The figures in the margin on the right side indicate full marks. Where considered necessary, suitable assumptions may be made and clearly indicated in the answer.
Answer Question No. 1 and any five from Question No. 2, 3, 4, 5, 6, 7 and 8.

## SECTION - A

## (Compulsory)

1. (a) Choose the correct answer from the given alternatives (you may write only the Roman numeral and the alphabet chosen for your answer): [ $1 \times 12=12]$
(i) Costs which are ascertained after they have been incurred are known as
a. Sunk Costs
b. Imputed Costs
c. Historical Costs
d. Opportunity Costs
(ii) Prime cost plus variable overheads is known as
a. Factory Cost
b. Marginal Cost
c. Cost of Production
d. Total Cost
(iii) In which of the following methods, issue of materials is priced at predetermined rate?
a. Specific price method
b. Standard price method
c. Inflated price method
d. Replacement price method
(iv) For reducing the labour cost per unit, which of the following factors is the most important?
a. Low wage rates
b. Longer hours of work
c. Higher input-output ratio
d. Strict control and supervision

## COST ACCOUNTING

(v) Maximum possible productive capacity of a plant when no operating time is lost is its
a. Normal capacity
b. Practical capacity
c. Theoretical capacity
d. Capacity based on sales expectancy
(vi) In job costing, which of the following documents is used to record the issue of direct materials to a job?
a. Goods Receipt Note
b. Purchase Order
c. Purchase Requisition Note
d. Material Requisition Note
(vii) The main purpose of accounting of joint products and by-products is to
a. determine the profit/loss on each product line.
b. determine the selling price.
c. comply with the statutory requirements.
d. identify the cost and load it on the main product.
(viii) The following is not treated as a manufacturing overhead:
a. Lubricants
b. Cotton waste
c. Apportioned administration overheads
d. Night shift allowance paid to a factory worker due to general work pressure.
(ix) When you attempt a reconciliation of profits as per Financial Accounts and Cost Accounts, the following is done:
a. Add the under absorption of overheads in Cost Accounts if you start from the profits as per Financial Accounts.
b. Add the under absorption of overheads in Cost Accounts if you start from the profits as per Cost Accounts.
c. Add the over absorption of overheads in Cost Accounts if you start from the profits as per Financial Accounts.
d. Add the over absorption of overheads in Cost Accounts if you start from the profits as per Cost Accounts.
(x) The fixed-variable cost classification has a special significance in the preparation of
a. Cash budget
b. Master budget
c. Flexible budget
d. Capital budget

## COST ACCOUNTING

(xi) Which one of the following is related to the calculation of labour turnover.
a. Replacement method
b. Cost of utilities
c. Decision package
d. Direct expenses
(xii) Cost Accounting Standard 10 (CAS-10) relates to
a. Cost of utilities
b. Decision package
c. Direct expenses
d. Production strategy
(b) State whether the following statements are "True" or "False". $\quad[1 \times 7=7]$
(i) Profit is the result of two varying factors sales and variable cost.
(ii) Bin card is a record of both quantities and value.
(iii) Overtime premium is directly assigned to cost objects.
(iv) In a reconciliation statement, expenses shown only in financial accounts are added to financial profit.
(v) The basic assumption under which Direct Costing is operational is that the contribution to sales ratio remains constant at all levels of activity.
(vi) Performance Budgeting is synonymous with Responsibility Accounting.
(vii) Any deviation from the standards can be quickly detected and responsibility pinpointed so that the company can take appropriate action to eliminate inefficiencies or take advantage of efficiencies - this is termed as management by exception.
(c) Fill in the blanks
(i) $\qquad$ costs are historical costs which are incurred in the past.
(ii) In Absorption Costing, $\qquad$ cost is added to inventory.
(iii) CAS-2 is the Cost Accounting Standard on $\qquad$ determination.
(iv) $\qquad$ is the summary of all functional budgets.
(v) Standard Costing is one of the $\qquad$ techniques.
(vi) Distribution of identifiable expenses to any department is called $\qquad$ .

