ASSIGNMENT No. 02
Cost Accounting (462) B.Com
Spring, 2025

Q. 1 The Universal Garment Factory is producing Job No. 15 which comprises 2,000 dresses of style A-1. The following costs were incurred for this production: - (20)

Direct Materials cost	Rs. 200 per dress
Direct Labour costs	Rs. 120 per dress
Factory Overheads cost	Rs. 160 per dress

When the lot was completed, the Quality Control department rejected 20 dresses after inspection which were considered spoiled dresses and were later disposed of for Rs. 150 per dress as 'seconds.

Required:

A) Pass journal entries if the loss from spoiled dresses is charged to the relevant job.
B) Pass journal entries if the loss from spoiled dresses is charged to all production.

When the lot was completed, the Quality Control department rejected 20 dresses after inspection which were considered as spoiled dresses and were later disposed off for Rs. 150 per dress as 'seconds'.

Required:

A) Pass journal entries if the loss from spoiled dresses is charged to the relevant job.
B) Pass journal entries if the loss from spoiled dresses is charged to all production.

To determine the total cost of producing Job No. 15 at the Universal Garment Factory, we need to calculate the total direct material cost, direct labor cost, and factory overhead cost for the production of 2,000 dresses of style A-1. Here's how you can break down the costs:

Breakdown of Costs

1. Direct Material Cost:

- Cost per dress: Rs. 200
- Number of dresses: 2,000
- Total Direct Material Cost = Cost per dress × Number of dresses
- Total Direct Material Cost = Rs. 200 × 2,000 = Rs. 400,000

2. Direct Labour Cost:

- Cost per dress: Rs. 120
- Number of dresses: 2,000
- Total Direct Labour Cost = Cost per dress × Number of dresses
- Total Direct Labour Cost = Rs. 120 × 2,000 = Rs. 240,000

3. Factory Overheads Cost:

- Cost per dress: Rs. 160
- Number of dresses: 2,000
- Total Factory Overheads Cost = Cost per dress × Number of dresses
- Total Factory Overheads Cost = Rs. 160 × 2,000 = Rs. 320,000

Total Cost Calculation

To find the total cost of producing Job No. 15, sum up the total costs of direct materials, direct labor, and factory overheads.

Total Production Cost:

- Total Direct Material Cost: Rs. 400,000
- Total Direct Labour Cost: Rs. 240,000
- Total Factory Overheads Cost: Rs. 320,000
- Total Production Cost = Total Direct Material Cost + Total Direct Labour Cost + Total Factory Overheads Cost
- Total Production Cost = Rs. 400,000 + Rs. 240,000 + Rs. 320,000 = Rs. 960,000

Summary

Here is the summarized cost breakdown for Job No. 15:

Cost Component	Cost per Dress	Total Cost
Direct Material Cost	Rs. 200	Rs. 400,000
Direct Labour Cost	Rs. 120	Rs. 240,000
Factory Overheads Cost	Rs. 160	Rs. 320,000
Total Production Cost		**Rs. 960,000**

You can use this breakdown to insert into your Microsoft Word document. If you need to present this in a tabular format, ensure to format the table for clarity and ease of understanding.

Q. 2 Describe the three methods of costing of material issuance to production. What are the advantages and disadvantages of FIFO and LIFO costing methods? Explain. (20)

Effective costing of materials is essential for accurate financial reporting and inventory management in manufacturing companies. There are several methods of costing material issuance to production, each with unique characteristics and implications. The most commonly used methods are FIFO (First In, First Out), LIFO (Last In, First Out), and the Weighted Average Cost method. Each method has its own advantages and disadvantages, which can significantly affect a company's profitability and tax obligations.

FIFO (First In, First Out)

The FIFO method assumes that the oldest inventory items are the first to be issued for production. This means that the materials purchased first are the ones utilized first in manufacturing processes. FIFO aligns the flow of costs with the physical flow of goods, making it particularly useful in industries where materials have a limited shelf life, such as perishable goods. Under FIFO, when inventory costs

are rising, the cost of goods sold appears lower, and ending inventory reflects the cost of more recent purchases, which can potentially result in higher profits on paper.

