

The Open University of Sri Lanka
Faculty of Engineering Technology



Study Programmes	: Bachelor of Science Honours in Engineering Bachelor of Software Engineering Honours
Name of the Examination	: Final Examination
Course Code and Title	: CVM5401 /CVM5402 Accounting for Engineers
Academic Year	: 2024/2025
Date	: 12 th February 2026
Time	: 13:30 - 16.30hrs
Duration	: 3 hours

General Instructions

1. Read all instructions carefully before answering the questions.
2. This question paper consists of **Two (2)** Sections carrying Seven (7) questions in **six (6)** pages.
3. Answer **BOTH questions in Section A** and **ANY THREE (3) Questions in Section B.**
4. Answers for **sections A & B should be submitted on separate answer books** with titles **Section A and Section B written clearly on the cover of the respective books.**
5. Answer for each question should commence on a new page.
6. This is a Closed Book Test (CBT).
7. Answers should be in clear handwriting.
8. Do not use Red colour pens.

SECTION A**QUESTION 01**

- (a) Accounting is often referred to as 'the language of business.' Do you agree with this statement? Provide justification for your position.

(05 Marks)

- (b) Briefly explain the importance of accounting knowledge for engineers.

(04 Marks)

- (c) Write down the names of the corresponding primary book and source document for each of the following transactions.

No	Transactions	Primary Book	Source Document
a.	Goods purchased for credit		
b.	Cash receipts & payments		
c.	Correction of errors		

(03 Marks)

- (d) Categorize the accounting situations or actions displayed in the table below into any one of the following accounts categories: Assets, Liabilities, Income, Expenses, and Equity.

No	Accounting situations or actions	Account Category
a.	Sales	
b.	Rent income received in advance	
c.	Owner's Capital	
d.	Bad debts written off	
e.	Key money paid to the property owner	

(05 Marks)

- (e) ABC enterprise is a small-scale business which has not maintained a proper accounting system during the financial year 2024-2025. The following information has been provided to you by the owner, Mr. Perera.

- ✓ Starting Capital as of 01.04.2024 is Rs.1,200,000
- ✓ Re-invested capital during the financial year is Rs. 400,000
- ✓ Drawings during the financial year is Rs.100,000
- ✓ Total Assets and Liabilities as of 31.03.2025 are Rs.2,400,000 and Rs. 500,000 respectively

You are required to calculate the profit (or loss) of the enterprise for the financial year 2024-2025.

(03 Marks)

QUESTION 02

- (a) The following transactions took place in Mr. Perera's business during the month of December 2025. Put each transaction into the accounting equation given below.

$$A = E + L$$

An example has been provided for you for the transaction shown below to make the question clearer:

The owner invested Rs.5,000,000 in the business on 01st December 2025.

$$+5,000,000 = +5,000,000 + 0$$

No	Date	Transaction
1	01.12.2025	Bought a motor vehicle worth Rs.2,500,000 on cash
2	05.12.2025	Took a bank loan worth Rs.2,000,000
3	06.12.2025	Purchased goods worth Rs.500,000 on credit.
4	08.12.2025	Purchased goods worth Rs.400,000 on cash.
5	10.12.2025	Sold the goods worth Rs.300,000 for Rs.450,000 on credit.
6	12.12.2025	Sold the goods worth Rs.220,000 for Rs.350,000 on cash.
7	15.12.2025	Received money from debtors Rs.250,000.
8	18.12.2025	Paid money for creditors Rs.200,000.
9	20.12.2025	Owner withdrew Rs.50,000 for personal use
10	25.12.2025	Donated Rs.100,000 worth goods

(01 Marks *10 = 10 Marks)

- (b) Draw the 'T' Account of the Cash Book, and show the entries for the month of December 2025 in Mr. Perera's business (part a). You are also required to use the transaction given as the example in preparing the Cash Book.

(10 Marks)

SECTION B**QUESTION 03**

Green Ceylon Tea is a specialized tea processing and packaging entity. The company recently accepted a bulk order to produce 1,000 units of 1 kg tea bags for a corporate client. The following financial data relates to this specific production run for the period ending 31.12.2025.