PAPER-8

## COST ACCOUNTING

## SECTION - B

## (Answer any five questions)

2. (a) Fire, Water and Air Ltd is a small machine part manufacturing company. You are the cost accountant of the unit. The top management places before you the following information from the cost records of the company. The records refer to the six months ending on 31st Dec., 2022.

|  |  |
| :--- | ---: |
| Materials used | $1,50,000$ |
| Direct wages | $1,20,000$ |
| Factory overhead expenses | 24,000 |
| Office expenses | 17,640 |

From the above particulars you are to prepare a Cost Sheet for the period. The top management also seeks from you the price which the company should quote for the manufacture of a machine requiring materials valued at ₹ 1,250 and expenditure on productive wages of ₹ 750 , so that the price may yield a profit of $20 \%$ on the selling price.
For the purpose of price quotation, you are to charge factory overhead as a percentage of direct wages and office overhead as a percentage of works cost which is the standard company policy.
(b) (i) What is direct expense?
(ii) State the definition of direct expenses as per CAS 10
(iii) State the principles of measurement of direct expense as per CAS 10 (any four)
$[1+2+5=8]$
3. (a) ASA FP LLP manufactures a particular brand of fountain pens called ASA MAYA, which requires ebonite 'Nicco' for the blank. The following particulars were collected for the year 2021-22:

| Monthly demand of ${ }^{\text {c Nicco’ }}$ | 7500 units |
| :--- | ---: |
| Cost of placing an order | $₹ 500$ |
| Re-order period | 5 to 8 weeks |
| Cost per unit | $₹ 60$ |
| Carrying cost \% p.a. | $10 \%$ |
| Normal usage | 500 units per week |
| Minimum Usage | 250 units per week |
| Maximum Usage | 750 units per week |

## COST ACCOUNTING

You are required to calculate
(i) Re-order quantity
(ii) Re-order level
(iii) Minimum stock level
(iv) Maximum stock level
(v) Average stock level
(b) Calculate total monthly remuneration of three workers, $\mathrm{A}, \mathrm{B}$ and C from the following data.

- Standard production per month per worker - 1000 units, actual production during the month, $\mathrm{A}-850$ units, $\mathrm{B}-750$ units and $\mathrm{C}-950$ units.
- Piecework rate ₹ 10 per unit [actual production]
- Additional production bonus is ₹ 10 for each percentage of actual production exceeding $80 \%$
- Dearness pay fixed ₹ 50 per month.

4. (a) LOTUS FP LLP has three Production Departments and two Service Departments. The overhead distribution sheet showed the following totals:

| Production Departments | $₹$ |
| :---: | ---: |
| A | 25,000 |
| B | 31,000 |
| C | 28,000 |
| Service Departments |  |
| S | 8,000 |
| T | 13,900 |

Given that the two service departments cater to the needs of the three production departments as per the following schedule (in percentage).

|  | A | B | C | S | T |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Department S | $30 \%$ | $20 \%$ | $40 \%$ | - | $10 \%$ |
| Department T | $40 \%$ | $15 \%$, | $25 \%$ | $20 \%$ | - |

Under the circumstance you are required to distribute the Overhead cost of the two service department on suitable basis such that iterations are avoided.
What according to you is the other way of apportioning the service department overheads under the above circumstance?
[3+4=7]

## COST ACCOUNTING

(b) In XYZ Ltd, the management finds that for a particular period the Profit as per cost accounts is ₹ $2,91,000$ while for the same period Profit as per financial accounts in $₹ 2,88,000$. He extracts the following from the records as the possible reason for the difference.

- Works overheads under-recovered ₹ 19,000
- Administration overheads under - recovered ₹ 45,500
- $\quad$ Selling overheads over - recovered ₹ 39,000
- Overvaluation of opening stock in cost accounts ₹ 30,000
- Overvaluation of closing stock in cost accounts ₹ 15,000
- Interest earned during the year ₹ 7,500
- $\quad$ Rent received during the year ₹ 54,000
- Bad debts written off during the year ₹ 18,000
- Preliminary expenses written off during the year ₹ 36,000

You, as a cost accountant of XYZ Ltd, are asked to analyse the above information and discuss how the difference between profit as per cost accounts and profit as per financial accounts can be presented to management in a suitable manner.
5. (a) You have been recently appointed as a Cost Accountant of Ratnamsons LTD. After going through the cost records you find that the selling price of Job No. 3286 has been calculated in the previous year on the following basis:

| Particulars | Amount (₹) |
| :--- | ---: |
| Materials | 1,208 |
| Direct Wages - 22 hours at ₹25 per hour | 550 |
| Department |  |
| A -10 hours |  |
| B - 4 hours |  |
| C -8 hours |  |
| Prime Cost | 1,758 |
| Plus 33\% on Prime Cost | 586 |
| Total | 2,344 |