Advantages of FIFO

One of the foremost advantages of FIFO is its simplicity and straightforward application. Since it follows the natural flow of goods, it is often easy to implement within an organization. Moreover, FIFO enhances the accuracy of financial statements by reflecting the most recent prices in the ending inventory valuation. This can be beneficial for companies looking to present a strong financial position to investors and creditors. Additionally, because FIFO results in lower cost of goods sold when prices are rising, it also leads to higher reported profits, which is often favorable for a company's stock price.

Disadvantages of FIFO

Despite its advantages, FIFO also has some drawbacks. In times of inflation, FIFO can lead to higher tax liabilities since it results in higher reported earnings and therefore higher taxable income. This can negatively impact cash flow, as a company may need to allocate more funds to cover its tax obligations. Furthermore, because FIFO reports the most recent costs in inventory, it may not accurately reflect current market conditions if prices fluctuate significantly, which can mislead management about the true cost of replacing inventory.

LIFO (Last In, First Out)

In contrast to FIFO, the LIFO method assumes that the most recently acquired inventory items are the first to be issued for production. This approach is often utilized in industries where inventory prices are volatile or rising, as it better matches current costs with current revenues. Under LIFO, during periods of inflation, the cost of goods sold is higher, leading to lower taxable income. This helps companies conserve cash by deferring tax liabilities, making LIFO an attractive option for some businesses.

Advantages of LIFO

The primary advantage of LIFO is its tax benefits during inflationary periods. By matching the latest costs against current revenues, companies can minimize their taxable income. This cash conservation can provide substantial liquidity for businesses, allowing them to reinvest in operations or manage day-to-day expenses more effectively. Additionally, LIFO can provide a closer representation of replacement costs in certain industries, helping management make informed decisions based on the current economic environment.

Disadvantages of LIFO

However, LIFO has its disadvantages as well. One significant drawback is that it can lead to distorted financial statements during periods of deflation, where it may inaccurately represent inventory valuations. LIFO can also complicate inventory management, as maintaining detailed records becomes necessary to track which materials are issued first accurately. Furthermore, the necessity of using LIFO under U.S. generally accepted accounting principles (GAAP) means that companies cannot use this method if they plan to operate internationally, where IFRS (International Financial Reporting Standards) does not permit LIFO.

Weighted Average Cost Method

The Weighted Average Cost method calculates the cost of goods sold and ending inventory based on the average cost of all inventory items available during the accounting period. Under this method, the total cost of all goods available for sale is divided by the number of units available for sale, resulting in a single weighted average cost per unit. This method smooths out price fluctuations and provides a consistent cost flow assumption throughout the accounting period.

Advantages of Weighted Average Cost Method

The primary advantage of the Weighted Average Cost method is its simplicity, particularly in environments where inventory prices fluctuate frequently. It eliminates the volatility associated with fluctuations in purchase prices, providing a stable and reliable method for inventory costing. This consistency can be beneficial for budgeting and forecasting, as it generates predictable financial results. Additionally, the average cost method provides a balanced view of expenses, as it does not favor either the oldest or newest inventory when calculating costs.

Disadvantages of Weighted Average Cost Method

On the downside, the Weighted Average Cost method may not accurately reflect the actual flow of inventory in some industries, as it does not take into consideration the specific items used in production. This lack of specificity can lead to inappropriately inflated or deflated profits, especially in situations where material costs are highly variable. Furthermore, during periods of inflation, the Weighted Average Cost method can result in higher cost of goods sold compared to FIFO, which may not be favorable from a tax perspective.

Comparison of Costing Methods

When comparing FIFO, LIFO, and the Weighted Average Cost methods, it's important to consider how each affects both the income statement and the balance sheet. FIFO typically results in higher profits in inflationary periods and provides a clearer picture of current inventory costs. LIFO's tax advantages in times of inflation make it appealing, but it can distort financial reporting in deflationary conditions. The Weighted Average Cost method offers simplicity and consistency but may diverge from the true costs of specific inventory items.

Impact on Financial Statements

The choice of costing method significantly impacts a company's financial statements, with variances in the cost of goods sold, inventory valuation, and net income directly linked to the method employed. FIFO often leads to higher net income when prices are rising, resulting in greater taxes owed. Conversely, LIFO can lower net income and tax bills under inflationary conditions, but it may obscure the actual value of inventory on the balance sheet. The Weighted Average Cost method provides consistency but may fail to accurately reflect the realities of inventory costs in certain markets.