Description	Value (Rs.)
Opening inventory (bulk tea leaves) as at 01.12.2025	36,300
Purchased bulk tea leaves	909,700
Factory rent (Allocated to this order)	16,500
Filter paper and outer packaging materials	308,000
Direct labour (packing and sealing staff)	162,800
Production supervisor charges	38,500
Factory electricity	9,350
Tea bagging machine repairs	7,150
Tags, threads, and staples (sundries)	13,200
Machine depreciation (allocated to this order)	8,800
Closing inventory (bulk tea leaves) as at 31.12.2025	49,500

You are required to calculate.

- | | |
|--------------------------------------|------------|
| (a) Primary Cost | (08 Marks) |
| (b) Overhead Cost | (04 Marks) |
| (c) Total Cost | (04 Marks) |
| (d) Unit Cost of producing a tea bag | (04 Marks) |

QUESTION 4

- (a) Briefly explain two types of liquidity ratios emphasising on the purpose of computing and analysing these ratios to a business entity.

(05 marks)

- (b) The balance sheet of Company ABC is presented below:

Assets	Amount in Rupees (in 1,000s)	Liabilities	Amount in Rupees (in 1,000s)
Cash	50,000	Accrued expenses	45,000
		Creditors	35,000
Marketable securities	25,000	Long term debt	150,000
Inventory	100,000	Share capital	200,000
Accounts receivables	80,000	Retained earnings	35,000
Prepaid expenses	60,000		
Plant and equipment	150,000		
Total	465,000	Total	465,000

Compute the two types of liquidity ratios (stated in part a) for Company ABC, and comment on the liquidity of the company.

(05 marks)

- (c) Briefly explain the two types of solvency ratios emphasising on the purpose of computing and analysing these ratios to a business entity.

(05 marks)

- (d) Compute the two types of solvency ratios (stated in part c) for Company ABC (shown in part b), and comment on the solvency of the company.

(05 marks)

QUESTION 5

- (a) Describe the two concepts 'cost unit' and 'cost centre' separately using examples.

(06 marks)

- (b) Write a short descriptive note on 'activity based cost analysis'.

(06 marks)

- (c) Explain the 'Manufacturing Costs' and 'Non -Manufacturing Costs' separately while illustrating your answer with the example of manufacture of soap in a factory.

(08 marks)

QUESTION 6

- (a) Briefly explain what is social accounting.

(04 marks)

- (b) Briefly explain what is Return on Investment (ROI) while highlighting merits and demerits of using it to evaluate an investment.

(05 marks)

- (c) Briefly explain Predatory pricing strategy.

(04 marks)

- (d) CDE Electrical (pvt) Ltd has developed a new electrical appliance, and they wish to introduce the product to the market at an attractive unit price of Rs. 4,500. The fixed cost and variable cost of production of one unit of this product is Rs. 2,200 and Rs. 950 respectively. Forecasted annual sales volume is 20,000 units. The financial data relevant to this product is listed below;

Other annual fixed costs (overheads etc.) - Rs. 5,000,000

Additional Investment on equipment to develop production line to manufacture this product - Rs. 55,000,000

Period over which the additional investment on equipment of production line to be written off - 05 years

Development costs for the invention of this appliance - Rs. 10,000,000

Calculate the ROI, on the assumption that unit price of the product is maintained at Rs. 4,500 throughout the period of 05 years. (07 marks)

QUESTION 7

- (a) Briefly explain what Capital Budgeting is. (03marks)
- (b) ZYX (pvt) Ltd. is a company which is planning to hire newly purchased earth moving machines to a road construction company at an annual rental of Rs. 2,500,000 for 5 years. The estimated salvage value of these machines after 5 years is Rs. 3,000,000. The initial investment made by the company for machines is Rs. 9,000,000. Calculate the Accounting Rate of Return (ARR) for this proposal. (04 marks)
- (c) The company also wishes to carry out NPV analysis for the hiring proposal presented in 7(b). Assume a cost of capital of 9 % for this analysis. Calculate NPV of this proposal. (05 marks)
- (d) Briefly explain the importance of Risk analysis in Capital Budgeting. (03 marks)
- (e) Assume that a risk analysis performed by the company reveals that the salvage value of earth moving machines could go down to Rs. 1,500,000 in the worst-case scenario. Comment on financial feasibility of this proposal by reperforming NPV analysis under this worst-case scenario. (05 marks)