

**MOCK TEST PAPER –1**

**INTERMEDIATE: GROUP – I**

**PAPER – 3: COST AND MANAGEMENT ACCOUNTING**

Answers are to be given only in English except in the case of the candidates who have opted for Hindi medium. If a candidate has not opted for Hindi medium his/ her answer in Hindi will not be valued.

Question No. 1 is compulsory.

Attempt any **four** questions from the remaining **five** questions.

Working notes should form part of the answer.

**Time Allowed – 3 Hours**

**Maximum Marks – 100**

1. Answer the following:

- (a) SKY Company Ltd., not registered under GST, purchased material 'RPP' from a company, registered under GST. The following information is available for one lot of 5,000 units of material purchased:

|                                             |                         |
|---------------------------------------------|-------------------------|
| Listed price of one lot                     | ₹ 7,50,000              |
| Trade discount                              | @ 10% on Listed price.  |
| CGST and SGST (Credit Not available)        | 12% (6% CGST + 6% SGST) |
| Road Tax paid                               | ₹ 15,000                |
| Freight and Insurance                       | ₹ 51,000                |
| Detention Charges                           | ₹ 15,000                |
| Commission and brokerage on purchases       | ₹ 30,000                |
| Amount deposited for returnable containers  | ₹ 90,000                |
| Amount of refund on returning the container | ₹ 60,000                |
| Other Expenses                              | @ 2% of total cost      |

20% of material shortage is due to normal reasons.

You are required to CALCULATE cost per unit of material purchased to SKY Company Ltd.

- (b) The following expenses were incurred on a contract:

|                               | (₹)      |
|-------------------------------|----------|
| Materials purchased           | 7,20,000 |
| Material drawn from stores    | 1,20,000 |
| Wages                         | 2,70,000 |
| Plant issued                  | 90,000   |
| Chargeable expenses           | 90,000   |
| Apportioned indirect expenses | 30,000   |

The contract was for ₹ 24,00,000 and it commenced on April 1, 2021. The value of the work completed and certified upto 28th February, 2022 was ₹ 15,60,000 of which ₹ 12,48,000 was received in cash, the balance being held back as retention money by the contractee. The value of work completed subsequent to the architect's certificate but before 31st March, 2022 was ₹ 72,000. There were also lying on the site materials of the value of ₹ 48,000. It was estimated that the value of plant as at 31st March, 2022 was ₹ 36,000.

You are required to COMPUTE notional profit on the contract till the year ended 31st March, 2022.

- (c) Mili Ltd., a manufacturing company, produces two main products and a by-product out of a joint process. The ratio of output quantities to input quantities of direct material used in the joint process remains consistent on yearly basis.

Company has employed the physical volume method to allocate joint production costs to the main products. The net realizable value of the by-product is used to reduce the joint production costs before the joint costs are allocated to the main products.

During a month, company incurred joint production costs of ₹ 15,00,000. The main products are not marketable at the split off point and thus have to be processed further. Details of company's operation are given in the table below.

| Particulars           | Product-Q  | Product-R  | By product |
|-----------------------|------------|------------|------------|
| Monthly output in kg. | 90,000     | 1,80,000   | 75,000     |
| Selling price per kg. | ₹ 50       | ₹ 30       | ₹ 5        |
| Process costs         | ₹ 3,00,000 | ₹ 4,50,000 |            |

FIND OUT the amount of joint product cost that Mili Ltd. would allocate to product-R by using the physical volume method to allocate joint production costs?

- (d) Chill Ltd. uses process costing to manufacture water density sensor for hydro sector. The following information pertains to operations for the month of February:

| Particulars                           | Units    |
|---------------------------------------|----------|
| Beginning WIP, February 1             | 22,400   |
| Started in production during February | 1,40,000 |
| Completed production during February  | 1,28,800 |
| Ending work in progress, February 28  | 33,600   |

The beginning work in progress was 50% complete for materials and 30% complete for conversion costs. The ending inventory was 80% complete for material and 30% complete for conversion costs.

Costs pertaining to the month of February are as follows:

Beginning inventory costs are material ₹ 1,38,350, direct labour ₹ 1,50,600 and factory overhead ₹ 63,600

Cost incurred during February are material ₹ 23,95,000, direct labour ₹ 9,14,400, factory overheads ₹ 19,55,800.

CALCULATE:

- (i) Using the FIFO method, the equivalent units of production for material.  
(ii) Cost per equivalent unit for conversion cost. **(4 × 5 Marks = 20 Marks)**

2. (a) The following data relates to the manufacturing project received for the budgeted output of 19,600 units. You are required to CALCULATE the selling price per unit covering a profit of 25% on the selling price.

Direct materials: 40 sq. m. per unit @ ₹ 10.60 per sq. m.

