INTERMEDIATE EXAMINATION
June 2019
Cost & Management Accounting and Financial Management

Time Allowed: 3 Hours
Full Marks: 100

The figures in the margin on the right side indicate full marks.
All workings must form part of your answer.
Wherever necessary, Candidates may make appropriate assumptions and clearly state them.

Please
(1) Write answers to all parts of a question together.
(2) Open a new page for answers to a new question.
(3) Attempt the required number of questions only.

This Paper has been divided into two Parts A & B, each carrying 50 marks.
Further each Part has been divided into two sections each.

Part-A
(COST & MANAGEMENT ACCOUNTING)
(50 Marks)

Section-I
Answer the following questions.

1. (a) Choose the correct answer from the given four alternatives (You may write only the Roman numeral and Alphabet chosen for your answer): 1x6=6

(i) Management Accounting
(A) accumulates, summarises and analyses the available data.
(B) is primarily concerned with the requirements of the management.
(C) makes Corporate Planning and Strategy Effective.
(D) All of the above
(ii) XYZ Ltd., makes a special gadget for the car it manufactures. The machine for the
gadget works to full capacity and incurs ₹ 15 Lakhs and ₹ 40 Lakhs respectively as
Variable and Fixed Costs. If all the gadgets were purchased from an outside
supplier, the machine could be used to produce other items, which would earn a
total contribution of ₹ 25 Lakhs. What is the maximum price that XYZ Ltd., should
be willing to pay to the outside supplier for the gadgets, assuming there is no
change in Fixed Costs?

(A) ₹ 40 Lakhs
(B) ₹ 65 Lakhs
(C) ₹ 25 Lakhs
(D) ₹ 15 Lakhs

(iii) When a manager is concerned with monitoring total cost, total revenue and net
profit conditioned upon the level of productivity, an accountant should normally
recommend

<table>
<thead>
<tr>
<th>Flexible Budgeting</th>
<th>Standard costing</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>(B) Yes</td>
<td>No</td>
</tr>
<tr>
<td>(C) No</td>
<td>Yes</td>
</tr>
<tr>
<td>(D) No</td>
<td>No</td>
</tr>
</tbody>
</table>

(iv) In a system whereby all activities are re-evaluated each time a budget is formulated
and starts with assumption that requirements of funds does not exist is called

(A) Performance Budgeting
(B) Programme Budget
(C) Flexible Budget
(D) Zero-based Budgeting

(v) The difference between hours paid and hours worked is known as

(A) Labour rate variance
(B) Labour efficiency variance
(C) Idle time variance
(D) Net efficiency variance
(vi) The difference in total cost that results from two alternative courses of action is called
(A) Relevant Cost
(B) Opportunity Cost
(C) Differential Cost
(D) Marginal Cost

(b) Match the statement under Column I with the most appropriate statement under Column II: (You may opt to write only the numeral and the matched alphabet instead of copying the contents into the answer book):

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Budgetary Control System</td>
<td>(A) are useful for budget and performance evaluation</td>
</tr>
<tr>
<td>2 Standard Costs</td>
<td>(B) helps in profit planning and analysis</td>
</tr>
<tr>
<td>3 Marginal Costing</td>
<td>(C) aims at adherence to planning costs</td>
</tr>
<tr>
<td>4 Cost Control</td>
<td>(D) The introduction and implementation of the system may be expensive</td>
</tr>
</tbody>
</table>

1×4=4

(c) State whether the following statements are True or False: (You may write only the Roman numeral and whether True or False without copying the statement into the answer book):

(i) Marginal Costing is useful for long term planning.
True

(ii) Profit Planning and Control is not a part of Budgetory Control Mechanism.
True

(iii) Standard Costs are based on technical assessments.
True

(iv) PV Chart exhibits the relationship between profit and overhead volume.
True
Section II

Answer any three questions from question nos. 2, 3, 4 and 5.

Each question carries 12 marks.