PAPER - 8

## COST ACCOUNTING

An analysis of the previous year's Profit \& Loss Account shows the following:

| Particulars | Amount (₹) | Particulars | Amount (₹) |
| :--- | ---: | :--- | ---: |
| Materials Used | $77,50,000$ | Factory Overheads: |  |
| Direct Wages: |  | A | $2,50,000$ |
| A | $5,00,000$ | B | $4,00,000$ |
| B | $6,00,000$ | C | $1,00,000$ |
| C | $4,00,000$ | Selling Overhead | $30,00,000$ |

You are required to:
(i) Make suitable calculations after making revision to the cost estimate on the basis of the previous year's figures;
(ii) Draw up a Job Cost Sheet on the basis of the calculations made in (i) above.
(iii) Make suitable analysis on per unit basis and infer the selling price if profit is to be estimated at add to $10 \%$ of cost of sales.
(b) VAZIR LTD. undertook a contract for ₹ $5,00,000$ on 1st January, 2022. The company furnishes the following details for the year ended 31st December, 2022:

|  | $₹$ |
| :--- | ---: |
| Materials consumed | $1,65,000$ |
| Direct Expenses | 5,000 |
| Wages | 30,000 |
| Materials returned to stores | 5,000 |
| Materials stolen from site | 10,000 |
| Insurance claim admitted | 6,000 |
| Works expenses @ 20\%onwages |  |
| Office expenses @ 10\%onworkscost |  |
| Materials in hand on 31.12.2022 | 15,000 |
| Cashreceivedtotheextentof90\%ofworkscertified | $2,70,000$ |
| Cost of work uncertified | 11,000 |

A machine was sent to site costing ₹ 60,000 with a scrap value of ₹ 10,000 and its useful life is 5 years. The machine was used for the contract for 146 days.

## Required:

You are required to make suitable calculations and prepare the Contract Account for the year ended 31/12/2022 showing therein the cost of contract and also calculate the amount of profit or loss to be transferred to the Profit \& Loss Account.

## COST ACCOUNTING

6. (a) The following details are extracted from the cost records of MAGNACARTA LTD, an oil refining factory for the year ended $31^{\text {st }}$ March, 2022. Purchased 2000 tons of copra for $₹ 1,00,000$ and other expenses were as under:

|  | Crushing $(₹)$ | Refining $(₹)$ | Finishing $(₹)$ |
| :--- | ---: | ---: | ---: |
| Cost of Labour | 10,000 | 6,000 | 4,000 |
| Sundry Material | 4,000 | 3,000 | 2,000 |
| Electric Power | 3,000 | 2,000 | 1,600 |
| Steam | 2,000 | 2,000 | 1,500 |
| Repair of Machine | 2,000 | 1,000 | 500 |
| Cost of Casks | - | - | 7,500 |

Factory Expenses were ₹ 10,000 to be apportioned on the basis of wages. 1700 tons of crude oil was produced; 1540 tons of oil was refined and finally 1500 tons of oil was finished for delivery. Realized ₹ 2,000 from sale of sacks; ₹ 5,000 by sale of 250 tons of copra residue and ₹ 5,100 by sale of 120 tons of by-products in refining process.

Prepare Process Accounts for the year ending on 31st March, 2022.
(b) (i) There are two warehouses for storing finished goods produced in a factory. Warehouse ' $A$ ' is at a distance of 10 kms . and Warehouse ' $B$ ' is at a distance of 15 kms from the factory. A fleet of 5 tonne lorries is engaged in transporting the finished goods from the factory. The records show that the lorries average a speed of 30 kms . per hour when running and regularly take 40 minutes to load at the factory. At warehouse ' A ' unloading takes 30 minutes per load while at warehouse ' B ' it takes 20 minutes per load. Drivers' Wages, depreciation, insurance and taxes amount to ₹ 18 per hour operated. Fuel oil, tyres, repairs and maintenance cost ₹ 2.40 per kilometer.

