

THE INSTITUTE OF BANKERS, BANGLADESH (IBB)

93rd Banking Diploma Examination, 2022

DAIBB

Management Accounting (MA)

Time—3 hours and 30 minutes

Full marks—100

Pass marks—50

[N.B. The figures in the right margin indicate full marks. Answer any five questions.]

Marks

1. (a) 'Managerial Accounting is helpful in decision making.'—Explain the statement with 5 examples. 5
- (b) Maxwell Company has the following comparative balance sheet data : 15

Maxwell Company

Balance sheets

December 31

	2017 (Taka)	2016 (Taka)
Cash	15,000	30,000
Accounts receivable	70,000	60,000
Inventory	60,000	50,000
Plant assets (net)	2,00,000	1,80,000
	<u>3,45,000</u>	<u>3,20,000</u>
Accounts payable	50,000	60,000
Mortgage payable (6%)	1,00,000	1,00,000
Common stock	1,40,000	1,20,000
Retained earnings	55,000	40,000
	<u>3,45,000</u>	<u>3,20,000</u>

Additional information for 2017 :

- (1) Net income was Tk. 25,000.
 (2) Sales on account were Tk. 4,10,000, sales return and allowances were Tk. 20,000.
 (3) Cost of goods sold was Tk. 1,98,000.

Required : You are required to comment on the financial solvency of the company by calculating the following ratios :

- (i) Current ratio (ii) Quick ratio (iii) Accounts receivable turnover ratio (iv) Inventory turnover ratio (v) Assets turnover ratio (vi) Leverage ratio (vii) Interest times earned (viii) ROA, and (ix) ROE.
2. (a) "Fixed cost per unit is variable, variable cost per unit is fixed".—Justify the statement. 5
- (b) The following data were taken from the records of Oponin Ltd. for the fiscal year ended 15 June 30, 2017 :

	Taka		Taka
Raw materials 01-07-16	48,000	Factory insurance	4,600
Raw materials 30-06-17	39,600	Factory machine depreciation	16,000
Finished goods inventory 01-07-16	96,000	Factory utilities	27,600
Finished goods inventory 30-06-17	75,900	Office utilities expenses	8,650
Work in process inventory 01-07-16	19,800	Sales revenue	5,34,000
Work in process inventory 30-06-17	18,600	Sales discount	4,200
Direct labour	1,39,250	Plant manager's salary	58,000
Direct expenses	20,000	Factory property taxes	9,600
Indirect labour	24,460	Factory repairs	1,400
Accounts receivable	27,000	Raw materials purchases	96,400

Instructions: (i) Prepare a cost of goods manufactured schedule and a cost of goods sold statement.

- (ii) If company produces 10,000 units during this year and wants to earn 25% on sales price what would be the sales price per unit?

[Please turn over]

3. (a) "Cost Volume Profit (CVP) analysis is both simple and simplistic. If you want realistic analysis to underpin your decisions, look beyond CVP analysis."—Do you agree? Explain. Marks 5
 (b) Almo Company manufactures and sells adjustable canopies that attach to motor homes and trailers. For its 2020 budget, Almo estimated the following : 15

	Taka
Selling price	400
Variable cost per canopy	200
Annual fixed costs	1,00,000
Net income	2,40,000
Income tax rate	40%

The May financial statements reported that sales were not meeting expectations. For the first 5 months of the year, only 350 units had been sold at the established prices with variable costs as planned, and it was clear that the net income projection for 2020 would not be reached unless some actions were taken. A management committee presented the following mutually exclusive alternatives to the president.

- (1) Reduce the selling price by Tk. 40. The sales organization forecasts that at this significantly reduced price, 2,700 units can be sold during the remainder of the year. Total fixed costs and variable cost per unit will remain as budgeted.
- (2) Lower variable cost per unit by Tk. 10 through the use of less expensive direct materials and slightly modified manufacturing techniques. The selling price will also be reduced by Tk. 30, and sales of 2,200 units are expected for the remainder of the year.
- (3) Reduce fixed costs by Tk. 10,000 and lower the selling price by 5%. Variable cost per unit will be unchanged. Sales of 2,000 units are expected for the remainder of the year.

Required : (i) If no changes are made in the selling price or cost structure, determine the number of units that Almo Company must sell (a) to break even and (b) to achieve its net income objective.

(ii) Determine which alternative Almo should select to achieve its net income objective. Show your calculations.