Considerations for Choosing Costing Methods

In deciding which cost method to use, companies should evaluate their specific circumstances, including market conditions, industry practices, and the potential tax implications of each method. For organizations dealing with perishable goods or fluctuating prices, FIFO may prove to be the best choice. Companies looking to minimize tax liabilities during inflationary periods may favor LIFO, while those in industries with stable pricing might benefit from the simplicity of the Weighted Average Cost method.

Regulatory Considerations

It's critical to consider accounting standards and regulations when selecting an inventory costing method. In the U.S., FIFO and Weighted Average Cost are permitted under both GAAP and IFRS, while LIFO is only acceptable under GAAP. In international markets, businesses must adhere to IFRS guidelines, which can significantly impact the choice of costing method depending on where they operate. Companies must ensure that their inventory valuation methods comply with the relevant accounting standards to avoid regulatory issues and ensure the accuracy of their financial reporting.

Conclusion

In conclusion, the choice of costing method for material issuance significantly impacts financial outcomes for a company. FIFO, LIFO, and the Weighted Average Cost each present unique strengths and weaknesses that can influence fiscal performance, tax liabilities, and inventory management. It is essential for organizations to carefully analyze their operational needs, market conditions, and regulatory compliance when selecting a method for inventory costing. By understanding the implications of each method, businesses can make informed decisions that align with their overall financial strategy and operational goals.

Q. 3 (a) Describe the functions of a Timekeeping department and various methods used for controlling the attendance of workers in a factory. (20)

Functions of a Timekeeping Department

The Timekeeping department plays a critical role in managing and monitoring employee attendance within a factory. This department is responsible for tracking the hours worked by each employee,

ensuring compliance with labor regulations, and maintaining accurate records for payroll processing. The effective management of timekeeping is essential for optimizing workforce productivity and ensuring that employees are compensated fairly for their work.

Accurate Attendance Tracking

One of the primary functions of the Timekeeping department is the accurate tracking of employee attendance. This involves recording when employees clock in and out, noting any absences or tardiness, and adjusting records to reflect any changes due to vacations, sick leaves, or personal time off. Accurate attendance tracking is vital for calculating wages correctly and for assessing overall employee productivity. By maintaining precise records, the Timekeeping department can help prevent payroll errors and disputes, contributing to employee satisfaction and trust in the organization.

Payroll Preparation

The Timekeeping department's functions extend to payroll preparation, where attendance data is converted into the necessary inputs for calculating wages. This involves not only tallying hours worked but also considering overtime, holiday pay, and various deductions. The department must ensure that all records are up to date and accurate before processing payroll to avoid delays in employee compensation. Timely and accurate payroll processing is crucial for maintaining employee morale and trust, as wage issues can lead to dissatisfaction and decreased productivity.

Compliance with Labor Laws

Another vital responsibility of the Timekeeping department is ensuring compliance with labor laws and regulations. This includes adhering to rules regarding working hours, breaks, overtime pay, and holidays as mandated by local, state, or federal laws. The department must remain updated on changes in labor legislation to ensure that the company is compliant and protected from potential legal issues. By monitoring adherence to labor regulations, the Timekeeping department helps minimize the risk of penalties, lawsuits, and disputes related to employee rights.

Reporting Absenteeism and Turnover

The Timekeeping department is also tasked with generating reports related to absenteeism and employee turnover. By analyzing patterns in attendance, the department can identify trends that may signal underlying issues affecting employee morale or engagement. Frequent absenteeism, for example, might indicate dissatisfaction in the workplace or personal challenges among employees. These insights can help management develop strategies to improve the work environment, enhance employee satisfaction, and ultimately reduce turnover.

Policy Development and Communication

A further function of the Timekeeping department involves contributing to the development and communication of attendance policies. This includes creating clear guidelines that outline expectations for employee attendance, procedures for reporting absences, and the consequences of excessive absenteeism. The department must ensure that these policies are communicated effectively to all employees, fostering a culture of accountability and responsibility regarding attendance. Well-defined policies can help prevent misunderstandings and disputes, creating a more harmonious workplace.

Implementation of Attendance Control Systems

To efficiently monitor employee attendance, the Timekeeping department must implement attendance control systems. These systems can range from manual logbooks to advanced electronic systems, designed to capture attendance data accurately. The department's role includes selecting the right system for the organization, ensuring it is user-friendly and meets the company's specific needs. By utilizing effective attendance control systems, the Timekeeping department can enhance accuracy and efficiency in its operations.

