# BE9-R4 : ACCOUNTING AND FINANCIAL MANAGEMENT SYSTEM

#### NOTE :

- 1. Answer question 1 and any FOUR questions from 2 to 7.
- 2. Parts of the same question should be answered together and in the same sequence.

Гime : 3 Hours	Total Marks : 100
----------------	-------------------

- 1. (a) How Financial Accounting is different from Cost Accounting ?
  - (b) Discuss the difference between allocation of overhead and apportionment of overhead.
  - (c) Write short notes on **any two** of the following :
    - (i) Conversion cost
    - (ii) Sunk cost
    - (iii) Opportunity cost
    - (iv) Matching concept
  - (d) Pass a journal entry each of the following cases :
    - (i) A running business was purchased by Max with following assets and liabilities :

Cash ₹ 2,000, Land ₹ 4,000, Furniture ₹ 1,000, Stock ₹ 2,000, Creditors ₹ 1,000, Bank Overdraft ₹ 2,000.

- (ii) Goods distributed by way of free samples  $\gtrless$  1,000.
- (iii) Rishi became an insolvent and could pay only 50 paise in a rupee. Amount due from him ₹ 600.
- (iv) Goods worth ₹ 10,000 were purchased from Mr. Shaswat on credit basis.
- (e) State two limitations of Internal Rate of Return (IRR).
- (f) The following is capital structure of a firm :

Source of Finance	Amount	After Tax cost(%)
Equity Share Capital	20,00,000	20
Retained Earnings	40,00,000	20
Preference Share Capital	15,00,000	10
Debt	25,00,000	8
Total	1,00,00,000	

Compute the weighted average cost of capital of the firm, based on the given capital structure.

(g) Distinguish between Funds Flow Statement and Cash Flow Statement.

**2.** (a) ABC company produces an identical product in two factories X and Y. The following are the details in respect of both factories :

	Factory X	Factory Y
Selling price per unit (₹)	50	50
Variable cost per unit (₹)	40	35
Fixed cost (₹)	2,00,000	3,00,000
Depreciation included in above fixed $\cot(\mathbf{R})$	40,000	30,000
Sales in units	30,000	20,000
Production capacity (units)	40,000	30,000

You are required to determine :

- (i) Break Even Point (BEP) for each factory individually.
- (ii) Cash Break Even Point for each factory individually.
- (iii) BEP for company as a whole, assuming the present product mix is in the Sales Ratio.
- (iv) What will be the impact on profit and BEP if product mix is changed to 2 : 3 and total demand remain same ?
- (b) Following are the selected financial information of Argo Ltd. and Bryt Ltd. for the year ended March 31, 2020 :

	Agro Ltd.	Bryt Ltd.
Variable Cost Ratio	60%	50%
Interest	₹ 20,000	₹ 1,00,000
Operating Leverage	5	2
Financial Leverage	3	2
Tax Rate	30%	30%

You are required to find out :

- (i) EBIT
- (ii) Sales
- (iii) Fixed Cost

(10+8)

**3.** (a) You are provided with the following details :

Current Ratio	2.5
Liquidity Ratio	1.5
Net Working Capital	₹ 3,00,000
Stock Turnover Ratio	6 times
Ratio of Gross Profit on Sales	20%
Turnover to Fixed Assets (net)	2 times
Average debt collection period	2 months
Fixed Assets to net worth	0.8
Reserve and Surplus to Capital	0.5

Draw up the Balance Sheet as at  $31^{st}$  March, 2020 of Zoom Ltd. with appropriate figures :

Zoom Ltd.						
Balance Sheet as on 31 <sup>st</sup> March, 2020						
Liabilities Amount Assets Amount						
Share Capital	?	Fixed Assets	?			
Reserves and Surplus	?	Stock	?			
Long-Term Borrowings	1,50,000	Debtors	?			
Current Liabilities	?	Bank	50,000			
Total	11,00,000		11,00,000			

(b) Moonlight Ltd. is planning an equity issue in present year. It has an Earning Per Share (EPS) of ₹ 20 and proposes to pay 60% dividend at the current year end. With a P/E ratio 6.25 and Return on Equity (RoE) of 16%, it wants to offer the issue at market price. The flotation cost is expected to be 4% of the issue price.

**Required** : Determine the required rate of return for equity share (cost of equity) before the issue and after the issue.

(12+6)

BE9-R4-09-21

4. Roxy Limited is thinking of buying a new machine which will cost ₹ 60 lakhs. The company's current production is 80,000 units, and expects to increase to 1,00,000 units, if the new machine is bought. The selling price of the product will remain unchanged at ₹ 200 per unit. The following is the cost of producing one unit of product using new machine :

Unit cost	New Machine (1,00,000 units)
Materials	63.75 (₹)
Wages & Salaries	37.50
Supervision	25.00
Repairs and Maintenance	7.50
Power and Fuel	14.25
Depreciation	10.00
Allocated Corporate Overheads	12.50

The new machine has a life of 5 years and a salvage value of ₹ 10,00,000 at the end of its economic life. Assume corporate income tax rate is 40%, and depreciation is charged on straight line basis for income-tax purposes. Further, assume that book profit is treated as ordinary income for tax purpose. The opportunity cost of capital of the company is 15%.

