

The Institute of Chartered Accountants of Bangladesh
Management Information

Time allowed: 1.5 hours

Full Marks: 100

Part One (1): Scenario based question

A new business is to be started and details of the budgeted transactions are as follows:

- Non- current assets will be purchased for BDT 12,000. Depreciation will be charged on straight line basis, assuming that the assets will have useful life of five years after which they will have no residual value.
- Month-end inventories will be maintained at a level sufficient to meet the forecast sales for the following month.
- Forecast monthly sales BDT 4,000 for January to March, BDT 5,000 for April to June and 6,000 per month for July onwards.
- The gross profit margin is budgeted to 20% of sales value.
- Two months' credit will be allowed to customers and one month's credit will be received from suppliers of inventory.
- Operating expenses (excluding depreciation) are budgeted to be BDT 350 per month.
- The budgeted closing cash balance as at 30 June is BDT 16,700.

Requirement:

Using the above information, prepare a budgeted income statement for the six months period ended 30 June and balance sheet at that date. (Fill blanks in following tables).

Budgeted Income Statement
For the six months period ended 30 June

Particulars	Amount in BDT	Amount in BDT
Revenue		<input type="text"/>
Cost of sales		<input type="text"/>
Gross profit		<input type="text"/>
Operating expenses	<input type="text"/>	
Depreciation	<input type="text"/>	
		<input type="text"/>
Budgeted profit		<input type="text"/>

Budgeted Balance Sheet
As at 30 June

Particulars	Amount in BDT	Amount in BDT
Non-current assets		<input type="text"/>
Current assets		
Inventories	<input type="text"/>	
Receivables	<input type="text"/>	
Cash	<input type="text"/>	
	<input type="text"/>	
Current liabilities		
Trade payables	<input type="text"/>	
Net current assets		<input type="text"/>
Owners' capital		<input type="text"/>

Part Two (2): Short question

- Which one of the following items might be a cost unit within the management accounting system of a university or college of further education?
 - Business studies department
 - A student
 - A college building
 - The university itself
- The XYZ Hospital has total costs of BDT 1,000,000 for 2021. During 2021, 200,000 patients were treated, and doctors were paid Tk. 500,000. What is the most appropriate cost per unit for the hospital to use?
 - BDT 0.20
 - BDT 2.50
 - BDT 5.00
 - BDT 7.50
- A cost which contains both fixed and variable components, and so is partly affected by changes in the level of activity is known as:
 - A direct cost.
 - A variable cost.
 - An indirect cost.
 - A semi-variable cost.

4. Which TWO of the following statements are correct?
- A. When target costing is used, the selling price of a product or service determines its target cost.
 - B. An activity based costing (ABC) system makes some use of volume-related cost drivers.
 - C. A JIT system tends to cause increased storage costs because high inventories are held to ensure that materials are available just as they are needed in production.
 - D. Life cycle costing does not track costs that are incurred once production has ceased, since there are no revenues against which to match the costs.
 - E. A products target cost takes no account of the external market conditions.
5. Which ONE of the following would not normally result from the adoption of a JIT purchasing system?
- A. Closer relationship with the suppliers.
 - A. Lower levels of inventory.
 - B. Lower levels of receivables.
 - C. Better quality supplies obtained.
6. Which of the following statements are true?
- i. The main role of the management accountant is to produce financial accounts
 - ii. Management accountants always work within the finance function
 - iii. Management accountants always work in partnership with business managers
- A. i and ii only
 - B. ii and iii only
 - C. i and iii only
 - D. None of the above.
7. Coed Novelties manufactures key chains for college bookstores. During 2003, the company had the following costs:

Direct materials used	BDT	31,000
Direct labor		18,000
Factory rent		12,000
Equipment depreciation – factory		2,000
Equipment depreciation – office		750
Marketing expense		2,500
Administrative expenses		40,000

35,000 units produced were in 2003. What is the product cost per unit?

- A. BDT 1.24
- B. BDT 1.80
- C. BDT 3.04
- D. BDT 1.82

8. The Dairy Candy Company had the following information available regarding last year's operations:

Sales (100,000 units)	BDT 200,000
Variable Cost	<u>100,000</u>
Contribution Margin	100,000
Fixed Cost	<u>50,000</u>
Net Income	<u>50,000</u>

If sales were to increase by 200 units, what would be the effect on net income?

- A. BDT 400 increase
 - B. BDT 200 increase
 - C. BDT 150 increase
 - D. BDT 100 increase
9. ABC absorbs fixed production overheads in one of its departments on the basis of machine hours. There were 100,000 budgeted machine hours for the forthcoming period. The fixed production overhead absorption rate was Tk. 2.50 per machine hour.

During the period, the following actual results were recorded:

Standard machine hours 110,000
Fixed production overheads Tk. 300,000

Which of the following statement is correct?