Timekeeping Methods: Manual Systems

One method of tracking attendance is through manual systems, which involve the use of attendance sheets or logbooks where employees record their arrival and departure times. While straightforward and low-cost, manual systems can be prone to human error, fraudulent entries, and inconsistencies. Moreover, the administrative burden of managing paper records can be labor-intensive, making this

method less efficient in larger organizations. Although still in use, many companies are gradually transitioning to more technologically advanced solutions.

Timekeeping Methods: Punch Cards

Punch card systems represent a more formalized method of tracking attendance. In this system, employees use physical cards that they "punch" into a timeclock when they arrive and leave. Punch card systems reduce the risks associated with manual recording and enhance accuracy in tracking attendance. However, they still come with limitations, such as potential malfunctions of the physical time clock or attempts at buddy punching—when one employee punches in for another.

Timekeeping Methods: Biometric Systems

Biometric attendance systems are increasingly popular for tracking employee presence through unique physical traits like fingerprints, facial recognition, or iris scans. These systems provide a high level of accuracy, effectively eliminating issues such as buddy punching and ensuring that only authorized personnel gain access to the workplace. While biometric systems can represent a higher initial investment, their long-term benefits in enhancing security and streamlining timekeeping can make them a cost-effective solution for many organizations.

Timekeeping Methods: Electronic Time Clocks

Electronic time clocks, which allow for digital clocking in and out, are another popular option for timekeeping. These systems can store data electronically, reducing the administrative burden associated with paper records. Additionally, many modern electronic time clocks offer integration with payroll systems, streamlining the transfer of attendance data for payroll processing. Despite their advantages, organizations must maintain these systems regularly and ensure they are properly calibrated to avoid errors.

Timekeeping Methods: Mobile Applications

In recent years, mobile applications have emerged as a modern alternative for timekeeping, particularly suited for organizations with remote or distributed workforces. These apps allow employees to clock in and out using their smartphones, providing convenience and flexibility. Mobile timekeeping solutions can include features like GPS tracking to confirm location-based clocking and instant notifications for management. However, organizations need to ensure adequate security measures are in place to protect sensitive employee data.

Importance of Timekeeping Training

For any timekeeping method to be effective, training employees on the proper use of attendance systems is essential. The Timekeeping department plays a key role in this training, ensuring that all employees understand how to accurately record their attendance and the importance of doing so. Training sessions can help mitigate the risks of errors and encourage accountability in tracking attendance. Regular refreshers on attendance policies can also keep employees engaged and informed about any updates or changes.

Continuous Improvement and Technology Adaptation

The Timekeeping department must also remain open to adopting new technologies and methods as they become available. Continuous improvement is vital for enhancing the efficiency and accuracy of attendance management systems. By staying abreast of advances in attendance-tracking technology, the department can evaluate new options that might better suit the organization's needs. This proactive approach helps ensure that the company maintains a competitive edge in managing its workforce effectively.

Conclusion

In summary, the Timekeeping department serves several critical functions that ensure effective employee attendance management within a factory setting. By implementing various methods for monitoring attendance, from manual systems to advanced biometric solutions, the department can enhance accuracy, compliance, and employee satisfaction. With careful consideration of each method's advantages and disadvantages, organizations can choose the best approach to develop a culture of responsibility and productivity among employees, ultimately contributing to the success of the organization.

(b) Roshan Steel Products Industries is applying a differential piece rates work system for labor payment. The differential rates applied are 80% -piece rate below standard and 120% -piece rate at or above standard. The standard allowed is 10 units per hour. The normal wage rate is Rs. 70 per hour. Abrar completed 100 units while Badar completed 80 units in a day. The workers are required to work for 9 hours daily.

Required: Compute earnings of the day of both workers under a differential piece rate work system.

Standard production per hour 60 min/10 min = 6 units

Standard production per day 6 units x 9 hours = 54 units

Per Piece rate Rs. 0.90/6 units = Rs. 0.15

Efficiency of:

Worker "A" is 100%

Worker "B" is less than 100%

Wages under Straight Piece Rate Basic:

Earnings of A

No. of units X Rate per unit

100 x 0.15 = Rs. 15

Earnings of B

80 x 0.15 = Rs. 12

Wages Taylor's differential piece rate basis:

Low piece rate in case of A = 80% of Rs. 0.15 = Rs. 0.12

High piece rate in case of B = 120% of Rs. 0.15 = Rs. 0.18

Earning of A 100 x 0.12 = Rs. 12-00

Earning of B 80 x 0.18 = Rs-14.40.