Direct wages: Bonding department 48 hours per unit @ ₹ 25 per hour

Finishing department 30 hours per unit @ ₹ 19 per hour

Budgeted costs and hours per annum-

Variable overhead:

|                      | (₹)       | Total hours |
|----------------------|-----------|-------------|
| Bonding department   | 15,00,000 | 10,00,000   |
| Finishing department | 6,00,000  | 6,00,000    |

Fixed overhead-

|                          | (₹)       |
|--------------------------|-----------|
| Production               | 15,68,000 |
| Selling and distribution | 7,84,000  |
| Administration (General) | 3,92,000  |

(10 Marks)

- (b) Following are the details given:

|                                               |                   |
|-----------------------------------------------|-------------------|
| Budgeted Days                                 | 25                |
| Budgeted Fixed Overheads                      | 1,00,000          |
| Budgeted Production                           | 800 units per day |
| Actual Production                             | 21,000 units      |
| Fixed Overheads are absorbed @ ₹ 10 per hour. |                   |
| Fixed overheads efficiency variance           | 10,000A           |
| Fixed overheads calendar variance             | 8,000F            |
| Fixed overheads cost variance                 | 15,000A           |

You are required to CALCULATE:

- (a) Actual Fixed Overheads
- (b) Actual Days
- (c) Actual Hours
- (d) Fixed overheads Expenditure variance
- (e) Fixed overheads volume variance
- (f) Fixed overheads capacity variance

(10 Marks)

3. (a) The standard time allowed for a certain piece of work is 240 hours. Normal wage rate is ₹ 75 per hour.

The bonus system applicable to the work is as follows:

| Percentage of time saved to time allowed (slab rate) | Bonus                                    |
|------------------------------------------------------|------------------------------------------|
| (i) Up to the first 20% of time allowed              | 25% of the corresponding saving in time. |
| (ii) For and within the next 30% of time allowed     | 40% of the corresponding saving in time. |
| (iii) For and within the next 30% of time allowed    | 30% of the corresponding saving in time. |
| (iv) For and within the next 20% of time allowed     | 10% of the corresponding saving in time. |

CALCULATE the total earnings of a worker over the piece of work and his earnings per hour when he takes-

- (a) 256 hours,  
(b) 120 hours, and  
(c) 24 hours respectively.

**(10 Marks)**

- (b) At budget activity of 80% of total capacity, a company earns a P/V ratio of 30% and a profit of 15% of total sales. Due to covid pandemic resulting in poor demand, the company has to reduce its selling price by 10%. The company was able to achieve a production and sales volume for the year equivalent to 50% of total capacity. The sales value at this level was ₹ 27,00,000 at a reduced price of ₹ 18 per unit. Due to reduction in production, the actual variable cost went up by 5% of the budget.

You are required to:

- (i) PREPARE statement of profitability at budget and actual activity.  
(ii) FIND P/V ratio and BES (in ₹ and unit of the actual sales activity).

**(10 Marks)**

4. (a) YSPP Transport Company is running local city buses. It has a fleet of 20 Buses. Each bus can carry average 40 passengers per day and cover distance of 112.50 kms per day. Due to Covid-19 pandemic, the company is running 90% buses on average.

Below are the operational expenses worked out for the month of November, 2021:

|                            |                       |
|----------------------------|-----------------------|
| Original cost per bus      | ₹ 48,00,000           |
| Insurance for 20 buses     | ₹ 63,36,000 per annum |
| Diesel & Oil               | ₹ 10 per km.          |
| Salary of drivers per bus  | ₹ 25,000              |
| Salary of cleaners per bus | ₹ 15,000              |
| Tyres and tubes            | ₹ 12,58,040           |
| Lubricants                 | ₹ 10,70,000           |
| Repairs                    | ₹ 24,70,000           |
| Road tax per bus           | ₹ 1,50,000            |
| Administrative overhead    | ₹ 50,88,000 per annum |

Depreciation on buses is computed @ 20% using Straight Line Method.

Passenger tax is 15% on total taking.

Based on abovementioned information, you are required to COMPUTE the fare to be charged from each passenger per kilometer assuming 25% margin on total taking (Total receipts from passengers.) **(10 Marks)**

- (b) The following data relates to manufacturing of a standard product during the month of February, 2022:

| Particulars                                         | Amount (in ₹) |
|-----------------------------------------------------|---------------|
| Stock of Raw material as on 01-02-2022              | 1,20,000      |
| Work in Progress as on 01-02-2022                   | 75,000        |
| Purchase of Raw material                            | 3,00,000      |
| Carriage Inwards                                    | 30,000        |
| Direct Wages                                        | 1,80,000      |
| Cost of special drawing                             | 45,000        |
| Hire charges paid for Plant (Direct)                | 36,000        |
| Return of Raw Material                              | 60,000        |
| Carriage on return                                  | 9,000         |
| Expenses for participation in Industrial exhibition | 12,000        |
| Maintenance of office building                      | 3,000         |
| Salary to office staff                              | 37,500        |
| Legal charges                                       | 3,750         |
| Depreciation on Delivery van                        | 9,000         |
| Warehousing charges                                 | 2,250         |
| Stock of Raw material as on 28-02-2022              | 45,000        |
| Stock of Work in Progress as on 28-02-2022          | 36,000        |

- Store overheads on materials are 10% of material consumed.
- Factory overheads are 20% of the Prime cost.
- 10% of the output was rejected and a sum of ₹ 7,500 was realized on sale of scrap.
- 10% of the finished product was found to be defective and the defective products were rectified at an additional expenditure which is equivalent to 20% of proportionate direct wages.
- The total output was 8,000 units during the month.