- A. Overhead was Tk. 25,000 over-absorbed
 - B. Overhead was Tk. 25,000 under-absorbed
 - C. Overhead was Tk. 50,000 over-absorbed
 - D. No under- or over-absorption occurred
10. W Ltd makes leather purses. It has drawn up the following budget for its next financial period:

Selling price per unit Tk. 11.60
Variable production cost per unit Tk. 3.40
Sales commission 5% of selling price
Fixed production costs Tk. 430,500
Fixed selling and administration costs Tk. 198,150
Sales 90,000 units

The margin of safety represents -

- A. A. 5.6% of budgeted sales
- B. B. 8.3% of budgeted sales
- C. C. 11.6% of budgeted sales
- D. D. 14.8% of budgeted sales

11. A company has recorded the following variances for a period:

Sales volume variance Tk. 10,000 adverse
Sales price variance Tk. 5,000 favourable
Total cost variance Tk. 12,000 adverse
Standard profit on actual sales for the period was Tk. 120,000.

What was the fixed budget profit for the period?

- A. Tk. 137,000
- B. Tk. 103,000
- C. Tk. 110,000
- D. Tk. 130,000

12. Using an interest rate of 10% per year the net present value (NPV) of a project has been correctly calculated as Tk. 50.

If the interest rate is increased by 1% the NPV of the project falls by Tk. 20. What is the internal rate of return (IRR) of the project?

- A. 7.5%
- B. 11.7%
- C. 12.5%
- D. 20.0%

13. In an integrated bookkeeping system, when the actual production overheads exceed the absorbed production overheads, the accounting entries to close off the production overhead account at the end of the period would be:

- A. Debit the production overhead account and credit the work-in-progress account.
- B. Debit the work-in-progress account and credit the production overhead account.
- C. Debit the production overhead account and credit the profit and loss account.
- D. Debit the profit and loss account and credit the production overhead account.

14. X operates a standard marginal costing system. The following budgeted and standard cost information is available:

Budgeted production and sales	10,000 units
Direct material cost – 3 kg x Tk. 10	Tk. 30 per unit

Actual results for the period were as follows:

Production and sales	11,500 units
Direct material – 36,000 kg	Tk. 342,000

The direct material price variance is

- A. Tk. 18,000 adverse
- B. Tk. 3,000 adverse
- C. TK. 3,000 favourable
- D. Tk. 18,000 favourable

15. Which of the following would **NOT** be included in a cash budget?

- (i) Depreciation
- (ii) Provisions for doubtful debts
- (iii) Wages and salaries

- A. (i) and (ii) only
- B. (ii) and (iii) only
- C. (iii) only
- D. (i) only

16. Items excluded from a cash budget are book items and are non-cash related. Depreciation is a book value and has no cash value. A provision for doubtful debts is also a book transaction and does not become a cash issue until the bad debt is realised. Wages and Salaries are cash transactions.

The term “budget slack” refers to the

- A. Extended lead time between the preparation of the functional budgets and the master budget.
- B. Difference between the budgeted output and the breakeven output.
- C. Additional capacity available which can be budgeted for.
- D. Deliberate over-estimation of costs and under-estimation of revenues in a budget.

17. The following details have been extracted from the receivables records of X:

Invoices paid in the month after sale	60%
Invoices paid in the second month after sale	20%
Invoices paid in the third month after sale	15%
Bad debts	5%

Credit sales for June to August 2019 are budgeted as follows:

June	BDT 100,000
July	BDT 150,000
August	BDT 130,000

Customers paying in the month after sale are entitled to deduct a 2% settlement discount. Invoices are issued on the last day of the month. The amount budgeted to be received in September 2019 from credit sales is:

- A. BDT 115,190
- B. BDT 116,750
- C. BDT 121,440
- D. BDT 123,000

18. A wholesaler buys and resells a range of items, one of which is the Kay. Each Kay is resold for Tk. 3 per unit and opening inventory for June was 400 units valued at Tk. 1.80 per unit. The wholesaler purchased a further 600 units on 10 June for Tk. 2.10 per unit and sold 800 units on 25 June. What gross profit would be recorded for the sale of Kays during June, using the FIFO method of inventory valuation? What would be the gross profit under FIFO method?

- A. BDT 780
- B. BDT 960
- C. BDT 840
- D. BDT 1,560

19. If the number of units of finished goods inventory at the end of a period is greater than that at the beginning, marginal costing inventory will result in (assuming unit variable and fixed costs are constant):

- A. Less operating profit than the absorption costing method.
- B. The same operating profit as the absorption costing method.
- C. More operating profit than the absorption costing method.
- D. More or less operating profit than the absorption costing method depending on the ratio of fixed to variable costs.