Q. 4 The normal operating capacity of Faiza Chemical Industries is 250,000 machine hours per month. At this level of activity, the fixed factory overhead cost is estimated at Rs. 500,000 and variable overhead is estimated at Rs. 250,000. During April 2014, the actual production consumed 240,000 machine hours and the actual factory overhead cost amounted to Rs. 730,000. (20)

Required:

a) Determine the fixed portion of the factory overhead application rate.
b) Determine the variable portion of the factory overhead application rate.
c) Compute the amount of over or under-applied factory overhead cost.
d) Calculate the amount of favourable or unfavourable Spending Variance.
e) Work out the amount of favourable or unfavourable idle capacity variance.

To solve the problems provided in the scenario regarding Faiza Chemical Industries, we will break down each requirement step-by-step.

a) Determine the fixed portion of the factory overhead application rate.

To determine the fixed portion of the factory overhead application rate, we will use the estimated fixed overhead cost and the normal operating capacity in machine hours.

Formula:
Fixed Overhead Application Rate = Total Fixed Factory Overhead / Normal Operating Capacity

Calculation:

- Fixed Factory Overhead = Rs. 500,000
- Normal Operating Capacity = 250,000 machine hours

Fixed Overhead Application Rate = Rs. 500,000 / 250,000 machine hours
Fixed Overhead Application Rate = Rs. 2 per machine hour

b) Determine the variable portion of the factory overhead application rate.

To determine the variable portion of the factory overhead application rate, we will use the estimated variable overhead costs and the normal operating capacity in machine hours.

Formula:
Variable Overhead Application Rate = Total Variable Factory Overhead / Normal Operating Capacity

Calculation:

- Variable Factory Overhead = Rs. 250,000
- Normal Operating Capacity = 250,000 machine hours

Variable Overhead Application Rate = Rs. 250,000 / 250,000 machine hours
Variable Overhead Application Rate = Rs. 1 per machine hour

c) Compute the amount of over or under-applied factory overhead cost.

To compute the over or under-applied factory overhead, we first need to calculate the applied overhead and then compare it with the actual overhead incurred.

Applied Factory Overhead:
Applied Factory Overhead = (Fixed Overhead Application Rate + Variable Overhead Application Rate) × Actual Machine Hours
= (Rs. 2 + Rs. 1) × 240,000
= Rs. 3 × 240,000
= Rs. 720,000

Actual Factory Overhead Cost:

- Actual Factory Overhead Cost = Rs. 730,000

Over or Under-Applied Factory Overhead:
Over/Under Applied = Applied Factory Overhead - Actual Factory Overhead Cost
= Rs. 720,000 - Rs. 730,000
= Rs. -10,000 (Under-applied by Rs. 10,000)

d) Calculate the amount of favourable or unfavourable Spending Variance.

The spending variance in factory overhead is calculated by comparing the actual factory overhead costs with the budgeted factory overhead based on actual activity level.

Budgeted Factory Overhead:
Budgeted Variable Overhead = Variable Overhead Application Rate × Actual Machine Hours
= Rs. 1 × 240,000
= Rs. 240,000

Total Budgeted Factory Overhead:
Total Budgeted Factory Overhead = Fixed Overhead + Budgeted Variable Overhead
= Rs. 500,000 + Rs. 240,000
= Rs. 740,000

Actual Factory Overhead:

- Actual Factory Overhead = Rs. 730,000

Spending Variance:
Spending Variance = Actual Factory Overhead - Total Budgeted Factory Overhead
= Rs. 730,000 - Rs. 740,000
= Rs. -10,000 (Favourable since actual cost was less than budgeted)

e) Work out the amount of favourable or unfavourable idle capacity variance.

The idle capacity variance reflects the difference between the fixed overhead costs that were budgeted based on normal operating capacity and those that are applied based on actual performance.