You are required to PREPARE a Cost Sheet for the above period showing the:

- Cost of Raw Material consumed.
- Prime Cost
- Work Cost
- Cost of Production
- Cost of Sales

**(10 Marks)**

5. (a) MG Ltd. manufactures three types of products namely A, B and C. The data relating to a period are as under:

| Particulars                  | A     | B     | C      |
|------------------------------|-------|-------|--------|
| Machine hours per unit       | 10    | 18    | 14     |
| Direct Labour hours per unit | 4     | 12    | 8      |
| Direct Material per unit (₹) | 1,350 | 1,200 | 1,800  |
| Production (units)           | 3,000 | 5,000 | 20,000 |

Currently the company uses traditional costing method and absorbs all production overheads on the basis of machine hours. The machine hour rate of overheads is ₹ 90 per hour. Direct labour hour rate is ₹ 300 per hour.

The company proposes to use activity based costing system and the activity analysis is as under:

| Particulars                         | A   | B   | C     |
|-------------------------------------|-----|-----|-------|
| Batch size (units)                  | 150 | 500 | 1,000 |
| Number of purchase orders per batch | 3   | 10  | 8     |
| Number of inspections per batch     | 5   | 4   | 3     |

The total production overheads are analysed as under:

|                                    |     |
|------------------------------------|-----|
| Machine set up costs               | 20% |
| Machine operation costs            | 30% |
| Inspection costs                   | 40% |
| Material procurement related costs | 10% |

Required:

- CALCULATE the cost per unit of each product using traditional method of absorbing all production overheads on the basis of machine hours.
- CALCULATE the cost per unit of each product using activity based costing principles.

(10 Marks)

- (b) PM Ltd. has three Production Departments P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub> and two Service Departments S<sub>1</sub> and S<sub>2</sub> details pertaining to which are as under:

|                       | P <sub>1</sub> | P <sub>2</sub> | P <sub>3</sub> | S <sub>1</sub> | S <sub>2</sub> |
|-----------------------|----------------|----------------|----------------|----------------|----------------|
| Direct wages (₹)      | 60,000         | 40,000         | 60,000         | 30,000         | 3,900          |
| Working hours         | 3,070          | 4,475          | 2,419          | -              | -              |
| Value of machines (₹) | 12,00,000      | 16,00,000      | 20,00,000      | 1,00,000       | 1,00,000       |
| H.P. of machines      | 60             | 30             | 50             | 10             | -              |
| Light points          | 10             | 15             | 20             | 10             | 5              |
| Floor space (sq. ft.) | 2,000          | 2,500          | 3,000          | 2,000          | 500            |

The following figures extracted from the accounting records are relevant:

|                          | (₹)      |
|--------------------------|----------|
| Rent and Rates           | 1,00,000 |
| General Lighting         | 12,000   |
| Indirect Wages           | 38,780   |
| Power                    | 30,000   |
| Depreciation on Machines | 2,00,000 |
| Sundries                 | 1,93,900 |

The expenses of the service departments are allocated as under:

|                | P <sub>1</sub> | P <sub>2</sub> | P <sub>3</sub> | S <sub>1</sub> | S <sub>2</sub> |
|----------------|----------------|----------------|----------------|----------------|----------------|
| S <sub>1</sub> | 20%            | 30%            | 40%            | -              | 10%            |
| S <sub>2</sub> | 40%            | 20%            | 30%            | 10%            | -              |

DETERMINE the total cost of product X which is processed for manufacture in Departments P<sub>1</sub>, P<sub>2</sub> and P<sub>3</sub> for 4, 5 and 3 hours respectively, given that its Direct Material Cost is ₹ 1,000 and Direct Labour Cost is ₹ 600. **(10 Marks)**

6. Answer **any four** of the following:

- (a) DISTINGUISH clearly between Bin cards and Stores Ledger.
- (b) Some of the items of PR Company, a manufacturer of corporate office furniture, are provided below. As the company is in the process of developing a formal cost accounting system, you are required to CLASSIFY the items into three categories namely: (i) Cost tracing (ii) Cost allocation (iii) Non-manufacturing item.  
  
Carpenter wages, Depreciation - office building, Glue for assembly, Lathe department supervisor, Metal brackets for drawers, Factory washroom supplies, Lumber, Samples for trade shows, Lathe depreciation, Lathe operator wages.
- (c) In Batch Costing, STATE how is Economic Batch Quantity determined?
- (d) EXPLAIN what are the essential pre-requisites of Integrated accounting system?
- (e) WHAT is inter-process profit? STATE its advantages and disadvantages. **(4 × 5 =20 Marks)**