20. Adams Ltd's budget for its first month of trading, during which 1,000 units are expected to be produced and 800 units sold, is as follows:

Variable production costs	BDT 95,500
Fixed production costs	BDT 25,800
Selling price is	BDT 250 per unit

The profit calculated on the absorption cost basis compared with the profit calculated on the marginal cost basis is:

- A. BDT 24,260 lower
- B. Tk. 5,160 higher
- C. Tk. 5,160 lower
- D. Tk. 24,260 higher

21. A company had opening inventory of 48,500 units and closing inventory of 45,500 units. Profits based on marginal costing were BDT 315,250 and on absorption costing were BDT 288,250. What is the fixed overhead absorption rate per unit?

- A. Tk. 5.94
- B. Tk. 6.34
- C. Tk. 6.50
- D. Tk. 9.00

22. A company currently sets its selling price at Tk. 10, which achieves a 25% mark-up on variable cost. Annual production and sales volume is 100,000 units and annual fixed costs are Tk. 80,000.

By how much would the selling price need to be increased in order to double profit if costs, production and sales volume remain unchanged?

- A. 12%
- B. 17%
- C. 20%
- D. 25%

23. A division has a residual income of Tk. 480,000 and a net profit before imputed interest of Tk. 1,280,000.

If it uses a rate of 10% for computing imputed interest on its invested capital, what is its return on investment?

- A. 10%
- B. 22%
- C. 6%
- D. 16%

24. Which of the following sentences best describes what is necessary for a responsibility accounting system to be successful?

- A. Each manager should know the criteria used for evaluating his or her own performance.
- B. The details on the performance reports for individual managers should add up to the totals on the report of their superior.
- C. Each employee should receive a separate performance report.
- D. Service department costs should be apportioned to the operating departments that use the service.

25. Within decentralised organisations there may be cost centres, investment centres and profit centres. Which of the following statements is true?

- A. Cost centres have a higher degree of autonomy than profit centres
- B. Investment centres have the highest degree of autonomy and cost centres the lowest
- C. Investment centres have the lowest degree of autonomy
- D. Profit centres have the highest degree of autonomy and cost centres the lowest

26. The following information is available for the latest period.

Fixed costs	Tk. 160,000
Variable cost per unit	Tk. 4
Profit	Tk. 10,000

A 2% increase in selling price would not alter the number of units sold each period but the profit would increase by Tk. 5,000.

The current selling price per unit is:

- A. Tk. 0.08
- B. Tk. 10.00
- C. Tk. 12.50
- D. Tk. 12.75

27. Red DAC is considering using Material C and Material D to produce a new product. Material C is no longer used by the company in its production activities, while Material D is in regular use. The following details are available for Materials C and D:

Material	Quantity available	Original Cost per kg	Current cost per kg	Scrap value per kg
C	4,200 kg	Tk. 3.50	Tk. 3.25	Tk. 0.90
D	3,000 kg	Tk. 2.10	Tk. 2.40	Tk. 0.50

Production of the new product requires 6,000 kg of Material C and 2,000 kg of material D. The relevant cost of Material C to be included in the new product cost is:

- A. Tk. 20,550
- B. Tk. 9,630
- C. Tk. 10,080
- D. Tk. 19,500.

28. When using limiting factor analysis in order to calculate maximum profit, which of the following assumptions should be made?

- A. Fixed costs per unit are not changed by increases or decreases in production volume.
- B. Fixed costs in total are not changed by increases or decreases in production volume.
- C. Variable costs per unit are not changed by increases or decreases in production volume.
- D. Estimates of sales demand, prices and resources required for each product are known with certainty

29. A company produces a single product for which standard cost details are as follows.

	Tk. per unit
Material (Tk. 2 per kg)	8
Labour (Tk. 6 per hour)	18
Production overhead	9
Total production cost	35

The item is perishable and no inventories are held.

Demand for next period will be 6,000 units but only 19,000 hours of labour and 22,000 kg of material will be available.

What will be the limiting factor next period?

- A. Material only
- B. Labour only
- C. Material and labour
- D. Sales demand

30. A company's cash budget highlights a short-term surplus in the near future.

Which TWO of the following actions would not be appropriate to make use of the surplus?

- A. Increase inventories and receivables to improve customer service.
- B. Buy back the company's shares.
- C. Increase payables by delaying payments to suppliers.
- D. Invest in a short term deposit account.

31. The following information relates to a business:

Debt collection period	11 weeks
Raw material inventory holding period	3 weeks
Suppliers' credit period	6 weeks
Production period	2 weeks
Finished goods inventory holding period	7 weeks

What is the working capital (operating) cycle of the business?

- A. 6 weeks
- B. 7 weeks
- C. 17 weeks
- D. 29 weeks

- 32.** A project has an initial investment cost of BDT 200,000. It is expected to generate a net cash flow of BDT 20,000 at the end of its first year. This will rise to BDT 25,000 at the end of the second year and remain at BDT 25,000 per annum in perpetuity. The relevant cost of capital is expected to be 8% in the first year and 10% in the second and subsequent years.

What would be the net present value (NPV) of the project (to the nearest BDT 100)?

- A. BDT 29,000
- B. BDT 45,800
- C. BDT 50,000
- D. BDT 68,500

<The end>