2. (a) AARINA LTD., sells its product at ₹ 30 per unit. During the quarter ending 31st March, 2019 it produced and sold 16000 units and suffered a loss of ₹ 10 per unit. If the volume of sales is raised to 40000 units, it can earn a profit of ₹ 8 per unit.

You are required to calculate:

(i) Break-Even Point in Rupees.

(ii) Profit, if the sales volume is 50000 units. 2+2=4

(b) TRITONI LTD., produces 3 products A, B and C from the same manufacturing facilities. The cost and other details of the 3 products are as follows:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selling Price/unit (₹)</td>
<td>200</td>
<td>160</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Variable Cost/unit (₹)</td>
<td>120</td>
<td>120</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Fixed Expenses/month (₹)</td>
<td></td>
<td></td>
<td></td>
<td>2,76,000</td>
</tr>
<tr>
<td>Maximum Production/month (units)</td>
<td>5000</td>
<td>8000</td>
<td>6000</td>
<td></td>
</tr>
<tr>
<td>Total Hours available for the month</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum demand/month (units)</td>
<td>2000</td>
<td>4000</td>
<td>2400</td>
<td></td>
</tr>
</tbody>
</table>

The processing hours cannot be increased beyond 200 hours/month.

You are required to:

(i) Compute the most profitable mix.

(ii) Compute the overall break-even sales of the company for the month based on the mix calculated in (i) above. 4+4=8
3. (a) WESTLAND LTD., a manufacturing company operates standard costing system and showed the following data in respect of the month of May 2019:

<table>
<thead>
<tr>
<th>Budgeted</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working days</td>
<td>20</td>
</tr>
<tr>
<td>Man hours</td>
<td>4000</td>
</tr>
<tr>
<td>Fixed overhead cost (₹)</td>
<td>2400</td>
</tr>
<tr>
<td>Output (units)</td>
<td>800</td>
</tr>
<tr>
<td></td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>4200</td>
</tr>
<tr>
<td></td>
<td>2500</td>
</tr>
<tr>
<td></td>
<td>900</td>
</tr>
</tbody>
</table>

You are required to **calculate** the following Fixed overheads variances:

(i) FOH Budget Variance  
(ii) FOH Cost Variance  
(iii) FOH Efficiency Variance  
(iv) FOH Capacity Variance  
(v) FOH Calendar Variance  
(vi) FOH Volume Variance

(b) SHIBHUMA LTD., budgets to sell in the quarter ending March 31, 2019:

500 Units of product P @ ₹ 30 per unit,  
400 Units of product Q @ ₹ 20 per unit and  
100 Units of product R @ ₹ 50 per unit.

During the quarter **Actual Sales** were as follows:

400 Units of product P @ ₹ 40 per unit.  
500 Units of product Q @ ₹ 10 per unit.  
50 Units of product R @ ₹ 40 per unit.

You are required to **determine** the following sales variances:

(i) Sales Value variance  
(ii) Sales Price Variance  
(iii) Sales Volume Variance  
(iv) Sales Mix Variance  
(v) Sales Sub-Volume Variance
4. (a) SBT LTD., a newly established manufacturing company has an installed capacity to produce 100000 units of a consumer product annually. However its practical capacity is only 90%.

The actual capacity utilization may be substantially lower, as the firm is new to the market and the demand is uncertain.

The following budget has been prepared for 90% capacity utilization.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Cost per unit (₹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Materials</td>
<td>12</td>
</tr>
<tr>
<td>Direct Labour</td>
<td>8</td>
</tr>
<tr>
<td>Direct Expenses</td>
<td>5</td>
</tr>
<tr>
<td>Production Overheads</td>
<td>10 (40% Variable)</td>
</tr>
<tr>
<td>Administrative Overheads</td>
<td>5 (100% Fixed)</td>
</tr>
<tr>
<td>Selling and Distribution</td>
<td>6 (50% Variable)</td>
</tr>
</tbody>
</table>

You are required to prepare the budgets at 70% and 80% levels of capacity utilization giving clearly the

(i) Unit Variable Costs
(ii) Unit Fixed Cost
(iii) Total Cost under various heads at all the above levels

(b) DANDIA LTD., a manufacturing company received an order for 16 units of a new product. So far, 4 units have been completed; the first unit required 40 direct labour hours and a total of 102-40 Direct labour hours has been recorded for the 4 units. The Production Manager expects on 80% learning effect for this type of work.

