

AKASH AGARWAL CLASSES



EDUCATION IS POWER

CMA INTER (G1 PAPER-8) COST ACCOUNTING



HIGHLIGHTS OF THIS BOOK:

- EXHAUSTIVE COVERAGE OF MODULE
- COMPLETE COVERAGE OF NEW SYLLABUS
- QUESTIONS WHICH ARE IMPORTANT FOR CMA STUDENTS
- LOGICAL ARRANGEMENT OF TOPICS

**APPLICABLE FOR
JUNE 24 AND
ONWARDS
EXAMINATION**

**AS PER NEW
SYLLABUS 2022**

CA SHRUTI AGARWAL

FOR MORE DETAIL SCAN ME



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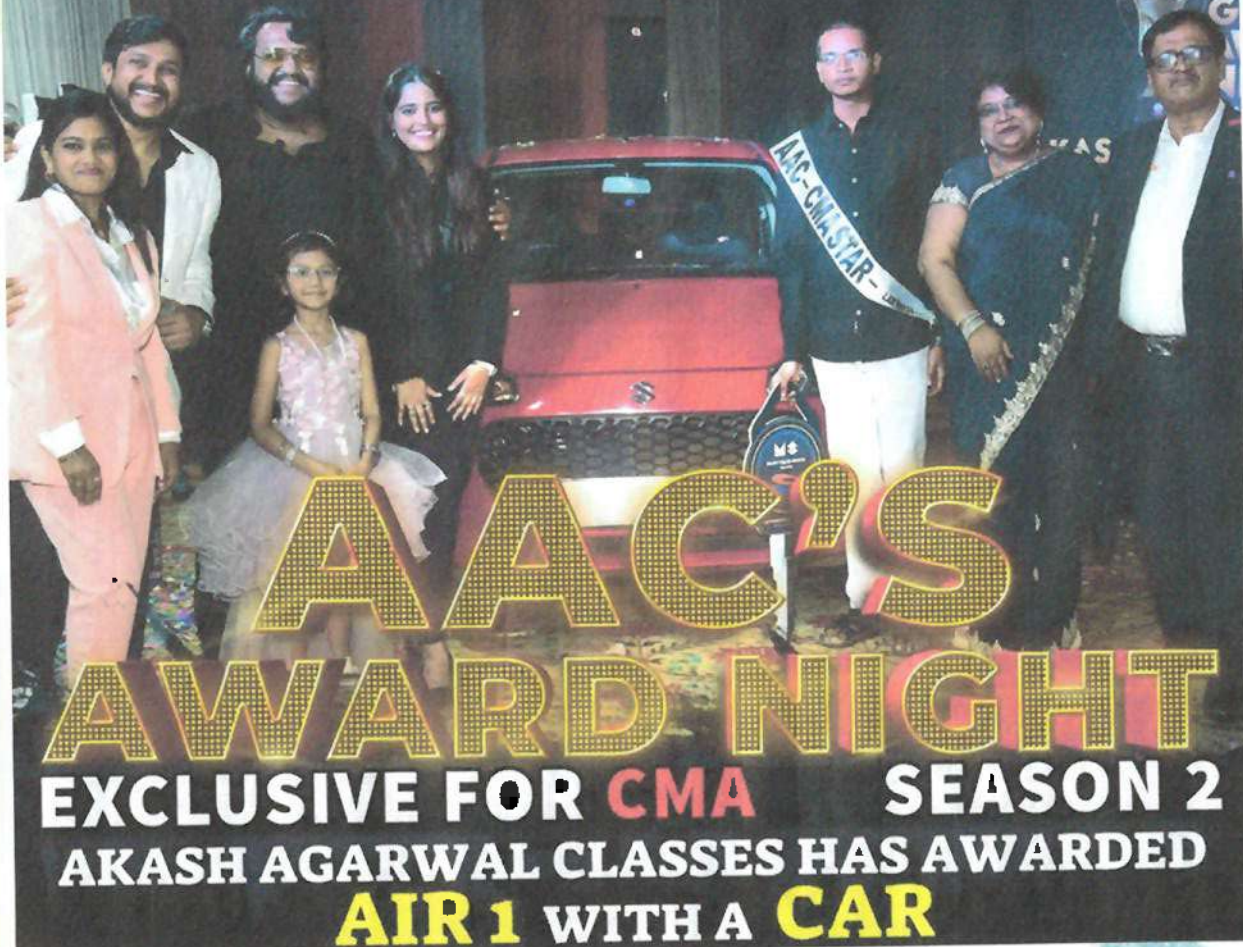


To acknowledge Lakkimsetty's tremendous achievement,
AAC presents this Beautiful car as a token
of appreciation.



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INDIA'S ONLY EXCLUSIVE COACHING INSTITUTE FOR CMA



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Enroll at Akash Agarwal Classes and be part of a legacy that celebrates success like no other. Elevate your CMA preparation with award-winning coaching, unmatched faculty, and a community that celebrates every achievement.

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AAC'S GRAND AWARD NIGHT

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AIR-29



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AAC'S AWARD NIGHT EXCLUSIVE FOR CMA SEASON 2

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With the help of Success Batch you can Gain access to cutting-edge study materials, practice exams, and comprehensive notes that will elevate your preparation to new heights.

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Akash Agarwal Classes Has started a new pre-revision batch from 2023 named Ummed batch for CMA foundation & Super 50 Batch for CMA inter students on free on youtube. In which AAC has covered so more than 500 questions in each subject which helped so many students to gain confidence in CMA before Exam.

Message from Akash Agarwal Classes....

Dear Future CMA Professionals,

Are you ready to embark on a journey of academic excellence and career success? Akash Agarwal Classes proudly presents an exclusive opportunity for all CMA aspirants - a specialized program designed to unlock your full potential and guide you towards attaining the esteemed CMA degree.

Be a proud AACIAN.....

AAC is only class Where Dedication gets recognition!



In our pursuit of nurturing brilliance and empowering dreams, we take immense pride in introducing the "Grand Award Night season 2". This night was designed to honor and reward the hard work and dedication of our exceptional students who have excelled in their CMA exams.

Students who achieved an All India Rank in the CMA Inter Exam was awarded with spectacular ₹51,000 cash prize. Their success story deserves to be celebrated, and AAC is here to make it unforgettable!

The journey to success is challenging, and conquering both groups of the CMA Inter Exam is a testament to your perseverance. We believe in acknowledging your commitment, and that's why a commendable ₹31,000 cash prize awaits those who have triumphed over both groups!

And for the AIR 1 AAC has given a brand new Car...

🏆 Your success is our pride! 🏆



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CELEBRATING SUCCESS OF CMA
INTER CLEARED STUDENT IN GOA**



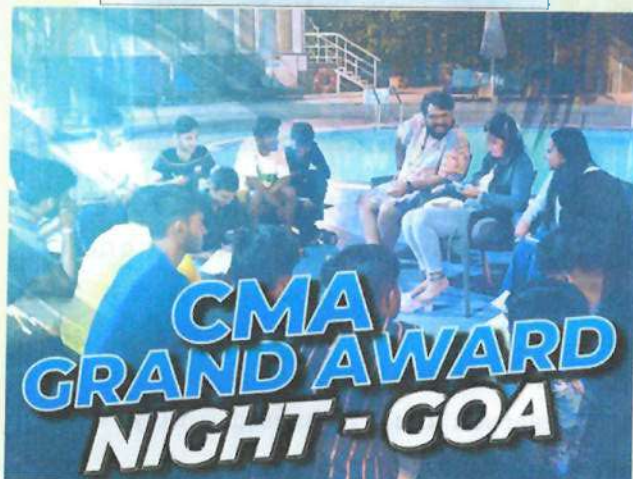
FIRST TIME IN HISTORY OF CMA.....



.....NEXT CAN BE YOU.



**CMA STUDENTS AND TEAM
AAC CELEBRATING SUCCESS
OF CMA INTER CLEARED
STUDENT IN GOA**



**PROMISE MADE BY AKASH SIR IN
LAST SUCCESS BATCH IS DELIVERED**



.....NEXT CAN BE YOU.



**CMA STUDENTS AND TEAM AAC
CELEBRATING SUCCESS OF CMA
INTER CLEARED STUDENT IN GOA**



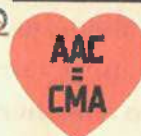
TOKEN OF MOTIVATION TO ACHIEVERS



.....NEXT CAN BE YOU.



**CMA STUDENTS AND TEAM
AAC CELEBRATING SUCCESS
OF CMA INTER CLEARED
STUDENT**



THAT IS WHY STUDENTS SAYS

AAC=CMA

.....NEXT CAN BE YOU.



Our students appreciation....

"HI Sir im your success batch student from Rajasthan aaj ka DT ka paper asan tha apke MCQ, LDR sums apke notes sabne bhot help kii and thankyou always for motivation and supporting us"

CMA Aspirant Rohini sinha

"Hello mam, I passed this attempt with 328 marks. I want to express my sincere appreciation to you for always being available to clarify doubts and answer

CMA Aspirant Minal Singh

"Sir, paper was easy sir apke Marathon ne help kiya attempt karne ko.. thank you so much"

CMA Aspirant Keerti Sharma

CMA Aspirant Mayank Puri

"Ma'am First of all need to thank you for todays paper. It was super se upar...you are best mam.itna easy laga paper costing fm ka... thankyou so much mam"

"How can I thankyou sir.. no words Salary se dar lagta tha. Lekin sapne sikhane ke baad I was fab. Your strategy completely worked sir.. No one can beat this level ..your predictions up to markthankyou"

CMA Aspirant Sagar



Our students appreciation....

