

**Vidya Vikas Mandal's**  
**Shree Damodar College of Commerce & Economics, Margao- Goa**  
**TY B.Com, Semester V, Semester End Examination, November 2023**  
**Cost Accounting (DSE4)**  
**Management Accounting-COD114**

**Max Marks: 80**

**Duration: 2 hrs**

- Instructions: 1) Question No.1 is compulsory*  
*2) Answer Any Three questions from Q.no.2 to Q.no.6*  
*3) Figures to the right indicate maximum marks*  
*4) Working notes should form a part of the answer*  
*5) Start each question on a fresh page*

**Q.1)** M/s. Justin Products Ltd. Margao manufactures three types of products P, Q and R and markets them at Rs.450, Rs.550, and Rs.650 per unit respectively. The current ratio of sales in quantities of P, Q and R are 1:2:4.

Relevant data of P, Q and R (per unit) is given below:

Product	Qty of spare parts required (in nos)				Labour hours		Variable overheads
	Frames	A	B	C	Skilled	Unskilled	
P	1	10	2	8	6	8	Rs.9
Q	1	2	14	10	4	6	Rs.11
R	1	6	10	2	3	6	Rs.7

The present purchase price per part is Rs.45, Rs.15, Rs.15 and Rs.5 for frame, A, B and C respectively. The wage rate per hour for skilled and unskilled workers is Rs.6 and Rs. 5 respectively.

The opening stocks as on 1.1.2019 stood at 500; 1,000; 3,000; 1500 for P, Q, R and frames. Whereas its 1,000; 20,000 and 10,000 for A, B and C respectively.

The company maintains closing stock of products and spare parts at 90% of the opening stock at the end of every month. The workers work for 8 hours a day for 25 days in a month.

The share of fixed overheads per month comes to Rs. 15,75,000; Rs.5,80,000 and Rs.8,45,000 for production, administrative and selling overheads respectively. The yearly profit projected for the year 2019 is 10 Lakhs.

You are required to prepare: (a) Sales Budget (b) Production Budget (c) Spareparts Usage and Purchase budget. **(20 marks)**

**Q.2)** There are two mutually exclusive projects under active consideration of a company. Both the projects have a life of five years and have initial cash outlays of Rs.1,00,000 each. The company pays tax at 50% rate and the maximum required rate

of the company has been given as 10%. The straight line method of depreciation will be charged on the projects. The projects are expected to generate a net cash inflow (after depreciation and before taxes) as follows:

Year	Project X	Project Y
1	Rs. 40,000	Rs. 60,000
2	Rs. 40,000	Rs. 30,000
3	Rs. 40,000	Rs. 20,000
4	Rs. 40,000	Rs. 50,000
5	Rs. 40,000	Rs. 50,000

The present value of Re.1 for 5 years at 10% discount factor is:

Years	1	2	3	4	5
P.V @10%	0.909	0.826	0.751	0.683	0.621

With the help of the above information you are required to calculate:

- The Payback Period of each project
- The Average rate of return
- The Net Present Value at 10%
- Profitability Index at 10% discount rate

(20 marks)

**Q.3)** From the following particulars prepare a Cash Budget of SunClear Ltd. for the month of October, November and December 2022: (all figures in Rs.)

Month	Purchases	Sales	Wages	Expenses
July	40,000	60,000	8,000	10,000
August	60,000	80,000	10,500	12,000
September	50,000	70,000	17,500	12,500
October	70,000	90,000	17,100	11,600
November	80,000	1,00,000	12,000	11,800
December	60,000	1,20,000	12,000	12,300

It is expected that 50% of sales will be in cash and 25% of the purchases can be made on credit. Debtors are allowed 2 months credit but will receive 5% cash discount if they will pay off their dues within the month next to the month of sale.

80% of the debtors normally clear their dues at the end of the period to avail the cash discount. Rest 20% of the debtors pay on the due date.

4/5<sup>th</sup> of the credit purchase is paid after 1 month of that purchase and next to that month the balance 1/5<sup>th</sup> is paid.

Wages are paid within 5<sup>th</sup> of the following month.

Expenses includes selling and distribution expenses which are 10% of the sales.

Any deficiency in cash at the end of a month will be met by taking short-term loan for two months from bank. At the end of September, 2022 the SunClear Ltd. had Rs.40,000 cash in hand.

**(20 marks)**

**Q.4) A.** Beta Ltd is considering the purchase of a new machine. Two alternative machines A and B suggested each costing Rs. 400,000. Earnings after taxation are expected to be as follows:

Year	P.V of Re.1 @10%	Machine A	Machine B
1	0.909	40,000	1,20,000
2	0.826	1,20,000	1,60,000
3	0.751	1,60,000	2,00,000
4	0.683	2,40,000	1,20,000
5	0.621	1,60,000	80,000

The company's target return on capital is 10%. You are required to compare the profitability of the machines and state which alternative of the machine is financially preferable. Adopt Net Present Value method and Profitability Index method to determine the acceptability of the projects.

**(10 marks)**

**B.** Discuss the basic principles of Management Accounting.

**(10 marks)**

**Q.5) A.** What is Target Costing? Describe in brief the steps involved in the implementation of target costing.

**(10 marks)**

**B.** Explain the need for application of Enterprise Resource Planning in Manufacturing Industries.

**(10 marks)**

**Q.6)** Write short notes on any four of the following:

**(4x5=20marks)**

- Role of Management Accountant in decision making
- Master Budget
- Internal rate of return as a technique of capital budgeting
- Scope of Management Accounting
- Scope of Enterprise Resource Planning
- Benefits of Target Costing