The direct cost attributed to the centre in which the unit is manufactured and its costs are as follows:

<table>
<thead>
<tr>
<th></th>
<th>₹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Material</td>
<td>30-00 per unit</td>
</tr>
<tr>
<td>Direct Labour</td>
<td>6-00 per hour</td>
</tr>
<tr>
<td>Variable overhead</td>
<td>0-50 per direct labour hour</td>
</tr>
<tr>
<td>Fixed overheads apportioned</td>
<td>5-00 per direct labour hour</td>
</tr>
</tbody>
</table>

You are required to produce an estimated product cost for the initial order based on the cost data given.

5. Write short notes on any three out of the following: 4×3=12
   (a) Distinction between Standard Costing and Budgetory Control
   (b) Inter Firm Comparison
   (c) Methods of Transfer Pricing
   (d) Limitations of Marginal Costing
Part-B
(FINANCIAL MANAGEMENT)
(50 Marks)
Section-III

Answer the following questions:

6. (a) Choose the correct answer from the given four alternatives (You may write only the Roman numeral and Alphabet chosen for your answer):

1×6=6

(i) Objective of Financial Management is

(A) Management of Liquidity
(B) Maximization of Profit
(C) Maximization of Shareholders’ Wealth
(D) Management of Fixed Assets

(ii) Which of the following variables is not known in Internal Rate of Return?

(A) Initial Cash Flows
(B) Discount Rate
(C) Terminal Inflows
(D) Life of the Project

(iii) Cost of Capital refers to

(A) Floatation Cost
(B) Dividend
(C) Required Rate of Return
(D) None of the above

(iv) Working Capital Management involves financing and management of

(A) All Assets
(B) All Current Assets
(C) Cash and Bank Balance
(D) Receivables and Payables
(v) All listed companies are required to prepare
   (A) Funds Flow statement
   (B) Cash Flow Statement
   (C) Statement of Affairs
   (D) All of the above

(vi) Ratio Analysis can be used to study liquidity, turnover, profitability etc., of a firm. What does Debt-Equity Ratio help to study?
   (A) Solvency
   (B) Liquidity
   (C) Profitability
   (D) Turnover

(b) Match the statement under Column I with the most appropriate statement under Column II: (You may opt to write only the numeral and the matched alphabet instead of copying the contents into the answer book): 1×4=4

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Important element of Capital Budgeting is</td>
<td>(A) represents a risky situation</td>
</tr>
<tr>
<td>2. High Operating and Financial Leverage</td>
<td>(B) may affect the size of working capital</td>
</tr>
<tr>
<td>3. A consistent dividend policy</td>
<td>(C) a tool for analysis of financial statements</td>
</tr>
<tr>
<td>4. Fund Flow Statement is</td>
<td>(D) the analysis of risk and uncertainty</td>
</tr>
</tbody>
</table>

(c) State whether the following statements are True or False: (You may write only the Roman numeral and whether True or False without copying the statement into the answer book.) 1×4=4

(i) In Financial Management, the objective of Financial Manager is profit maximization.

(ii) Investment Decisions and Capital Budgeting are one and the same.

(iii) Operating Leverage analyses the relationship between Sales Level and Earning Per Share (EPS).

(iv) The Cost of Capital is the required rate of return to maintain the value of the firm.
Section IV

Answer any three questions from question nos. 7, 8, 9 and 10.

Each question carries 12 marks.