"sir aap sirf law guru I nhi...DT ke bhi maha guru ho..Thankyou God blessed me with the best teacher in world. Concept clarity, Revisions, success batch, marathon, Mcq,theory, practical everything....Thankyou so much"

CMA Aspirant Anirudh

Thankyou so much mam itna acha sa sb revision karwane ke liye..ur the best mam saradoubt clear hogya and sab mein confidence aaraha hai thankyou so much aap best ho mam..loveyou

CMA Aspirant Pranjal

CMA Aspirant Neha

"Guys just an appreciation post...I scored 68 in fm by just watching the revision lecture twice and cleared bot groups in the first attempt...ur amazing mam..thanks for such incredible work..."

"goodmorning mam....i want to Thank whole AAC team for the quality of teaching provided free of cost in success batch...it helps a lot to students like me."

CMA Aspirant Piyush

CMA Aspirant Priyanka

"hi mam, I really like teaching of AAC....I thought math is a hard subect but ab aap hoo toh darn hi lagta....bhtt confidence aaya hai maths ko leke..bilkul bhi bore nhi hota lecture ke time pe thankyou so much mam AAC is great....aapko jitna thanks bolu utna kam hai....cma foundation from Aurangabad"

Words from

CA Shruti Agarwal Mam



Dear students,

You have embarked on a challenging and rewarding journey that will shape your career and open doors to exciting opportunities.

As your companion in this journey, I want to share some words of advice and encouragement to help you navigate this path successfully:

1. **Embrace the Learning Process:** The road to becoming a CMA is not easy, but remember that learning is a continuous process. Embrace the subjects, regulations, and professional ethics with an open mind. Each challenge you overcome will make you stronger and more knowledgeable.
 2. **Stay Committed and Disciplined:** The CMA journey demands dedication and discipline. There will be times when you feel overwhelmed, but remember why you started and keep pushing forward. Stay committed to your studies and maintain a healthy work-life balance.
 3. **Seek Guidance and Support:** Don't hesitate to seek guidance from us, whenever you feel stuck. Their insights and experiences can be a lot valuable in your journey.
 4. **Persevere in the Face of Challenges:** At times, you might face setbacks or encounter tough exams. Stay resilient and persevere. It is in overcoming these obstacles that you grow both personally and professionally.
 5. **Develop Soft Skills:** Becoming a successful CMA requires not only technical expertise but also strong communication, leadership, and interpersonal skills. Work on developing these soft skills alongside your technical knowledge.
 6. **Integrity and Ethics Matter:** As a future CMA, integrity and ethics are of utmost importance. Uphold high ethical standards in all your professional dealings, and never compromise on your principles.
 7. **Be Resilient and Adaptable:** The world of finance and accounting is dynamic and ever-changing. Be adaptable to new technologies, trends, and methodologies. Embrace change and see it as an opportunity to grow.
 8. **Celebrate Your Achievements:** Along the way, celebrate your achievements, no matter how small they may seem. Recognize your progress and use it as motivation to keep pushing forward.
- Remember that the journey to becoming a CMA is as important as the destination. Embrace the challenges, cherish the learning experiences, and stay passionate about your chosen path, with hard work, determination, and a thirst for knowledge, you will achieve your goal and become a successful CMA.

Wishing you all the best on your journey to excellence! AAC is always there for your help!

CA Shruti Agarwal



Cost accounting is the compass that guides businesses in their pursuit of efficiency, profitability, and competitiveness. By dissecting the costs incurred during the production process and tracing them across various activities, products, or services, cost accounting offers invaluable insights that enable informed strategic choices.

This book of around 172 pages consisting of 14 Chapters And 245 Questions serves as a comprehensive guide tailored to provide you with a profound understanding of the fundamental principles and practical applications of cost accounting.

It covers key topics such as Fundamentals of Cost Accounting, Costing Methods, Cost-Volume-Profit Analysis, Budgeting and Variance Analysis, Cost Allocation and Joint Products etc.

This book has been brought together using ICMAI Module, Past Year Papers, Revision Test papers and different reference books.

Key Features of this Book:

1. Covers both theory and practical sums.
2. Tabular presentation of Subject Matter
3. Use of simple and concise language for easy and quick understanding
4. Covers institute's study material
5. Logical arrangement of topics

Cost accounting is not just about numbers; it's about driving efficiency, optimizing resources, and fostering growth. So, embark on this journey with an inquisitive mind and a thirst for understanding, as we unravel the complexities of cost accounting together.

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CMA INTERMEDIATE

Paper- 8 Cost & Management Accounting

CHAPTER NO:	CHAPTER NAME:	NO OF QUESTIONS	PAGE NO:
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4	Labour Costing	23	44-52
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6	Job And Batch Costing	7	69-72
7	Contract Costing	15	73-84
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14	Budget and Budgetary Control	23	155-172
TOTAL		245	

CONTACT: 8007777042/043

1.COST SHEET

Question 1

The Funsung Ltd. submits the following information for current year:-

Sales for the year	2,75,000	Direct labour	65,000
Inventories at the beginning:		Factory overhead was 60% of the direct labour cost	
Finished goods	7,000		
Work-in-progress	4,000		
Purchases of materials	1,10,000	Inventories at the end of the year:	
		Work-in-progress	6,000
		Finished goods	8,000
Materials inventory:		Other expenses for the year:	
at the beginning of the year	3,000	Selling expenses 10% of sales	
at the end of the year	4,000	Administrative expenses 5% of sales	

Required: Prepare a Statement of Cost and Profit & Loss Statement.

Question 2

HOMEWORK SUM

Date:

From the following information, prepare a statement showing the cost & the profit per unit & in total:

1. Cost of materials @ Rs. 13 per unit.
2. Labour cost @ Rs. 7.50 per unit.
3. Factory overheads are absorbed @ 60% of labour cost.

4. Administration overheads are absorbed @ 20% of factory cost.
5. Selling overheads are charged @ 2.50 per unit sold.
6. Opening stock of finished goods - 500 units @ 19.75
7. Closing stock of finished goods - 250 units
8. Sales -10250 units at profit of 20% on sales.

Question 3

The books of Jonny Ltd. present the following data for the month of March:

1. Balance

	1st March (Rs.)	31st March (Rs.)
Raw material	8,000	8,600
Work-in progress	8,000	12,000
Finished Goods	14,000	18,000

2. Raw material purchased Rs. 36,000.
3. Direct labour cost Rs. 16,000 (160% of factory overheads).
4. Selling Expenses Rs. 3,400
5. Administrative Expenses Rs. 2,600 (including Rs. 600 as abnormal cost).
6. Sales Rs. 75,000

Required:- Cost sheet for the month of March?

Question 4

The Budget Controller of PCT (Exam.) Ltd. a Manufacturing Organisation producing three products has compiled the following data for the preparation of the annual budget for the next year.

	Price /Kg.	Product A	Product B	Product C
Raw Materials	Rs.			
RM 1	5	1	6	12
RM 2	2	6	-	14
RM 3	3	6	10	2
Direct Labour:	Rate/Hour		Hours Per unit	
Dept. 1	2	9	4	4
Dept. 2	3	3	4	2
Dept. 3	4	2	5	4
Factory Overheads Variable Rs. / Unit		4	8	6
Sales Value (Rs. Lacs)		346.50	275.40	263.25
Opening Stock of Fished Goods (units)		1200	800	1000
Fixed Factory Overheads Rate Per Direct Labour Hour				
Dept 1	Rs. 5	9	4	4
Dept 2	Rs. 3	3	4	2
Dept 3	Rs. 6	2	5	4

The following policies have been laid down for the budget year -

1. Fixed Factory Overheads will be absorbed on Direct Labour Hour basis.
2. Administration Overheads are absorbed at the rate of 20% of Factory Cost.
3. Selling and Distribution Overheads (one-third variable) are recovered at the rate of 25% of the cost of production including Administration Overheads.
4. Selling Price Per Unit: Product 'A' Rs. 231, Product 'B' Rs. 306, Product 'C' Rs.

351

5. Inventories of Finished Goods will be reduced by 25% at the end of budget year
6. The Finished Goods Inventories are valued on marginal cost basis. The marginal costs of the opening stocks in the beginning of budget year were: Product 'A' Rs. 80, Product 'B' Rs. 120 and Product 'C' Rs. 140.

Required: Prepare Statement of Product wise Total Cost and Profit for the budget year.

Question 5**HOMEWORK SUM**

Date:

From the following information, prepare a statement showing the cost and profit per unit.