Fixed Overheadapplied based on normal activity:
Fixed Overhead Applied = Fixed Overhead Application Rate × Normal Operating Capacity
= Rs. 2 × 250,000
= Rs. 500,000

Fixed Overhead Applied based on actual activity (which is zero since it's allocated per machine hours):
(Note: Since fixed overhead is incurred irrespective of actual usage, we do not directly calculate it. Instead, we analyze the fixed overhead as follows.)

Idle Capacity Variance Calculation:
Idle Capacity Variance = Fixed Factory Overhead - Fixed Overhead Applied based on Actual Production
Because Fixed Overhead is completely absorbed at the normal capacity.

Ideal Capacity = Fixed Factory Overhead - Fixed Factory Overhead to be allocated

However, as there is no allocation based on actual reduced machine hours, we confirm the entire Rs. 500,000 was available but went to cover the overheads for the entire capacity of machine hours available:

Idle Capacity Variance = Fixed Overhead at normal capacity - Fixed Overhead at Actual
This leads to zero over or under.

Conclusion:

- Fixed Factory Overhead Application Rate: Rs. 2 per machine hour
- Variable Factory Overhead Application Rate: Rs. 1 per machine hour
- Under-applied Factory Overhead: Rs. 10,000
- Spending Variance: Rs. 10,000 Favourable
- Idle Capacity Variance: Rs. 0 (due to full absorption of all overhead)

Q. 5 The Oxford Garments Industries comprises four departments. Cutting, Stitching and Finishing are the Production departments whereas Procurement is the Servicing Department. Actual overhead costs for June 2024 are as under: - (20)

Rent	**Rs. 120,000**	**Supervision**	**Rs. 30,000**
Repair & maintenance	**Rs. 12,000**	**Insurance**	**Rs. 14,000**
Depreciation of Plant	**Rs. 90,000**	**Lighting**	**Rs. 16,000**
Power consumption	**Rs. 18,000**		

The following further data is also available in respect of the four departments: -

Particulars	Cutting	Stitching	Finishing	Procurement
Square foot area occupied	150	110	90	50
Number of workers	24	16	12	8
Total Wages	Rs. 240,000	Rs. 192,000	Rs. 96,000	Rs. 80000
Value of Plant	Rs. 200,000	Rs. 600,000	Rs. 100,000	–
Value of Stock	Rs. 150,000	Rs. 90,000	Rs. 60,000	–

Required: Apportion the overhead costs on most equitable basis and prepare the overheads distribution statement.

To apportion the overhead costs among the departments of Oxford Garments Industries, we will consider various bases of allocation, like the square footage occupied, number of workers, total wages, value of plant, and value of stock. These measures will help us fairly distribute the overhead costs to the production and servicing departments.

Let's begin by outlining each overhead cost and determining an equitable basis for the apportionment, then calculating how much each department will receive.

Overhead Costs

The total overhead costs are as follows:

- Rent: Rs. 120,000
- Supervision: Rs. 30,000
- Repair & maintenance: Rs. 12,000
- Insurance: Rs. 14,000
- Depreciation of Plant: Rs. 90,000
- Lighting: Rs. 16,000
- Power consumption: Rs. 18,000

Total Overheads: Rs. 300,000

Apportionment Bases

Cost Item	Basis of Allocation
Rent	Square foot area occupied
Supervision	Number of workers
Repair & maintenance	Total Wages
Insurance	Value of Plant
Depreciation of Plant	Value of Plant
Lighting	Square foot area occupied
Power consumption	Number of workers

Apportionment Calculations

Rent (Rs. 120,000 based on square feet)

Total Square Foot Area = 150 + 110 + 90 + 50 = 400 sq. ft.

Department	Area (Sq. Ft.)	Ratio	Share of Rent
Cutting	150	150/400 = 0.375	Rs. 120,000 * 0.375 = Rs. 45,000
Stitching	110	110/400 = 0.275	Rs. 120,000 * 0.275 = Rs. 33,000
Finishing	90	90/400 = 0.225	Rs. 120,000 * 0.225 = Rs. 27,000
Procurement	50	50/400 = 0.125	Rs. 120,000 * 0.125 = Rs. 15,000

Supervision (Rs. 30,000 based on number of workers)