7. (a) The Balance Sheet of VASUDHA LTD. as on March 31, 2019 is as given below:

<table>
<thead>
<tr>
<th>Equity and Liabilities</th>
<th>Amount</th>
<th>Assets</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity Share Capital</td>
<td>250</td>
<td>Fixed Assets</td>
<td>400</td>
</tr>
<tr>
<td>General Reserve</td>
<td>280</td>
<td>Investment</td>
<td>50</td>
</tr>
<tr>
<td>Profit &amp; Loss a/c (Current year)</td>
<td>30</td>
<td>Stock</td>
<td>460</td>
</tr>
<tr>
<td>Secured Loans—Long Term</td>
<td>300</td>
<td>Debtors</td>
<td>460</td>
</tr>
<tr>
<td>Secured Loans—Short Term</td>
<td>360</td>
<td>Cash and cash</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>equivalents</td>
<td></td>
</tr>
<tr>
<td>Creditors</td>
<td>150</td>
<td>Miscellaneous</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Expenditure (not</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Written off)</td>
<td></td>
</tr>
<tr>
<td>Other Liabilities</td>
<td>30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1,400                                        1,400

Additional informations:
(i) From the P&L A/c, ₹ 90 Lakhs was transferred to General Reserve during the year
(ii) Interest Cost amounted to ₹ 120 lakhs
(iii) Taxation @ 40%

You are required to calculate
(i) Current Ratio
(ii) Debt-Equity Ratio
(b) The following are the financial statement of KODIAC LTD. for the year ended March 31.

Balance Sheet as on March 31, (Amount in ₹ Thousand)

<table>
<thead>
<tr>
<th>Equity &amp; Liabilities</th>
<th>2019</th>
<th>2018</th>
<th>Assets</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Capital</td>
<td>5,000</td>
<td>5,000</td>
<td>Fixed Assets</td>
<td>10,500</td>
<td>8,500</td>
</tr>
<tr>
<td>Profit &amp; Loss A/c</td>
<td>5,000</td>
<td>4,250</td>
<td>Stock</td>
<td>3,000</td>
<td>3,400</td>
</tr>
<tr>
<td>Long-term Loan</td>
<td>5,500</td>
<td>5,000</td>
<td>Debtors</td>
<td>3,450</td>
<td>3,800</td>
</tr>
<tr>
<td>Creditors</td>
<td>1,800</td>
<td>1,750</td>
<td>Cash and cash equivalents</td>
<td>350</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>17,300</td>
<td>16,000</td>
<td></td>
<td>17,300</td>
<td>16,000</td>
</tr>
</tbody>
</table>

Income Statement for the year ended 31.3.2019.

(Amount in ₹ Thousand)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>21,500</td>
</tr>
<tr>
<td>Less: Cost of Sales</td>
<td>(14,700)</td>
</tr>
<tr>
<td></td>
<td>6,800</td>
</tr>
<tr>
<td>Less: Operating Expenses:</td>
<td></td>
</tr>
<tr>
<td>Administrative Expenses</td>
<td>(2,400)</td>
</tr>
<tr>
<td>Depreciation</td>
<td>(1,000)</td>
</tr>
<tr>
<td>Add: Dividend Received</td>
<td>3,400</td>
</tr>
<tr>
<td></td>
<td>250</td>
</tr>
<tr>
<td>Less: Interest Paid</td>
<td>3,650</td>
</tr>
<tr>
<td></td>
<td>(700)</td>
</tr>
<tr>
<td>Less: Income Tax</td>
<td>2,950</td>
</tr>
<tr>
<td></td>
<td>(1,300)</td>
</tr>
<tr>
<td>Profit after Tax</td>
<td>1,650</td>
</tr>
</tbody>
</table>

KODIAC Ltd. paid dividend of ₹ 9,00,000 during the year ended 31.03.2019.