1. Direct material consumed	Rs. 4,00,000
2. Direct labour cost	40% of direct material
3. Direct expenses	50% of direct labour cost
4. Factory overheads	25% of prime cost
5. Adm. expenses have been absorbed @ Rs. 150 per 10 units produced.	
6. Selling & distribution expenses have been applied @ Rs. 500 per 100 units sold.	
7. Opening finished Stock unit	800 units @ Rs. 85.50 per
8. Closing finished Stock	400 units
9. Finished goods sold	16,400 units
10. Profit	1/6th of sales

Question 6

Taki Taki Ltd. Provides you the following Information:

Production Capacity	33-1/3%	50%
Sales (units)	9,000	15,000
Production (units)	10,000	15,000
Direct Material	1,10,000	1,65,000
Direct Labour	1,80,000	2,30,000
Production Overheads (including depreciation)	1,10,000	1,25,000
Depreciation on Production Machinery	20,000	20,000
Administrative Expenses (related with production 20,950 activity)	20,950	20,950
Selling & Distribution Expenses	38,000	50,000

1. Variable labour cost becomes 50% higher for activity in excess of 19,000 units due to the necessity for overtime working.
 2. The variable element of selling and distribution expenses is a function of sales. All other costs with a variable element are a function of production volume. During the previous year, All goods produced were sold @ Rs. 40 were Rs.7,20,000.
 3. During the next year, Selling price is expected to decrease by 5%, Direct Material price is expected to increase by Rs. 1 per unit with 5% inefficiency (wasting allowance), Direct Wage rate is expected to increase by 12-1/2% with 25% increase in productivity of variable labour input, Fixed Production Overheads and Fixed Selling and Distribution Overheads are expected to increase by 20%.
- Required: Prepare a Statement of Cost and Profit for the next year if Sales and Output are expected to increase by (a) 1000 units, and (b) 50%

Question 7

A manufacturing company has an installed capacity of 1,50,000 units per annum. Its cost structure is given below:

Particulars	RS
(i) Variable cost per unit	
Materials	10
Labour (subject to a minimum of Rs. 1,00,000 per month)	10
Overheads	4
(ii) Fixed overheads per annum	1,92,300
(iii) Semi-variable overheads per annum at 75% capacity (it will increase by Rs. 4,000 per annum for increase of every 5% of the capacity utilisation or any part thereof)	60,000

The capacity utilisation for the next year is budgeted at 75% for first three months, 80% for the next six months and 90% for the remaining three months. Required: If the company is planning to have a profit of 20% on the selling price, calculate the selling price per unit for the next year.

Question 8

The following figures are extracted from the Trial Balance of Panky Ltd. on 31st March:

Inventories:	Rs.		Rs.
Finished stock	80,000	Indirect labour	18,000
Raw materials	1,40,000	Factory supervision	10,000
Work-in-process	2,00,000	Repairs and upkeep-factory	14,000
Office appliances	17,400	Heat, light and power	65,000
Plant & machinery	4,60,500	Rates and taxes	6,300
Buildings	2,00,000	Miscellaneous factory expenses	18,700
Sales	7,68,000	Sales commission	33,600
Sales return & rebates	14,000	Sales travelling	11,000
Materials purchased	3,20,000	Sales promotion	22,500
Freight incurred on material	16,000	Distribution dept. Salaries & expenses	18,000
Purchase returns	4,800	Office salaries and expenses	8,600
Direct labour	1,60,000	Interest on borrowed funds	2,000

Further details are available as follows:

(i) Closing Inventories:		(ii) Depreciation to be provided	
Finished goods	1,15,000	Office appliances	5%
Raw materials	1,80,000	Plant and machinery	10%
Work-in-process	1,92,000	Buildings	4%
(ii) Accrued expenses			
Direct labour	8,000		
Indirect labour	1,200		
Interest on borrowed funds	2000		

Distribution of the following costs:

Heat, light and power to factory, office and selling in the ratio 8:1:1. Rates and taxes two-thirds to factory and one-third of office. Depreciation on buildings to

factory, Office and selling in the ratio 8:1:1.

With the help of the above information, you are required to prepare a condensed Profit and Loss Statement of X Ltd. for the year ended 31st March along with the schedules showing (i) Cost of sales (ii) Selling and distribution expenses (iii) Administration expenses.

Question 9**HOMEWORK SUM**

Date:

From the following information, prepare a statement showing the cost and profit.

	Opening	Closing
Raw Materials:	Rs. 29,500	Rs. 36,000
Work-in-progress:		
Materials	13,600	12,000
Wages	11,000	16,500
Works overheads	6,600	9,900
Finished Goods:	200 units @ Rs. 84	1600 units

- 1) Purchases of raw material Rs. 1,90,000, Carriage on purchases Rs. 1,500
Sale of scrap of raw materials Rs. 5,000.
- 2) Wages Rs. 2,97,000.
- 3) Works overheads are absorbed @ 60% of direct labour cost.
- 4) Administration overheads are absorbed @ Rs. 12 per unit produced.
- 5) Selling & distribution overheads are absorbed @ 20% of sales.
- 6) Sales - 7600 units @ at a profit of 10% on sales price.

Question 10

Calculate Conversion Cost in each of the following alternative cases:

Case (a) Direct Labour Cost Rs. 3,00,000, Direct Expenses Rs. 2,00,000
and Factory Overheads Rs. 1,00,000

Case (b) Factory Cost Rs. 10,00,000 and Direct Material Cost Rs. 4,00,000

Question 11

The books of Bala Manufacturing Company present the following data for the month of April:

Direct labour cost Rs. 17,500 being 175% of works overheads.

Cost of goods sold Rs. 56,000 Excluding Admin Expense

Inventory accounts showed the following opening and closing balances

Particulars	April 1	April 30
	Rs.	Rs.
Raw materials	8,000	10,600
Works-in-progress	10,500	14,500
Finished goods	17,600	19,000

Required:
materials
cost
various
the profit earned.

Other data are:	Rs.
Selling expenses	3,500
General and administration expenses	2,500
Sales for the month	75,000

(i) Compute the value of purchased, (ii) Prepare a statement showing the elements of cost and also

Question 12

HOMEWORK SUM

Date:

From the following information, prepare a statement showing cost and profit per unit:

Direct material	Rs. 45,000
Direct labour	33-1/3% of direct material cost.
Direct expenses	20% of direct material cost and direct labour cost.
Factory overheads	1/9th of prime cost.
Adm. & Expenses	25% of works cost
Selling & Distribution Expenses	10% of cost of goods sold.
Units produced	100
Units remain unsold	10% of units produced
Profit	1/6th of sales.

Question 13

HOMEWORK SUM

Date:

Joker Ltd. Co. has a capacity to produce 1,00,000 units of the product every month. Its works cost at varying levels of productions is as under:

Levels	Work cost per unit (Rs)
10%	400
20%	390
30%	380
40%	370
50%	360
60%	350
70%	340
80%	330
90%	320
100%	310

Its fixed administration expenses amount to Rs.1,50,000 p.m. and fixed marketing expenses amount to Rs.2,50,000 p.m. respectively. The variable selling costs amounts to Rs.30 per unit.

It can market 100% of its output at Rs.500 per unit provided it incurs the following further expenditure :

- (a) it gives gift items costing Rs.30 per unit of sale;
- (b) it has lucky draw every month giving the first prize of Rs.50,000; 2nd prize of Rs. 25,000; 3rd prize of Rs.10,000 and three consolation prizes of Rs. 5,000 each to customers buying the product.
- (c) It spends Rs. 1,00,000 on refreshment served every month to its customers
- (d) It sponsors a television programme every week at the cost of Rs. 20,00,000 per month. It can market 30% of its full capacity output at Rs.550 per unit without incurring any of the expenses referred to in (a) to (d) above. Prepare cost sheets to compute the amount of profit at 30% and 100% capacity.

2. OPERATING COSTING

Question 1

Calculate total passengers km from the following information:

Number of buses 6, number of days operating in a month 25, trips made by each bus per day 8, distance covered 20 km (one side), capacity of bus 40 passengers, normally 80% of capacity utilization.

Question 2

A lorry starts with a load of 24 tonnes of goods from station A. It unloads 10 tonnes at station B and rest of goods at station C. It reaches back directly to station A after getting reloaded with 18 tonnes of goods at station C. The distance between A to B, B to C and then from C to A are 270 kms, 150 kms and 325 kms respectively. Compute 'Absolute tonnes km,' and 'Commercial tones-km'.

Question 3

Lalli transport company has 20 vehicles, which capacities are as follows:

No of Vehicles	Capacity Per Vehicle
5	9 tonne
6	12 tonne
7	15 tonne
2	20 tonne

The company provides the goods transport service between stations 'A' to station 'B'. Distance between these stations is 200 kilometres. Each vehicle makes one round trip per day an average. Vehicles are loaded with an average of 90 per cent of capacity at the time of departure from station 'A' to station 'B' and at the time of return back loaded with 70 per cent of capacity.

10 per cent of vehicles are laid up for repairs every day. The following information are related to the month of October, 2013:

Salary of Transport Manager	Rs. 30,000
Salary of 30 drivers	Rs.4,000 each driver
Wages of 25 Helpers	Rs.2,000 each helper
Wages of 20 Labourer	Rs.1,500 each labourer
Consumable stores	Rs.45,000
Insurance (Annual)	Rs, 24,000
Road Licence (Annual)	Rs.60,000
Cost of Diesel per litre	Rs.35
Kilometres run per litre each vehicle	5 Km.
Lubricant, Oil etc.	Rs.23,500
Cost of replacement of Tyres, Tubes, other parts	Rs. 1,25,000
Garage rent (Annual)	Rs.90,000
Transport Technical Service Charges	Rs.10,000
Electricity and Gas charges	Rs. 5,000
Depreciation of vehicles	Rs.2,00,000

There is a workshop attached to transport department which repairs these vehicles and other vehicles also. 40 per cent of transport manager's salary is debited to the workshop. The transport department is charged Rs. 28,000 for the service rendered by the workshop during October, 2013. During the month of October, 2013 operation was 25 days.

You are required:

- (i) Calculate per ton-km operating cost.
- (ii) Find out the freight to be charged per ton-km, if the company earned a profit of 25 per cent on freight.