Prepare a statement showing the cost per tonne kilometer of carrying the finished goods to the two warehouses.
(ii) Distinguish between absolute basis and commercial basis of calculating composite cost unit.
$[4+3=7]$

PAPER - 8

## COST ACCOUNTING

7. (a) Lurvey Men's Clothing's revenues and cost data for 2022 are as follows:

| Particulars | $₹$ | $₹$ |
| :--- | ---: | ---: |
| Revenues |  | $6,00,000$ |
| Cost of goods sold |  | $3,00,000$ |
| Gross margin |  | $3,00,000$ |
| Operating costs: |  |  |
| Salaries (fixed) | $1,70,000$ |  |
| Sales commissions (10\% of sales) | 60,000 |  |
| Depreciation of equipment and fixtures | 20,000 |  |
| Store rent (4,500 per month) | 54,000 |  |
| Other operating costs | 45,000 | $3,49,000$ |
| Operating income (loss) |  | $-49,000$ |

Mr. Lurvey, the owner of the store, is unhappy with the operating results. An analysis of other operating costs reveals that it includes ₹ 30,000 variable costs, which vary with sales volume, and ₹ 15,000 (fixed) costs. Mr. Lurvey approaches you as a qualified cost accountant and asks you to
(i) Critically assess the contribution margin of Lurvey Men's Clothing.
(ii) Evaluate the contribution margin percentage.
(iii) Mr. Lurvey estimates that he can increase revenues by $15 \%$ by incurring additional advertising costs of ₹ 13,000 . Assess the impact of the additional advertising costs on operating income.
(b) The following particulars are extracted from the records of a company.

| Particulars |  | Per Unit |  |
| :--- | :---: | :---: | :---: |
|  |  | Product B |  |
| Sales | ₹ 100 | ₹ 120 |  |
| Consumption Of Material | 2 Kg | 3 Kg |  |
| Material Cost | ₹ 10 | ₹ 15 |  |
| Direct Wages Cost | ₹ 15 | ₹ 10 |  |
| Direct Expenses | ₹ 5 | ₹ 6 |  |
| Machine Hours Used | 3 hours | 2 hours |  |
| Overhead Expenses |  |  |  |
| Fixed | ₹ 5 | ₹ 10 |  |
| Variable <br> Direct Wages per hour ₹ 5 | ₹ 15 | ₹ 20 |  |

PAPER-8

## COST ACCOUNTING

I. You as a Cost Accountant is required to comment on profitability of each product, both of which use the same raw material in the following alternative situations:
a. Total sales potential in units is limited;
b. Total sales potential in value is limited;
c. Raw material is in short supply;
d. Production capacity (in terms of machine hours) is the limiting factor
II. Assuming raw material as the key factor, availability of which is $10,000 \mathrm{kgs}$ and each product cannot be sold more than 3,500 units, advise on the product mix which will yield the maximum profit.
8. (a) Mr. Hardik, the owner of Trident Ltd. provides the following information regarding the production process of a particular fountain pen called the Magneye. After careful consideration he has noted that a group of workers usually consists of 10 skilled, 5 semi-skilled and 5 unskilled workers, paid at standard hourly rates of ₹ 50.00 , ₹ 32.00 and ₹ 28.00 respectively. In a normal working week of 40 hours, the group is expected to produce 1,000 units of Magneye.
During March 2023, adjustments were to be made to the actual composition of the group, due to non-availability of labour and actually consisted of 13 skilled, 4 semiskilled and 3 unskilled employees; actual wages paid were ₹ 48.00 , ₹ 34.00 and ₹ 26.00 respectively.
Two hours were lost due to abnormal idle time and 960 units of Magneye were produced.
Mr Hardik is worried about the variances in labour cost and asks you as a Cost Accountant to analyse the labour cost variances.
(b) Trinity Engineering Ltd. wishes to calculate an operating budget for the forthcoming period. Information regarding products, costs and sales levels is as follows:

| Product | A | B |
| :--- | :---: | :---: |
| Material required |  |  |
| X (kg) | 2 | 3 |
| Y (litres) | 1 | 4 |
| Labour hours required | 4 |  |
| Skilled (hours) | 2 | 2 |
| Semi - Skilled (hours) | 2000 | 5 |
| Sales level (units) | 100 | 200 |
| Opening stock (units) |  |  |

## COST ACCOUNTING

Closing Stock of materials and finished goods will be sufficient to meet $10 \%$ of demand. Opening stocks of material X was 300 kg and for material Y was 1000 litres. Material prices are ₹ 100.00 per kg for material X and ₹ 80.00 per hour for the semi-skilled workers.

You are required to prepare the following budget:

- Production budget
- Material usage budget
- Material Purchase budget