Required:
Prepare a Cash Flow Statement of Kodiac Ltd. As per AS-3 (Revised) for the year ended March 31, 2019 using Indirect Method.
8. (a) GOLDILOCKS LTD. sells goods to domestic market on a gross profit of 25% on sales without considering depreciation. Its estimates for the year 2019-20 are as follows:

<table>
<thead>
<tr>
<th>Sales:</th>
<th>(Amount in ₹ Lakh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Market at 2 months’ Credit</td>
<td>1600</td>
</tr>
<tr>
<td>Export (Selling price 10% below home price)</td>
<td>540</td>
</tr>
<tr>
<td>(Exports at 3 months’ Credit)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials used (Suppliers extend 2 months’ Credit)</td>
<td>600</td>
</tr>
<tr>
<td>Wages paid (1/2 month in Arrear)</td>
<td>400</td>
</tr>
<tr>
<td>Manufacturing Expenses (Paid 1 month in Arrear)</td>
<td>600</td>
</tr>
<tr>
<td>Sales Promotion (Payable quarterly in advance)</td>
<td>80</td>
</tr>
<tr>
<td>Administration Expenses (Paid 1 month in Arrear)</td>
<td>200</td>
</tr>
</tbody>
</table>

The company maintains one month’s stock of each raw material and finished goods. A cash balance of ₹ 20 lakh is also maintained. There is no Work-In-Progress (WIP). All expenses and incomes are made evenly throughout the year.

Required:
Prepare a statement of Working Capital Requirements of the Company for 2019-20 on Cash Cost basis.

(b) HILSON LTD. was started a year back with equity capital of ₹ 40 lakhs. The other details are as under:

- Earnings of the company: ₹ 4,00,000
- Price Earning ratio: 12.5
- Dividend paid: ₹ 3,20,000
- Number of Shares: 40,000

Required:
(i) Find the Current Market price of the share, and

(ii) Find whether the Company’s D/P ratio is optimal —using Walter’s model.
9. (a) The WONDERLAND LTD. has the following Book Value Capital Structure as on March 31, 2019:

<table>
<thead>
<tr>
<th>Share Type</th>
<th>Amount in ₹ Thousand</th>
</tr>
</thead>
<tbody>
<tr>
<td>600000 Equity Share at ₹ 10 each fully paid</td>
<td>6000</td>
</tr>
<tr>
<td>10000, 9% Preference Shares of ₹ 100 each</td>
<td>1000</td>
</tr>
<tr>
<td>30000, 12% Debentures of ₹ 100 each</td>
<td>3000</td>
</tr>
<tr>
<td></td>
<td>10000</td>
</tr>
</tbody>
</table>

The equity share of the Company sells at ₹ 20 per share. The dividend expected next year is ₹ 2.5 per share, which is expected to grow at 5% per annum. Corporate tax rate is 30%.

You are required to determine the Weighted Average Cost of Capital (WACC) of Wonderland Ltd. based on the existing Capital Structure.

(b) ELROND LTD. (EL) has just installed MACHINE A at a cost of ₹ 2,00,000. This machine has 5 years life with no residual value. The annual volume of production is estimated at 150000 units, which can be sold at ₹ 8 per unit. Annual operating costs are estimated at ₹ 2,00,000 (excluding depreciation) at this output level. Fixed costs are estimated at ₹ 4,50,000 per annum for the same level of production.

The company has just come across another model called MACHINE B capable of giving the same output at an annual operating costs of ₹ 1,50,000 (excluding depreciation). There will be no change in fixed costs. Capital cost of this machine is ₹ 2,50,000 and the estimated life is 5 years with no residual value.

The company has an offer for sale of MACHINE A at ₹ 1,00,000. But the cost of dismantling and removal will amount to ₹ 30,000. As the company has not yet commenced operation, it wants to sell MACHINE A and purchase MACHINE B.

ELROND LTD. will be zero-tax company for 7 years in view of several incentives and allowances available. The cost of capital is 14%.

Required:

**Based on the NPV Criterion,** advise the Company whether it should opt to replace MACHINE A by installing MACHINE B.

[Given : PVIFA (14%, 5 years) = 3.433 and PVIF (14%, 5 years) = 0.519] (Solve the problem by an incremental cash flow approach.)

10. Write short notes on *any three* out of the following: 4×3=12

(a) Lease Financing

(b) Objectives, Functions and Powers of the Securities Exchange Board of India (SEBI)

(c) Window Dressing

(d) Significance of Funds Flow Statement (FFS)