Question 4

Munna company is considering three alternative proposals for conveyance facilities for its sales personnel who has to do considerable travelling, approximately 20,000 kilometres every year. The proposals are as follows:

(1) Purchase and maintain its own fleet of cars. The average cost of a car is Rs. 6,00,000

(2) Allow the Executive use his own car and reimburse expenses at the rate of Rs 10 per kilometre and also bear insurance costs.

(3) Hire cars from an agency at Rs. 1,80,000 per year per car. The company will have to bear costs of petrol, taxes and tyres.

The following further details are available:

Petrol Rs. 6 per km	Repairs and Maintenance Rs. 0.20 per km
Tyre Rs. 0.12 per km.	Insurance Rs.1,200 per car per annum
Taxes Rs. 800 per car per annum	Life of the car : 5 years with annual mileage of 20,000 km.

Resale value Rs.80,000 at the end of fifth year.

Work out the relative costs of three proposals and rank them.

Question 5

BEENA transport company has a fleet of three trucks of 10 tonnes capacity each plying in different directions for transport of customer's goods. The trucks run loaded with goods and return empty. The distance travelled, number of trips made and the load carried per day by each truck are as under:

Truck No.	One way Distance Km	No. of trips per day	Load carried per trip /day tonnes
1	16	4	6
2	40	2	9
3	30	3	8

The analysis of maintenance cost and the total distance travelled during the last two years is as under

Year	Total distance travelled	Maintenance Cost Rs.
1	1,60,200	46,050
2	1,56,700	45,175

The following are the details of expenses for the year under review

Diesel	Rs. 10 per litre. Each litre gives 4 km per litre of diesel on an average
Driver's salary	Rs.2,000 per month
Licence and taxes	Rs. 5,000 per annum per truck
Insurance	Rs. 5,000 per annum for all the three vehicles
Purchase Price per truck	Rs.3,00,000, Life 10 years. Scrap value at the end of life is Rs. 10,000
Oil and sundries	Rs. 25 per 100 km run.
General Overhead	Rs. 11,084 per annum

The vehicles operate 24 days per month on an average.

Required

- (i) Prepare an Annual Cost Statement covering the fleet of three vehicles.
- (ii) Calculate the cost per km. run.
- (iii) Determine the freight rate per tonne km. to yield a profit of 10% on freight

Question 6**HOMEWORK SUM**

Date:

You have been given a permit to run a bus on a route of 20 km. long. The bus costs you Rs. 9,00,000. It has to be insured @ 3% p.a. and the annual tax will be Rs. 10,000. Garage rent is Rs. 10,000 p.m. Annual repairs will be Rs. 10,000 and the bus is likely to last for 5 years and at the end of which the scrap value is likely to be Rs. 60,000. The driver's salary will be Rs. 1,500 p.m. and the conductor's Rs. 1,000 together with 10% of the takings as commission (to be shared equally by both). Stationery will cost Rs. 500 p.m. The manager-cum-accountant's salary will be Rs. 3,500 p.m. Diesel and oil be Rs. 450 per hundred km. The bus will make 3 round trips for carrying on the average 40 passengers on each trip. Assuming 15% profit on takings, calculate the bus fare to be charged from each passengers. The bus will work on the average 25 days in a month.

Question 7

A mini-bus, having a capacity of 32 passengers, operates between two places- 'A' and 'B'. The distance between the place 'A' and place 'B' is 30 km. The bus makes 10 round trips in a day for 25 days in a month. On an average, the occupancy ratio is 70% and is expected throughout the year. The details of other expenses are as under:

		Amount (Rs.)	Passenger tax @ 22% on total
Insurance	15,600	Per annum	
Garage Rent	2,400	Per quarter	
Road Tax	5,000	Per annum	
Repairs	4,800	Per quarter	
Salary of operating staff	7,200	Per month	
Tyres and Tubes	3,600	Per quarter	
Diesel: (one litre is consumed for every 5 km)	13	Per litre	
Oil and Sundries	22	Per 100 km run	
Depreciation	68,000	Per annum	

taking is to be levied and bus operator requires a profit of 25% on total taking.

Prepare operating cost statement on the annual basis and find out the cost per

passenger kilo meter and one way fare per passenger.

Question 8

LALA Cabs Pvt. Ltd. is a New Delhi based cab renting company, provides cab facility on rent for cities Delhi, Agra and Jaipur to the tourists. To attract more tourists it has launched a new three days tour package for Delhi-Jaipur-Agra-Delhi. Following are the relevant information regarding the package

Distance between Delhi and Jaipur (km)	274
Distance between Delhi and Agra (km)	242
Distance between Agra and Jaipur (km)	238
Price of diesel in Delhi	Rs. 54 per litre
Price of diesel in Jaipur	Rs. 56 per litre
Price of diesel in Agra	Rs. 58 per litre
Mileage of cab per litre of diesel (Km.)	16
Chauffeur's salary	Rs. 12,000 per month
Cost of the cab	Rs. 12,00,000
Expected life of the cab	24,00,000kms.
Servicing cost	Rs. 30,000 after every 50,000 kilometres run.
Chauffeur's meal allowance	Rs. 50 for every 200 kilometres of completed journey
Other setup and office cost	Rs. 2400 per month

LALA Cabs has made tie-up with fuel service centres at Agra, Jaipur and Delhi to fill diesel to its cabs on production of fuel passbook to the fuel centre. Company has a policy to get fuel filled up sufficient to reach next destination only.

You are required to calculate the price inclusive of passenger tax @ 12.36% to be quoted for the package if company wants to earn profit of 25% on its net takings i.e.

excluding passenger tax.

Question 9

PEG is a Public School having 25 buses each plying in different directions for the transport of its school students.

In view of large number of students availing of the bus service, the buses work two shifts daily both in the morning and in the afternoon. The buses are garaged in the school. The workload of the students has been so arranged that in the morning the first trip picks up senior students and the second trip plying an hour later pick a up junior students. Similarly, in lorrylthe afternoon, the first trip takes the junior student and an hour later the second trip takes the senior students home.

The distance travelled by each bus, one way is 16 km. The school works 24 days in a month and remains closed for vacation in May and June. The bus fee, however, is payable by the students for all the 12 months in a year.

The details of expenses for the year 2013-2014 are as under:

Driver's salary payable for all the 12 months.	Rs. 5,000 per month per driver
Cleaner's salary (Salary payable for all 12 months) (One cleaner employed for all the five buses)	Rs.3,000 per month
Licence fee, taxes, etc.	Rs.2,300 per bus per annum
Insurance	Rs. 15,600 per bus per annum
Repairs and maintenance	Rs. 16,400 per bus per annum
Purchase price of the bus	Rs. 16,50,000 each
Life of each bus	16 years
Scrap value of buses at the end of life	Rs. 1,50,000
Diesel cost	Rs. 18.50 per litre

Each bus gives an average of 10 km. per litre of diesel. The seating capacity of each bus is 60 students. The seating capacity is fully occupied during the whole year.

The school follows differential bus fees based on distance travelled as under:

Students picked up and dropped within the range of	Bus fee	Percentage of students availing this facility
---	---------	--

distance from the school		
4 km	25% of Full	15%
8 km	50% of Full	30%
16 km	Full	55%

Ignore interest. Since the bus fees has to be based on average cost, you are required to

(i) Prepare a statement showing the expenses of operating a single bus and the fleet of 25 buses for a year.

(ii) Work out average cost per student per month in respect of:

- (a) Students coming from a distance of upto 4 km. from the school.
- (b) Students coming from a distance of upto 8 km. from the school; and
- (c) Students coming from a distance of upto 16 km. from the school.

Question 10

Mr. Funsung owns a bus which runs according to the following schedule:

a) Delhi to Chandigarh and back, the same day.

Distance covered : 250 km. one way.

Number of days run each month : 8

Seating capacity occupied : 90%

(b) Delhi to Agra and back, the same day.

Distance covered : 210 km. one way

Number of days run each month : 10

Seating capacity occupied : 85%

(c) Delhi to Jaipur and back, the same day.

Distance covered : 270 km. one way

Number of days run each month : 6

Seating capacity occupied : 100%

Following are the other details:

Cost of the bus	Rs. 12,00,000
-----------------	---------------

Salary of the Driver	Rs.24,000 p.m.
Salary of the Conductor	Rs.21,000 p.m.
Salary of the part-time Accountant	Rs.5,000 p.m.
Insurance of the bus	Rs.4,800 p.a.
Diesel consumption	4 km. per litre at Rs.56 per litre
Road tax	Rs. 15,915 p.a.
Lubricant oil	Rs. 10 per 100 km.
Permit fee	Rs.315 p.m.
Repairs and maintenance	Rs. 1,000 p.m.
Depreciation of the bus	@ 20% p.a.
Seating capacity of the bus	50 persons

Passenger tax is 20% of the total takings. Calculate the bus fare to be charged from each passenger to earn a profit of 30% on total takings. The fares are to be indicated per passenger for the journeys:

- 1) Delhi to Chandigarh
- 2) Delhi to Agra and
- 3) Delhi to Jaipur

Question 11

Tripathi transport company has been given a 40 kilometre long route to run 5 buses. The cost of each bus is Rs. 6,50,000. The buses will make 3 round trips per day carrying on an average 80 percent passengers of their seating capacity. The seating capacity of each bus is 40 passengers. The buses will run on an average 25 days in a month. The other information for the year 2013-14 are given below:

Garage rent	Rs.4,000 per month
Annual repairs and maintenance	Rs.22,500 each bus
Salaries of 5 drivers	Rs. 3,000 each per month
Wages of 5 conductors	Rs.1,200 each per month

Manager's salary	Rs.7,500 per month
Road tax, permit fee, etc.	Rs.5,000 for a quarter
Office expenses	Rs.2,000 per month
Cost of diesel per litre	Rs.38
Kilometre run per litre for each bus	6 kilometres
Annual depreciation	15% of cost
Annual insurance	8% of cost

You are required to calculate the bus fare to be charged from each passenger per kilometre, if the company wants to earn profits of $33 \frac{1}{3}$ percent on taking (total receipts from passengers).

