month	
Credit allowed by Creditors is	1 month	
Credit allowed to Debtors	2 months	
Lag in payment of Wages	1/8 month	
Lag in payment of Overheads	1 month	

You are required to submit statement of working capital required to the management.

**OR**

- (B) Answer the following question :

- (1) Prepare an estimate of the working capital required, from the following information :

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Production (Annual)	1,20,000
Selling price per unit	₹ 5
Raw materials	60% of selling price
Direct wages	10% of selling price
Overheads	20% of selling price
Material on hand	2 months' requirement

Production period	1 month
Finished goods in stock	3 months
Credit allowed to customers	3 months
Credit for materials	2 months
Average cash balance	₹ 20,000

Wages and overheads are paid in the beginning of next month. The raw materials used in production is charged in the initial stage, while wages and overheads are incurred uniformly.

- (2) A High market value added means the company has created substantial wealth for shareholders. On the other hand, negative EVA means that the value of management's actions and investments is less than the value of the capital contributed to the company by the capital market or that the wealth and value have been destroyed. 7

The following information of Rohan Ltd is available to calculate EVA :

Debt capital 12%	₹ 20 Crores
Equity Capital	₹ 5 Crores
Reserve and surplus	₹ 75 Crores
Capital employed	₹ 100 Crores
Cost of Equity	19.5%
Net Operating profit after tax	₹ 21 Crores
Tax rate	30%

3. (A) Answer the following question, each carries 7 marks :

- (1) Explain Modigliani - Miller approach in detail. 7
- (2) Discuss the NI approach in detail. 7

**OR**

- (B) Answer the following question, each carries 7 marks :

- (1) Define Capital Structure and explain various factors affecting Capital Structure. 7
- (2) Explain the Traditional Approach in detail. 7

4. (A) Answer the following question, each carries 7 marks :
- (1) Discuss different types of Buy-outs in detail. 7
- (2) Define Strategic Alliance. Discuss the various forms of Strategic Alliance. 7

**OR**

- (B) Answer the following question, each carries 7 marks :
- (1) Explain the concept of Reverse merger & Demerger. 7
- (2) Explain the concept of Take over and franchising. 7

5. Do as directed (attempt any **seven**), each carries 2 marks. 14

- (1) The project concerning the purchase of fixed assets is known as:
- (A) Cash inflow project (B) Replacement project
- (C) Fund flow project (D) Capital expenditure project.
- (2) For long-term decision making, which method is the best guide ?
- (A) NPV method (B) Payback method
- (C) ARR method (D) None of these
- (3) Depreciation is a \_\_\_\_\_ expense.
- (A) Cash (B) Non-Cash
- (C) Credit (D) None of these
- (4) Net Working Capital = \_\_\_\_\_
- (A) Current Assets – Current Liabilities
- (B) Current Assets ÷ Current Liabilities
- (C) Current Assets + Current Liabilities
- (D) Current Assets × Current Liabilities
- (5) What is the formula of NOPAT ?
- (A) EBIT – Taxes (B) EAT – Taxes
- (C) EBIT + Taxes (D) EBT + Taxes
- (6) Undrawn profit \_\_\_\_\_ working capital requirement.
- (A) Increases (B) Neither increases nor reduces
- (C) Reduces (D) All of these.

- (7) Traditional approach is the \_\_\_\_\_.
- (A) Positive (B) Intermediate  
(C) Negative (D) None of these.
- (8) Modigliani-Miller approach is identical to the \_\_\_\_\_ approach.  
(Net Income/ Net Operating Income)
- (9) Working Capital is used to finance fixed assets operations. (True/ False)
- (10) Which one of the following are include in modes of winding-up ?
- (A) Compulsory winding-up  
(B) Voluntary winding-up  
(C) Both (A) and (B) options above.  
(D) None of the above
- (11) “Reverse Merger” is also known as \_\_\_\_\_.
- (A) Back door listing (B) Demerger  
(C) Front door listing. (D) Both (A) and (B) options above
- (12) Merger between two entities that do not compete with each other but exist in the same supply chain is called \_\_\_\_\_. (Horizontal merger/Vertical merger)

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