Total Number of Workers = 24 + 16 + 12 + 8 = 60 workers

Department	Workers	Ratio	Share of Supervision
Cutting	24	24/60 = 0.4	Rs. 30,000 * 0.4 = Rs. 12,000
Stitching	16	16/60 = 0.267	Rs. 30,000 * 0.267 = Rs. 8,000
Finishing	12	12/60 = 0.2	Rs. 30,000 * 0.2 = Rs. 6,000
Procurement	8	8/60 = 0.133	Rs. 30,000 * 0.133 = Rs. 4,000

Repair & Maintenance (Rs. 12,000 based on total wages)

Total Wages = Rs. 240,000 + Rs. 192,000 + Rs. 96,000 + Rs. 80,000 = Rs. 608,000

Department	Total Wages	Ratio	Share of Repair & Maintenance
Cutting	Rs. 240,000	240,000/608,000 = 0.394	Rs. 12,000 * 0.394 = Rs. 4,728
Stitching	Rs. 192,000	192,000/608,000 = 0.316	Rs. 12,000 * 0.316 = Rs. 3,796
Finishing	Rs. 96,000	96,000/608,000 = 0.158	Rs. 12,000 * 0.158 = Rs. 1,896
Procurement	Rs. 80,000	80,000/608,000 = 0.131	Rs. 12,000 * 0.131 = Rs. 1,572

Insurance (Rs. 14,000 based on value of plant)

Total Value of Plant = Rs. 200,000 + Rs. 600,000 + Rs. 100,000 + Rs. 0 = Rs. 900,000

Department	Value of Plant	Ratio	Share of Insurance
Cutting	Rs. 200,000	200,000/900,000 = 0.222	Rs. 14,000 * 0.222 = Rs. 3,108

Department	Value of Plant	Ratio	Share of Insurance
Stitching	Rs. 600,000	600,000/900,000 = 0.667	Rs. 14,000 * 0.667 = Rs. 9,333
Finishing	Rs. 100,000	100,000/900,000 = 0.111	Rs. 14,000 * 0.111 = Rs. 1,556
Procurement	Rs. 0	0/900,000 = 0	Rs. 14,000 * 0 = Rs. 0

Depreciation of Plant (Rs. 90,000 based on value of plant)

This will be allocated similarly to the insurance.

Department	Value of Plant	Ratio	Share of Depreciation
Cutting	Rs. 200,000	200,000/900,000 = 0.222	Rs. 90,000 * 0.222 = Rs. 19,980
Stitching	Rs. 600,000	600,000/900,000 = 0.667	Rs. 90,000 * 0.667 = Rs. 60,030
Finishing	Rs. 100,000	100,000/900,000 = 0.111	Rs. 90,000 * 0.111 = Rs. 9,990
Procurement	Rs. 0	0/900,000 = 0	Rs. 90,000 * 0 = Rs. 0

Lighting (Rs. 16,000 based on square footage)

This will be allocated similarly to the rent.

Department	Share of Lighting
Cutting	Rs. 16,000 * 0.375 = Rs. 6,000
Stitching	Rs. 16,000 * 0.275 = Rs. 4,400
Finishing	Rs. 16,000 * 0.225 = Rs. 3,600
Procurement	Rs. 16,000 * 0.125 = Rs. 2,000

Power Consumption (Rs. 18,000 based on number of workers)

This will be allocated similarly to the supervision.

Department	Number of Workers	Share of Power Consumption
Cutting	24	24/60 * Rs. 18,000 = Rs. 7,200
Stitching	16	16/60 * Rs. 18,000 = Rs. 4,800
Finishing	12	12/60 * Rs. 18,000 = Rs. 3,600
Procurement	8	8/60 * Rs. 18,000 = Rs. 2,400

Summary of Overheads Distributed to Each Department

Now we can combine all the figures distributed to each department:

Department	Rent	Supervision	Repair & Maintenance	Insurance
Cutting	45,000	12,000	4,728	3,108
Stitching	33,000	8,000	3,796	9,333
Finishing	27,000	6,000	1,896	1,556
Procurement	15,000	4,000	1,572	0

Overheads Distribution Statement

At the end of the calculations, here is the finalized overhead distribution statement for Oxford Garments Industries:

Department	Total Overhead Allocated
Cutting	Rs. 97,016
Stitching	Rs. 122,359
Finishing	Rs. 53,642
Procurement	Rs. 25,972
Total	Rs. 299,989

This statement summarizes the equitable sharing of total overhead costs across the four departments based on the given allocation bases. Note that minor variations may arise due to rounding errors in proportions.