Question 12**HOMEWORK SUM**

Date:

TOKYO is a public school having five buses each plying in different directions for the transport of its school students. In view of a larger number of students availing of the bus service the buses work two shifts daily both in the morning and in the afternoon. The buses are garaged in the school. The work-load of the students has been so arranged that in the morning the first trip picks up senior students and the second trip plying an hour later picks up the junior students. Similarly in the afternoon the first trip takes the junior students and an hour later the second trip takes the senior students home.

The distance travelled by each bus one way is 8 km. The school works 25 days in a month and remains closed for vacation in May, June and December. Bus fee, however, is payable by the students for all 12 months in a year.

The details of expenses for a year are as under:

Driver's salary	Rs.4,500 per month per driver
Cleaner's salary (Salary payable for all 12 months) (One cleaner employed for all the five buses)	Rs.3,500 per month
Licence fee, taxes, etc.	Rs.8,600 per bus per annum
Insurance	Rs. 10,000 per bus per annum

Repairs and maintenance	Rs.35,000 per bus per annum
Purchase price of the bus	Rs. 15,00,000 each
Life of each bus	12 years
Scrap value of buses at the end of life	Rs.3,00,000
Diesel cost	Rs.45.00 per litre

Each bus gives an average mileage of 4 km. per litre of diesel. Seating capacity of each bus is 50 students. The seating capacity is fully occupied during the whole year.

Students picked up and dropped within a range upto 4 km, of distance from the school are charged half fare and fifty per cent of the students travelling in each trip are in this category. Ignore interest. Since the charges are to be based on average cost you are required to:

(i) Prepare a statement showing the expenses of operating a single bus and the fleet of five buses for a year.

(ii) Work out the average cost per student per month in respect of -

- (A) students coming from a distance of upto 4 km. from the school and
- (B) students coming from a distance beyond 4 km. from the school.

Question 13**HOMEWORK SUM**

Date:

The following information relates to a bus operator:

Cost of the bus	Rs. 18,00,000
Insurance charges	3% p.a.
Manager-cum accountant's salary	Rs. 8,000 p.m.
Annual Tax	Rs. 50,000
Garage Rent	Rs. 2,500 p.m.
Annual repair & maintenance	Rs. 1,50,000
Expected life of the bus	15 years
Scrap value at the end of 15 years	Rs. 1,20,000
Driver's salary	Rs.15,000 p.m.

Conductor's salary	Rs. 12,000 p.m.
Stationery	Rs. 500 p.m.
Engine oil, lubricants (for 1200 km.)	Rs. 2,500
Diesel and oil (for 10 km.)	Rs. 52
Commission to driver and conductor (shared equally)	10% of collections
Route distance	20 km long

The bus will make 3 round trips for carrying on the average 40 passengers in each trip. Assume 15% profit on collections. The bus will work on the average 25 days in a month. Calculate fare for passenger-km

Question 14

A lodging home is being run in a small hill station with 100 single rooms, The home offers concessional rates during six off-season months in a year. During this period, half of the full room rent is charged. The management's profit margin is targeted at 20% of the room rent. The following are the cost estimates and other details for the year ending on 31st March 2017.

[Assume a month to be of 30 days].

(i) Occupancy during the season is 80% while in the off-season it is 40% only.

(ii) Total investment in the home is Rs.200 lakhs of which 80% relate to buildings and balance for furniture and equipment.

(iii) Expenses:

Staff salary (Excluding room attendants) : Rs.5,50,000

Repairs to building : Rs. 2,61,000

Laundry charges : Rs.80,000

Interior : Rs.1,75,000

Miscellaneous expenses : Rs.1,90,800

(iv) Annual depreciation is to be provided for buildings @ 5% and on furniture and equipment @ 15% on straight line basis.

(v) Room attendants are paid Rs. 10 per room day on the basis of occupancy of the rooms in a month.

(vi) Monthly lighting charges are Rs.120 per room, except in four months in winter when it is Rs.30 per room and this cost is on the basis of full occupancy for a month. You are required to work out the room rent chargeable per day both during the season and the off-season months on the basis on the foregoing information.

Question 15**HOMEWORK SUM**

Date:

Lalli company runs a holiday home for its customers. For this purpose, it has hired a building at a rent of Rs. 10,000 per month along with 5% of total taking. It has three types of rooms for its customers, viz., single room, double rooms and triple rooms. Following information is given:

Type of suite	Number	Occupancy percentage
Single room	100	100%
Double room	50	80%
Triple rooms	30	60%

The rent of double rooms is to be fixed at 2.5 times of the single room and that of triple rooms as twice of the double rooms.

The other expenses for the year 2013 are as follows:

Particulars	Amount (Rs.)
Staff salaries	14,25,000
Room attendants' wages	4,50,000
Lighting, heating and power	2,15,000
Repairs and renovation	1,23,500
Laundry charges	80,500
Interior decoration	74,000
Sundries	1,53,000

Provide profit @ 20% on total taking and assume 360 days in a year.

You are required to calculate the rent

to be charged for each type of suite.

Question 16

From the following information, calculate Patient Days:

	General Ward	Semi-Deluxe Ward	Deluxe Ward
Number of Wards	10	20	30
Number of Beds in each Ward	30	2	1
Occupancy Rate for 200 days	100%	80%	60%
Occupancy Rate for rest of the year	80%	60%	40%

Assume 365 days in a year. The Rent of semi-deluxe ward bed is to be fixed at 3 times of the general ward bed and that of deluxe ward bed as twice of semi-deluxe ward bed. Desired Profit = 20% on total cost

Calculate rent to be charged for each bed day for different types of wards if Total operating cost = 1368 Lacs

Question 17

Gaitonde Hospital runs an intensive Medical Care Unit. For this purpose, it has hired a building at a rent of Rs. 5,000 p.m. with the understanding that it would bear the repairs and maintenance charges also.

The unit consists of 25 beds and 5 more beds can be comfortably accommodated when occasion demands.

The permanent staff attached to the unit are as follows:

- 1 Supervisor, at a salary of Rs.1,000 p.m.
- 2 Nurses each at a salary of Rs .600 p.m.
- 1 Ward boy, at a salary of Rs.300 p.m.

Though the unit was open for the patients all the 365 days in a year, scrutiny of accounts in 20X1 revealed that only for 120 days in the year, the unit had the 100% occupancy rate and for another 80 days it had on an average 80% occupancy rate. But there were occasions when the beds were full, extra beds were hired from outside at charge of Rs. 5 per bed per day and this did not come to more beds extra above the normal capacity on any one day. The total hire charges for the beds incurred for the whole year amounted to Rs. 2,000.

The unit engaged expert doctors from outside to attend on the patients and the fees were paid on the basis of the number of patients attended and time spent by them and on an average worked out to Rs. 10,000 p.m. in 20X1. The other expenses for the year were as under:

Particulars	Rs.
Repairs and Maintenance	14,450
Food supplied to patients	44,000
Monitor and other services for them	12,500
Laundry charges for their bed linen	28,000
Medicines supplied	73,500
General administration charges allocated to the unit	49,550

- (i) If the unit recovered an overall amount of Rs. 100 per day on an average from each patient, what is the profit per patient made by the unit in 20X1?

(ii) The unit wants to work on a budget for the year 20X2, but the number of patients requiring intensive medical care is a very uncertain factor. Assuming that same revenue and expenses prevail in 20X2, in the first instance, work out the number of patient-days required by the unit to break even.

Question 18**HOMEWORK SUM**

Date:

A Multinational company runs a Public Medical Health Center. For this purpose, it has hired a building at a rent of Rs.10,000 per month with 5% of total taking. Health center has three types of wards for its patients namely. General ward, Cottage ward and Deluxe ward. State the rent to be to each bed-day for different type of ward on the charged to each basis of the following information,

- i. The number of beds of each type is General ward 100, Cottage ward 50, Deluxe ward 30.
 - ii. The rent of cottage ward bed is to be fixed at 2.5 times of the General ward bed and that of Deluxe ward bed as twice of the Cottage ward bed
 - iii. The occupancy of each type of ward is as follows: General ward 100%, Cottage ward 80% and Deluxe ward 60%.
- But, in General ward there were occasions when beds are full, extra beds were hired at a charges of Rs. 20 per bed per day. The total hire charges for the extra beds incurred for the whole year amount to Rs.12,000.
- iv. The Health center engaged a heart specialist from outside and on an average fees paid to him was Rs. 15,000 per trip. He makes three trips in the whole year.
 - v. The other expenses for the year were as under:

	(Rs.)
Salary of Supervisors, Nurses, Ward Boys	4,25,000
Repairs and Maintenance	90,000
Food Supplied to Patients	40,000
Laundry Charges for their Bed Linens	80,500
Salary of Doctors	13,50,000

Medicines Supplied	74,000
Cost of Oxygen, X-Ray etc. (other than directly borne for treatment of Patients)	49,500
General Administration Charges	63,000

- vi. Provide profit @ 20% on total taking.
- vii. The Health center imposes 8% tax on rent received
- viii. 360 days may be taken in year

3. MATERIAL COSTING

Question 1

The annual carrying cost of material 'X' is Rs. 3.6 per unit and its total carrying cost is Rs. 9,000 per annum. What would be the Economic order quantity for material 'X', if there is no safety stock of material X?