4. (a) Do you recommend that a firm should finance its current assets entirely with short term financing? Explain your answer. 5
 (b) Akij Cement Company Ltd. has an initial capacity of producing 1.25 lakhs tonnes of cement per annum. Its present capacity utilization is 80%. The company produces cement in 50 kg bags. From the information given below, determine the net working capital (NWC) requirement of the company for the current year. 15
Cost structure per bag of cement (estimated) in taka :

	Taka
Gypsum	25
Lime stone	15
Coal	30
Packing material	10
Direct labour	50
Factory overhead	30
Administrative overheads	20
Selling overhead	25
Total cost	205
Profit margin	45
Selling price	250
Add VAT (10% on selling price)	25
Invoice price to consumers :	275

Additional information :

- (i) Desired holding period of raw materials : Gypsum 3 months, lime stone 1 month, coal 2-5 months, and packing materials 1-5 months;
- (ii) The product remains in process for a period of 0-5 month;
- (iii) Finished goods are in stock for a period of 1 month;
- (iv) Debtors are extended credit for a period of 3 months;
- (v) Average time lag in payment of wages is 0-5 month and overheads 1 month;
- (vi) Average time lag in payment of VAT is 1-5 months;
- (vii) The credit period extended by various suppliers are : Gypsum 2 months, coal 1 month, and packing materials 0-5 month.
- (viii) Minimum desired cash balance is Tk. 25 lakhs.

5. (a) What do you mean by cash flows from operating activities? What items are included in it? 5
 (b) The following balances are gathered from the books of ZK. Ltd. 15

Assets	2020 (Taka)	2021 (Taka)
Cash	20,000	22,000
Accounts receivable	15,000	18,000
Inventories	30,000	31,000
Plant and equipment	1,25,000	1,50,000
Investment	30,000	32,000
Total assets	<u>2,20,000</u>	<u>2,53,000</u>
Liabilities		
Accumulated depreciation	35,000	45,000
Bank loan (long-term)	1,00,000	1,10,000
Common stock	20,000	22,000
Capital in excess of par	40,000	46,000
Retained earnings	25,000	30,000
	<u>2,20,000</u>	<u>2,53,000</u>

Other information of ZK. Ltd. for 2021 included :

- (i) New plant and equipment was bought for Tk. 30,000.
 (ii) New investment was purchased for Tk. 7,000. Old investment of Tk. 5,000 was sold for Tk. 6,200.
 (iii) Plant and equipment costing Tk. 5,000 with a book value of Tk. 1,000 was sold at Tk. 800.
 (iv) Repayment made against bank loan was Tk. 7,000 while fresh borrowing amounted to Tk. 17,000.
 (v) Common stock of Tk. 2,000 was issued at Tk. 8,000.
 (vi) Depreciation on plant and equipment amounted to Tk. 14,000.
 (vii) Net income for the year was Tk. 25,000.
 (viii) Dividend of Tk. 20,000 was declared and paid.

Required :

Prepare a cash flow statement for the year 2021.

6. (a) Discuss the steps to be taken in preparation of a capital budget. 5
 (b) The P Ltd. is considering to purchase two modern machines X and Y to be used in its factory. 15
 Particulars of the two machines are given below :

	Machine X	Machine Y
Original cost	Tk. 3,20,000	Tk. 4,30,000
Effective life	5 years	5 years
Annual cash inflow	Tk. 1,00,000	Tk. 1,20,000
Scrap value at the end of life	Tk. 70,000	Tk. 80,000

Required :

- (i) Payback period.
 (ii) Rate of return on average investment.
 (iii) Net present value @ 10% cost of capital.
 (iv) Which machine is more acceptable?

Yr	1	2	3	4	5
PVF at 10%	·909	·826	·751	·683	·621

7. (a) What do you mean by differential cost statement? Distinguish it from relevant cost. 8
 (b) The cost sheet of a production is given below : 12

	Tk. (per unit)
Materials	4·00
Labour : skilled (fixed)	2·00
Others	3·00
Fixed expenses	4·00
Variable expenses	3·00
	<u>16·00</u>

The selling price per unit is Tk. 18. The above figures are for an output of 80,000 units, while the capacity is 1,00,000 units. A foreign customer desires to buy 20,000 units at a price of Tk. 12 per unit. Advise the manufacturer whether the order should be accepted. What will be your advice if the order were from a local customer? Assume the noncost factors to be considered while taking the decisions.

[Please turn over

8. (a) Explain the differences between forecast and budget. 4
- (b) The Rahman Company Ltd. had sales of Tk. 95,000 in December. It expects sales of Tk. 70,000 in January. Sales levels should increase by 15% each month over the next 5 months. Cash sales will be 35% of total sales, the remainder collected in the following month. Other cash income is expected to be 5% of monthly sales. Wages and salaries will be constant at Tk. 35,000. Taxes will be 20% of wages and salaries. Rent, utilities and operating expenses are constant at Tk. 4,000, Tk. 3,000 and Tk. 8,000 per month respectively. Supplies purchased will be 50% of sales. The company has Tk. 10,000 in its bank account and Tk. 25,000 in a money market fund. 16

Required :

Prepare a 6 months cash forecast.