## Required :

- (i) Estimate net present value for the new machine.
- (ii) Calculate the Internal Rate of Return (IRR).

Year(t)	1	2	3	4	5
PVIF 0.15	0.8696	0.7561	0.6575	0.5718	0.4972
PVIF 0.20	0.8333	0.6944	0.5787	0.4823	0.4019
PVIF 0.25	0.80	0.64	0.512	0.4096	0.3277
PVIF 0.30	0.7692	0.5917	0.4552	0.3501	0.2693
PVIF 0.35	0.7407	0.5487	0.4064	0.3011	0.2230

(18)

**5.** X - Star Ltd. produces a product, which passes through two processes, process I and process II. The output of the first process is treated as the raw material of the next process to which it is transferred and output of the second process is transferred to finished stock. The following data related to March, 2020 :

	Process I	Process II
25,000 units introduced at a cost of	₹ 2,00,000	-
Material consumed	₹ 1,92,000	96,020
Direct labor	₹ 2,24,000	1,28,000
Manufacturing expenses	₹ 1,40,000	60,000
Normal wastage of input	10%	10%
Scrap value of normal wastage (per unit)	₹ 9.90	8.60
Output in units	22,000	20,000

### **Required** :

- (i) Prepare Process I and Process II account.
- (ii) Prepare Abnormal gain/wastage account as the case may be each process. (18)
- 6. (a) Saturn Co. has made plans for the next year. It is estimated that the company will employ total Assets of ₹ 8,00,000; 50 percent of the assets being financed by borrowed capital at an interest cost of 8 percent per year. The direct costs for the year are estimated at ₹ 4,80,000 and all other operating expenses are estimated at ₹ 80,000. The goods will be sold to customers at 150 percent of the direct costs. Tax rate is assumed to be 50 percent.

You are required to calculate :

- (i) Net Profit Margin
- (ii) Return on Assets
- (iii) Asset Turnover and
- (iv) Return on owners' equity
- (b) Explain the followings :
  - (i) Pre-production Costs
  - (ii) Research and Development Costs
  - (iii) Training Costs

(12+6)

7. ABC Ltd. manufactures two products A and B. The manufacturing division consists of two production departments D1 and D2 and two service departments S1 and S2. Budgeted overhead rates are used in the production departments to absorb factory overheads to the products. D1 does not use direct labour and uses only direct machine hours. The rate of Department D1 is based on direct machine hours, while the rate of Department D2 is based on direct labor hours. In applying overheads, the predetermined rates are multiplied by actual hours.

For allocating the service department costs to production departments, the basis adopted is as follows :

- (i) Cost of Department S1 to Department D1 and D2 equally, and
- (ii) Cost of Department S2 to Department D1 and D2 in the ratio of 2 : 1 respectively. The following budgeted and actual data are available :

## Budgeted Data :

Factory overheads budgeted for the year :

Departments	D1	25,50,000	S1	6,00,000
Departments	D2	21,75,000	S2	4,50,000

Budgeted output in units: Product A 50,000; Product B 30,000.

Budgeted raw-material cost per unit : Product A ₹ 120; Product B ₹ 150.

Budgeted time required for production per unit :

Department D1 Proc	luct A	: 1.5 machine h	hours Product B : 1.0 machine hou		duct B : 1.0 machine hour	
Department D2 Proc	luct A	: 2 Direct labour	our hours Product B : 2.5 Direct labour ho		duct B : 2.5 Direct labour hours	
Average wage rates bu	dgeted	l in Department	: D2 a	are : (Not	t applicable to D1)	
Product A - ₹ 72 per ho	our and	d Product B - ₹	75 pe	er hour.	·	
All materials are used i	in Dep	artment D1 only	y. –			
Actual data : (for the n	nonth	of July, 2020).				
Units actually produced	d :	2 ,				
Product A: 4,000 units	Produ	ct B : 3,000 unit	S			
Actual direct machine	hours	worked in Depa	artme	nt D1 :		
On Product A : 6,100	hours	5				
Product B: 4,150	) hours	6				
Actual direct labour ho	ours wo	orked in Depart	ment	D2:		
On Product A: 8,200	hours	-				
Product B: 7,400	) hours	5				
Costs actually incurred	:					
	F	Product A	Р	roduct B		
		(₹)		(₹)		
Raw material		4,89,000 4,56,000				
Wages		5,91,900 5,52,000				
Overheads : Department	nt	(₹)		(₹)		
]	D1 2	2,31,000	S1	60,000		
]	D2 2	2,04,000	S2	48,000		
You are required to :						
(i) Compute the pre-	-deterr	nined overhead	rate	for each	production department.	

(ii) Prepare a performance report for July, 2020 that will reflect the budgeted costs and actual costs.

- 0 0 0 -

(18)