Question 2

The Lalu Gardener is deciding on the economic order quantity for two brands of lawn fertilizer Super Grow and Nature's own. The following information is collected:

	Fertilizer	
	Super Grow	Nature's Own
Annual demand	2000 bags	1,280 bags
Relevant ordering cost per purchase order	Rs. 1,200	Rs. 1,400
Annual Relevant carrying cost per bag	Rs. 480	Rs. 560

Required:

- Compute EOQ for Super Grow and Nature's own.
- For the EOQ, what is the sum of the total annual relevant ordering costs and total annual relevant carrying costs for Super Grow and Nature's own?
- For the EOQ, compute the number of deliveries per year for Super Grow and Nature's own.

Question 3

Sundari Ltd. manufactures a product X which requires two raw materials A and B in a ratio of 1:4. The sales department has estimated a demand of 5,00,000 units for the product for the year. To produce one unit of finished product, 4 units of material is required.

Stock position at the beginning of the year is as follows:

Product X - 12,000 units

Material A - 24,000 units

Material B-52,000 units

To place an order the company has to spend Rs. 15,000. The Company is financing its working capital using a bank cash credit @ 13% p.a. Product X is sold at Rs. 1040 per unit. Material A & B is purchased at Rs. 150 and Rs.200 respectively.

Required:

Compute Economic Order Quantity (EOQ):

- If purchase order for the both materials is placed separately,
- If purchase order for the both materials is not placed separately.

Question 4**HOMEWORK SUM**

Date:

(i) Compute E.O.Q. and the total variable cost for the following:

Annual Demand	=	5,000 units
Unit price	=	Rs. 20.00
Order cost	=	Rs. 16.00
Storage rate	=	2% per annum
Interest rate	=	12% per annum
Obsolescence rate	=	6% per annum

(ii) Determine the total variable cost that would result for the items if an incorrect price of Rs. 12.80 is used.

Question 5**HOMEWORK SUM**

Date:

Jaanu & Company buys its annual requirement of 36,000 units in 6 installments. Each unit costs Rs. 1 and the ordering cost is Rs. 25. The inventory carrying cost is estimated at 20% of unit value. Find the total annual cost of the existing inventory policy. How much money can be saved by Economic Order Quantity

Question 6

Kamini Limited produces product M which has a quarterly demand of 8,000 units. The product requires 3 kg. quantity of material 'X' for every finished unit of product. The other information are follows:

Cost of material 'X'	:	Rs. 20 per kg
Cost of placing an order	:	Rs. 1,000 per order
Carrying Cost	:	15% per annum of average inventory

You are required:

- Calculate the Economic Order Quantity for material 'X'.
- Should the company accept an offer of 2 percent discount by the supplier, if he wants to supply the annual requirement of material 'X' in 4 equal quarterly installments?

Question 7

Basanti & Company supplies plastic crockery to fast food restaurants in metropolitan city. One of its products is a special bowl, disposable after initial use, for serving soups to its customers. Bowls are sold in pack 10 pieces at a price of Rs. 50 per pack. The demand for plastic bowl has been forecasted at a fairly steady rate of 40,000 packs every year. The company purchases the bowl direct from manufacturer at Rs. 40 per pack within a three days lead time. The ordering and related cost is Rs. 8 per order. The storage cost is 10% per annum of average inventory investment.

Required:

- Calculate Economic Order Quantity.
- Calculate number of orders needed every year.
- Calculate the total cost of ordering and storage bowls for the year.
- Determine when should the next order to be placed. (Assuming that the company does not maintain a safety stock and that the present inventory level is 333 packs with a year of 360 working days.)

Question 8**HOMEWORK SUM**

Date:

Ghungroo Ltd. produces a product which has a monthly demand of 4,000 units. The product requires a component X which is purchased at Rs. 20. For every finished product, one unit of component is required. The ordering cost is Rs. 120 per order and the holding cost is 10% p.a. You are required to calculate:

- (i) Economic order quantity.
- (ii) If the minimum lot size to be supplied is 4,000 units, what is the extra cost, the company has to incur?
- (iii) What is the minimum carrying cost, the company has to incur?

Question 9

Jonny & company has the option to procure a particular material from two sources:

Source I assures that defectives will not be more than 2% of supplied quantity.

Source II does not give any assurance, but on the basis of past experience of supplies received from it, it is observed that defective percentage is 2.8%.

The material is supplied in lots of 1,000 units. Source II supplies the lot at a price, which is lower by Rs. 100 as compared to Source I. The defective units of material can be rectified for use at a cost of Rs. 5 per unit.

You are required to find out which of the two sources is more economical.

Question 10**HOMEWORK SUM**

Date:

A Company manufactures a special product which requires a component 'Alpha'. The following particulars are collected for the year 2016:

- (i) Annual demand of Alpha 8,000 units
- (ii) Cost of placing an order Rs. 200 per order
- (iii) Cost per unit of Alpha Rs. 400
- (iv) Carrying cost p.a. 20%

The company has been offered a quantity discount of 4% on the purchase of 'Alpha' provided the order size is 4,000 components at a time.

Required: (i) Compute the economic order quantity

- (ii) Advise whether the quantity discount offer can be accepted

Question 11

ROTADI Limited has received an offer of quantity discount on its or materials as under:

Price per ton	Order Size (in ton)
Rs. 9,600	Less than 50
Rs. 9,360	50 and less than 100
Rs. 9,120	100 and less than 200
Rs. 8,880	200 and less than 300
Rs. 8,640	300 and above

The annual requirement for the material is 500 tons. The ordering cost per order is Rs. 12,500 and the stock holding cost is estimated at 25% of the material cost per annum.

Required:

1. Compute EQO.
2. Compute the most economical purchase level.
3. Compute EOQ if there are no quantity discounts and the price per ton is Rs. 10,500.

Question 12

Laila & company manufactures a product from a raw material, which is purchased at Rs.60 per kg. The company incurs a handling cost of Rs.360 plus freight of Rs.390 per order. The incremental carrying cost of inventory of raw material is Rs.0.50 per kg, per month. In addition, the cost of working Capital finance on the investment in inventory of raw material is Rs. 9 per kg. per annum The annual production of the product is 1,00,000 units and 2.5 units are obtained from one kg of raw material.

Required

- (i) Calculate the economic order quantity of raw materials.
- (ii) Advise, how frequently should orders for procurement be placed.
- (ii) If the company proposes to rationalize placement of orders on quarterly basis, what percentage of discount in the price of raw materials should be negotiated?

Question 13

The quarterly production of a company's product which has a steady market is 20,000 units. Each unit of a product requires 0.5 kg. of raw material. The cost of placing one order for raw material is Rs. 100 and the inventory carrying cost is Rs. 2 per annum. The lead time for procurement of raw material is 36 days and a safety stock of 1,000 kg. of raw materials is maintained by the company. The company has been able to negotiate the following discount structure with the raw material supplier.

Order quantity (kg.)	Discount (Rs.)
Upto 6,000	NIL
6,001-8,000	400
8,001- 16,000	2,000
16,001 - 30,000	3,200
30,001 - 45,000	4,000

Required : (i) Calculate the re-order point taking 30 days in a month.

(ii) Prepare a statement showing the total cost of procurement and storage of raw material after considering the discount of the company elects to place one, two, four or six orders in the year.

Question 14

SAKI SAKI Ltd. produces a product 'Exe' using a raw material Dee. To produce one unit of Exe, 2 kg of Dee is required. As per the sales forecast conducted by the company, it will be able to sell 10,000 units of Exe in the coming year.

The following is the information regarding the raw material Dee:

(i) The Re-order quantity is 200 kg. less than the Economic Order Quantity.

(ii) Maximum consumption per day is 20 kg. more than the average consumption per day.

(iii) There is an opening stock of 1,000 kg.

(iv) Time required to get the raw materials from the suppliers is 4 to 8 days.

(v) The purchase price is Rs.125 per kg.

There is an opening stock of 900 units of the finished product Exe. The rate of

interest charged by bank on Cash Credit facility is 13.76%.

To place an order company has to incur Rs. 720 on paper and documentation work. From the above information find out the followings in relation to raw material Dee:

- Re-order Quantity
- Maximum Stock level
- Minimum Stock level
- Calculate the impact on the profitability of the company by not ordering EOQ. [Take 364 days for a year]

Question 15

A company uses three raw materials A, B and C for a particular product for which the following data apply :-

Raw Material	Usage per unit of product (kg)	Re-order quantity (kg)	Price per (kg) (Rs)	Delivery period (in weeks)			Re order level (kg)	Minimum level (kg)
				Minimum	Average	Maximum		
A	10	10,000	0.10	1	2	3	8,000	?
B	4	5,000	0.30	3	4	5	4,750	?
C	6	10,000	0.15	2	3	4	?	2,000

Weekly production varies from 175 to 225 units, averaging 200 units of the said product. What would be the following quantities:-

- Minimum Stock of A?
- Maximum Stock of B?
- Re-order level of C?
- Average stock level of A?