9. (a) Define lease. Differentiate between capital lease and operating lease along with their relative merits and demerits if any. 8
- (b) H and Company needs to finance a machine as a loan at the rate of 15% that will cost Tk. 3,35,220. The company has alternative to finance the equipment to take lease from Royal Leasing Company, for 5 years with an annual lease payment of Tk. 1,20,000 to be paid at the beginning of each year. The equipment will be depreciated on straight-line basis. The corporate tax rate is 40%. Should the offer be accepted? 12

10. Write short notes on any five of the following : 4×5=20

- (a) Capital rationing (b) Assumptions of CVP analysis
(c) Opportunity Cost (d) Inventory management
(e) Internal Rate of Return (IRR) (f) Limitations of management accounting
(g) Production cycle (h) Zero based budget.

[বাংলা অনুবাদ]

[দ্রষ্টব্য : ডান পাশের সংখ্যা প্রশ্নের পূর্ণমান জ্ঞাপক। যে কোনো পাঁচটি প্রশ্নের উত্তর দিন।]

- | | নম্বর |
|--|---|
| ১। (ক) "ব্যবস্থাপনা হিসাববিজ্ঞান সিদ্ধান্ত গ্রহণে সহায়ক"—উক্তিটি উদাহরণসহ ব্যাখ্যা করুন। | ৫ |
| (খ) ইংরেজি অংশ দেখুন। | ১৫ |
| ২। (ক) "প্রতি একক স্থির ব্যয় পরিবর্তনশীল, পরিবর্তনশীল ব্যয় প্রতি একক স্থির"—উক্তিটির যথার্থতা ব্যাখ্যা করুন। | ৫ |
| (খ) ইংরেজি অংশ দেখুন। | ১৫ |
| ৩। (ক) "ব্যয় পরিমাণ মূল্যায়ন সাধারণ ও সরল। আপনি যদি অধিকতর পর্যালোচনার মাধ্যমে সঠিক সিদ্ধান্ত নিতে চান তাহলে ব্যয় পরিমাণ মূল্যায়ন বাহিরে গিয়ে পর্যালোচনার দরকার"—আপনি কি উক্তিটির সাথে একমত? ব্যাখ্যা করুন। | ৫ |
| (খ) ইংরেজি অংশ দেখুন। | ১৫ |
| ৪। (ক) আপনি কি মনে করেন একটা প্রতিষ্ঠানের চলতি সম্পত্তি সম্পূর্ণভাবে স্বল্পকালীন অর্থায়ন দ্বারা করা উচিত? আপনার উত্তরের ব্যাখ্যা দিন। | ৫ |
| (খ) ইংরেজি অংশ দেখুন। | ১৫ |
| ৫। (ক) পরিচালন কার্যাবলি হতে নগদ প্রবাহ বলতে কী বুঝেন? এতে কী কী বিষয় অন্তর্ভুক্ত হয়? | ৫ |
| (খ) ইংরেজি অংশ দেখুন। | ১৫ |
| ৬। (ক) মূলধন বাজেটিং প্রক্রিয়ার পদক্ষেপগুলো বর্ণনা করুন। | ৫ |
| (খ) ইংরেজি অংশ দেখুন। | ১৫ |
| ৭। (ক) পার্থক্যমূলক ব্যয় বিবরণী বলতে কী বুঝেন? প্রাসঙ্গিক ব্যয় হতে এর পার্থক্য নিরূপণ করুন। | ৮ |
| (খ) ইংরেজি অংশ দেখুন। | ১২ |
| ৮। (ক) পূর্বানুমান এবং বাজেট এর মধ্যে পার্থক্য ব্যাখ্যা করুন। | ৮ |
| (খ) ইংরেজি অংশ দেখুন। | ১৬ |
| ৯। (ক) ইজারার সংজ্ঞা দিন। মূলধনী ইজারা এবং পরিচালনা ইজারার মধ্যে পার্থক্য ও তাদের তুলনামূলক গুণাগুণ ও ক্ষতিসমূহ উল্লেখ করুন। | ৮ |
| (খ) ইংরেজি অংশ দেখুন। | ১২ |
| ১০। নিম্নের যে কোনো পাঁচটি বিষয়ের উপর সংক্ষিপ্ত টীকা লিখুন : | ৪×৫=২০ |
| (ক) মূলধন রেশনিং | (খ) CVP বিশ্লেষণের অনুমানসমূহ |
| (গ) সুযোগ ব্যয় | (ঘ) মুজদপণ্য ব্যবস্থাপনা |
| (ঙ) অভ্যন্তরীণ উপার্জন হার | (চ) ব্যবস্থাপনা হিসাববিজ্ঞানের সীমাবদ্ধতাসমূহ |
| (ছ) উৎপাদন চক্র | (জ) শূন্যভিত্তিক বাজেট। |