Question 16

Following details are related to a manufacturing concern:

Re-order Level	1,60,000 units
Economic Order Quantity	90,000
Minimum Stock Level	100000 units
Maximum Stock Level	190000 units
Average Lead Time	6 days
Difference between minimum lead time and Maximum lead time	4 days
Calculate	

(i) Maximum consumption per day (ii) Minimum consumption per day.

Question 17

From the details given below, calculate:

- (i) Re-ordering level
- (ii) Maximum level
- (ii) Minimum level
- (iv) Danger level.

Re-ordering quantity is to be calculated on the basis of following information

Cost of placing a purchase order is Rs. 20

Number of units to be purchased during the year is 5,000

Purchase price per unit inclusive of transportation cost is Rs. 50

Annual cost of storage per units is Rs. 5.

Details of lead time: Average- 10 days. Maximum- 15 days. Minimum- 5 days.

For emergency purchases- 4 days.

Rate of consumption: Average: 15 units per day, Maximum: 20 units per day

Question 18**HOMEWORK SUM**

Date:

A company manufactures 5,000 units of a product per month. The cost of placing an order is Rs. 100. The purchase price of the raw material is Rs.10 per kg. The re-order period is 4 to 8 weeks. The consumption of raw materials varies from 100 kg to 450 kg per week, the average consumption being 275 kg. The carrying cost of

Inventory is 20% per annum.

You are required to calculate

(i) Re-order quantity

(iii) Maximum level

(v) Average stock level

(ii) Re-order level

(iv) Minimum level

Question 19

HOMEWORK SUM

Date:

Re-order quantity of material X is 5,000 kg.; Maximum level 8,000kg.; Minimum usage 50 kg. per hour, minimum re-order period 4 days; daily working hours in the factory is 8 hours. You are required to calculate the re-order level of material 'X'

Question 20

From the following data for the year ended 31st December, 2021, calculate the inventory turnover ratio of the two items and put forward your comments on them.

	Material A (Rs.)	Material B(Rs.)
Opening stock 1.1.2021	10,000	9,000
Purchase during the year	52,000	27,000
Closing stock 31.12.2021	6,000	11,000

Question 21

HOMEWORK SUM

Date:

The following data are available in respect of material C for the year ended 31st March, 2021.

	(Rs.)
Opening stock	90,000
Purchases during the year	2,70,000
Closing stock	1,10,000

Calculate:

Inventory turnover ratio, and the number of days for which the average inventory is held.

Question 22

At what price per unit would Part No. A 32 be entered in the Stores Ledger, if the following invoice was received from a supplier:

Invoice	(Rs.)
200 units Part No. A 32 @ Rs.5	1,000
Less:- 20% Discount	(200)
	800
Add:- GST @15%	120
	920
Add: Packing Charges (5 Non-returnable boxes)	50
	970

(i) A 2 per cent cash discount will be given if payment is made in 30 days.

(ii) Documents sustaining payment of GST is enclosed for claiming CENVAT credit.

Question 23

An invoice in respect of a consignment of chemicals A and B provides the following information

Particulars	(Rs.)
Chemical A: 10,000 kgs, at Rs. 10 per kg.	1,00,000
Chemical B: 8,000 kgs, at Rs. 13 per kg.	1,04,000
Basic Custom Duty @ 10% (Credit is not available)	20,400
Railway freight	3,840
Total cost	2,28,240

A shortage of 500 kgs. in chemical A and 320 kgs. in chemical B is noticed due to normal breakages. You are required to determine the rate per kg. of each chemical, assuming a provision of 2% for further deterioration.

Question 24

The following information is provided by Sundari Industries for the fortnight of April, 2021 Material Exe :

Stock on 1-4-2021 100 units at Rs. 5 per unit.

Purchases

5-4-21	300	units	at Rs. 6
8-4-21	500	units	at Rs.7
12-4-21	600	Units	at Rs. 8

Issues

6-4-21	250	units
10-4-21	400	units
14-4-21	500	units

The stock verifier of the company reported a shortage of 30 units on X on account of shortage. On 20-04-2021, There happened fire in company which resulted in loss of 20 units of material.

Required:

1. Calculate using FIFO, LIFO & weighted average methods of pricing issues
 - a. the value of materials consumed during the period
 - b. the value of stock of materials on 30-4-21.

Question 25**HOMEWORK SUM****Date:**

Prepare a Store Ledger Account from the following transactions of TITU Company Ltd. April, 2021

1 Opening balance 200 units @ Rs. 10 per unit.

5 Receipt 250 costing Rs. 2,000

8 Receipt 150 units costing RS.1,275

10 Issue 100 units

15 Receipt 50 units costing Rs. 500

20 Shortage 10 units

21 Receipt 60 units costing Rs. 540

22 Issue 400 units

The issues upto 10-4-21 will be priced at LIFO and from 11-4-21 issues will be priced at FIFO. Shortage will be charged as overhead.

Question 26**HOMEWORK SUM**

Date:

The following are the details of receipts and issues of a material of stores in a manufacturing company for the period of three months ending 30th June, 2020:

Receipts:

Date	Quantity (kg.)	Rate per kg. (Rs.)
April 10	1,600	5.00
April 20	2,400	4.90
May 5	1,000	5.10
May 17	1,100	5.20
May 25	800	5.25
June 11	900	5.40
June 24	1,400	5.50

There was 1,500 kg. in stock at April 1, 2020 which was valued at Rs. 4.80 per kg

Issues:

Date	Quantity (kg.)
April 4	1,100
April 24	1,600
May 10	1,500
May 26	1,700
June 15	1,500
June 21	1,200

Issues are to be priced on the basis of weighted average method. The stock verifier of the company reported a shortage of 80 kgs. on 31st May, 2020 and 60 kgs. on 30th June, 2020. The shortage is treated as inflating the price of remaining material on account of shortage.

You are required to prepare a Stores Ledger Account.

Question 27**HOMEWORK SUM**

Date:

The following information is extracted from the Stores Ledger
Material X- Opening Stock Nil

Purchases :

Jan. 1 100 @ Rs. 1 per unit

Jan. 20 100 @ Rs. 2 per unit

Issues:

Jan. 22 60 for Job W 16

Jan. 23 60 for Job W 17

Complete the receipts and issues valuation by adopting the First-In-First Out, Last-In-First Out and the Weighted Average Method. Tabulate the values allocated to Job W 16, Job W 17 and the closing stock under the methods aforesaid and discuss from different points of view which method you would prefer.

Question 28**HOMEWORK SUM**

Date:

Andheri Ltd. is engaged in heavy engineering works on the basis of job order received from industrial customers. The company has received a job order of making turbine from a power generating company. Below are some details of stores receipts and issues of copper wire, used in the manufacturing of turbine:

Feb. 1 Opening stock of 1,200 Kgs. @ Rs. 475 per kg.

Feb. 5 Issued 975 kgs. to mechanical division vide material requisition no. Mec 09/13

Feb. 6 Received 3,500 kgs. @ Rs. 460 per kg vide purchase order no. 159/2013

Feb. 7 Issued 2,400 kgs. to electrical division vide material requisition no. Ele012/13

Feb. 9 Returned to stores 475 kgs. by electrical division against material requisition no. Ele 012/13.

Feb. 15 Received 1,800 kgs. @ Rs. 480 per kg. vide purchase order no 161/2013

Feb 17 Returned to supplier 140 kgs, out of quantity received vide purchase order no. 161/2013

Feb 20 Issued 1,900 kgs, to electrical division vide material requisition no. Ele 165/2013

On 28th February, 2014 it was found that 180 kgs of wire was fraudulently misappropriated by the stores assistant and never recovered by the company. From the above information you are required to prepare the Stock Ledger account using 'Weighted Average' method of valuing the issues.

Question 29

A chemical manufacturing unit uses ingredient A as basic material. The cost of raw material is Rs. 20 per kg. and input-output ratio is 120%. Due to a sudden shortage in the market, the material becomes non-available and the manufacturing unit is considering the use of any of the following two substitutes available:-

Material	Input-output ratio	Purchase price per kg. (Rs.)
B1	135%	26
B2	110%	30

You are required to recommend which of the above substitute is to be used. Also indicate additional cost required to be incurred.

Question 30**HOMEWORK SUM**

Date:

Pappu Limited produces product 'P'. It uses annually 60,000 units of a material 'Rex' costing Rs. 10 per unit. Other relevant information are:

Cost of placing an order	Rs. 800 per order
Carrying cost	15% per annum of average inventory
Re-order period	10 days
Safety stock	600 units

The company operates 300 days in a year

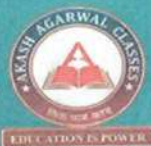
You are required to calculate:

1. Economic Order Quantity for material 'Rex'.
2. Re-order Level

3. Maximum Stock Level

4. Average Stock Level

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MOH. MURSHID



NATRAJAN S.



RUGVEDI K.



SAKSHI J.



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Sandeep S.



Ruchita K.



Mitalee S.



Ananya R.



Vanshika N.



Vijay A.



Navya A.



Ayush M.



Prestan



Vijay K.



Harsh D.



Sanket S.



Ruchi K.



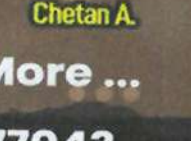
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270 Marks Simran	240 Marks Tanvi P.	240 Marks Yash S.	236 Marks Lavish M.	229 Marks Vishanavi
228 Marks Jaym E.	220 Marks Swati	219 Marks Muskan	218 Marks Rohit M.	213 Marks Tahir K.
212 Marks Sanskar	208 Marks Aditi B.	207 Marks Ishu S.	207 Marks Dipshi C.	209 Marks Anju Y.
205 Marks Yashan	204 Marks Sanjeev	203 Marks Siyali	203 Marks Naveen	202 Marks Soumya
200 Marks Ritika	200 Marks Nikhil	200 Marks Ankita	200 Marks Priti G.	200 Marks Vikash

heartiest congratulations.... and many more ...

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CMA INTERMEDIATE
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Meet Our Group 1 Top Scorers

267 Marks Vaidik	252 Marks Rishabh	239 Marks Harsh	237 Marks Anshul	230 Marks Tanvi J.
228 Marks Harsh S.	224 Marks Riya S.	217 Marks Kamakhya	215 Marks Ruchika	214 Marks Rohit S.
210 Marks Snehal	209 Marks Shila S.	209 Marks Kirti P.	208 Marks Zaveriya	207 Marks Rahul S.
206 Marks Unnati	206 Marks Shweta G.	204 Marks Anshu	203 Marks Abhinav	201 Marks Vicky S.
200 Marks Yamini	200 Marks Vedant M.	200 Marks Surya N.	200 Marks Shreyansh	200 Marks Yash D.

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JULY 23 RESULTS


All India Ranker 30TH



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Jan 23 Exams Results




Trishir Goyal
536 Marks

#13
All India Rank

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Jan 23 Exams Results



Rishit Bharti
520 Marks

#20
All India Rank

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JULY 23 RESULTS

All India Ranker 36TH



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4. LABOUR COSTING

Question 1

You are given the following information of a worker.

- (i) Name of worker : Mr. Bunny
- (ii) Ticket No. : 002
- (iii) Work started : 1-4-21 at 8 a.m.
- (iv) Work finished : 5-4-21 at 12 noon
- (v) Work allotted : Production of 2,160 units
- (vi) Work done and approved : 2,000 units
- (vii) Time and units allowed : 40 units per hour
- (viii) Wage rate : Rs. 25 per hour
- (ix) Mr. Bunny worked 9 hours a day.

You are required to calculate the remuneration of Mr. Bunny on the following basis:

- (i) Halsey plan and
- (ii) Rowan plan

Question 2

Bango Limited is working by employing 50 skilled worker is considering the introduction of incentive scheme-either. Halsey scheme (with 50% bonus) or Rowan scheme of wage payment for increasing the labour productivity to cope up the increasing demand for the product by 40%. It is believed that proposed incentive scheme could bring about an average 20% increase over the present earnings of the workers, it Could act as sufficient incentive for them to produce more.

Because of assurance, the increase in productivity has been observed as revealed by the figures for the month of April

Hourly rate of wages (Guaranteed)	Rs. 30
Average time for producing one unit by one worker at the previous performance	1.975 hours
(This may be taken as time allowed)	
Number of working days in the month	24
Number of working hours per day of each worker	8

Actual production during the month
Required

6,120 units

- (1) Calculate the effective rate of earnings under the Halsey scheme and the Rowen scheme.
- (2) Calculate the savings to the Bango Limited in terms of direct labour cost per piece.
- (3) Advise Bango Limited about the selection of the scheme to fulfill their assurance.

Question 3

Two workers 'Ranbir' and 'Deepika' produce the same product using the same material. Their normal wage rate is also the same. 'Ranbir' is paid bonus according to Rowan scheme while 'Deepika' is paid bonus according to Halsey scheme. The time allowed to make the product is 50 hours. 'Ranbir' takes 30 hours while 'Deepika' takes 40 hours to complete the product. The factory overhead rate is Rs. 5 per person-hour actually worked. The factory cost of product manufactured by 'Ranbir' is Rs. 3,490 and for product manufactured by 'Deepika' is Rs. 3,600.

Question 4

Standard Time for a job is 90 hours. The hourly rate of guarantee wages is Rs. 50. Because of the saving in time a worker A gets an effective hourly rate of wages of Rs. 60 under Rowan premium bonus system. For the same saving in time, calculate the hourly rate of wages a worker B will get under Halsey premium bonus system assuring 40% to worker.

Question 5

Mr. Patlu executes a piece of work in 120 hours as against 150 hours allowed to him. His hourly rate is Rs. 10 and he gets a dearness allowance @ Rs. 30 per day of 8 hours worked in addition to his wages. You are required to calculate total wages received by Mr. Patlu under the following incentive schemes:

- (i) Rowan Premium Plan, and (ii) Emerson's Efficiency Plan

Question 6

Guddu, Munna and Bablu are three industrial workers are three industrial workers working in Sports industry and are experts in making cricket pads. Guddu, Munna and Bablu are working in Mahi Sports, Virat Sports and Shikhar Sports companies respectively. Workers are paid under different incentive schemes. Company wise incentive schemes are as follows:

Company	Incentive scheme
Mahi Sports	Emerson's efficiency system
Virat Sports	Merrick differential piece rate system
Shikhar Sport	Taylor's differential piece work system

The relevant information for the industry is as under

Standard Working Hours 8 hours a day

Standard output per hour (in units) 2

Daily wages rate Rs. 360

No. of working days in a week 6 days

Actual outputs for the week are as follows:

Guddu	Munna	Bablu
132 units	108 units	96 units

You are required to calculate effective wages rate and weekly earnings of all the three workers.

Question 7

In a factory the standard time allowed for completing a given task (50 units), is 8 hours. The guaranteed time wages are Rs. 20 per hour. If a task is completed in less than the standard time, the high rate of Rs. 4 per unit is payable. Calculate the wages of a worker, under the Gantt system, if he completes the task in (i) 10 hours; (ii) 8 hours, and (ii) in 6 hours.

Also ascertain the comparative rate of earnings per hour under the three situations.

Question 8

Two workmen, Hardik and Virat, produce the same product using the same material, Hardik is paid bonus according to Halsey plan, while Virat is paid bonus according to Rowan plan. The time allowed to manufacture the product is 100 hours. Hardik has taken 60 hours and Virat has taken 80 hours to complete the product. The normal hourly rate of wages of workman Hardik is Rs. 24 per hour. The total earnings of both the workers are same. Calculate normal hourly rate of wages of workman Virat.

Question 9

Calculate the earnings of workers of workers Sonu, Titu and Sweety under Straight Piece Rate System and Merrick's Piece Rate System from the following particulars.

Normal Rate per Hour	Rs. 5.40
Standard Time per Unit	1 Minute
Output per day is as follows	
Worker Sonu-	390 Units
Worker Titu -	450 Units
Worker Sweety -	600 Units
Working hours per day are 8.	

Question 10

Standard Output in 10 hours is 240 units, actual output in 10 hours is 264 units. Wages rate is Rs. 10 per hour. Calculate the amount of bonus and total wages under Emerson efficiency Plan.

Question 11

The existing Incentive system of Bunty Limited is as under

Normal working week	5 days of 8 hours each plus 3 late shifts of 3 hours each
Rate of Payment	Day work: Rs. 160 per hour
Late shift	Rs. 225 per hour
Average output per operator for 49-hours week i.e, including 3 late shifts	120 articles

In order to increase output and eliminate overtime, it was decided to switch on to a system of payment by results. The following information is obtained:

Time-rate (as usual)	Rs. 160 per hour
Basic time allowed for 15 articles	5 hours
Piece-work rate	Add 20% to basic piece-rate
Premium Bonus	Add 50% to time.
Required	

(1) Prepare a Statement showing hours worked, weekly earnings, number articles produced and labour cost per article for one operator under following systems:

- (a) Existing time-rate
 (b) Straight piece-work
 (c) Rowan system (d) Halsey premium system

Assume that 135 articles are produced in a 40-hour week under straight piecework, Rowan Premium system, and Halsey premium system above and worker earns half the time saved under Halsey premium system.

Question 12

Calculate the earnings of worker from the following information under Bedeaux system:

Standard time for a product A-30 seconds plus relaxation allowance of 50%.

Standard time for a product B-20 second plus relaxation allowance of 50%.

During 8 hour day for

Actual output of product for A	500 units.
Actual output of product B	300 units
Wage rate	Rs. 10 per hour

Question 13

HOMEWORK SUM

Date:

Bonus paid under the Halsey Plan with bonus at 50% for the time saved equals the bonus paid under the Rowan System. When will this statement hold good? (Your answer should contain the proof).

Question 14

HOMEWORK SUM

Date:

A skilled worker in Shakira Ltd. is paid a guaranteed wage rate of Rs.30 per hour. The standard time per unit for a particular product is 4 hours. P, a machine man, has been paid wages under the Rowan Incentive Plan and he had earned an effective hourly rate of Rs. 37.50 on the manufacture of that particular product.

Required:

What could have been his total earnings and effective hourly rate, had he been put on Halsey Incentive Scheme (50%)?

Question 15

HOMEWORK SUM

Date:

A skilled worker is paid a guaranteed wage rate of Rs. 120 per hour, The standard time allowed for a job is 6 hour. He took 5 hours to complete the job. He is paid wages under Rowan Incentive Plan!

- (i) Calculate his effective hourly rate of earnings under Rowan Incentive Plan.
- (ii) If the worker is placed under Halsey Incentive Scheme (50%) and he wants to maintain the same effective hourly rate of earnings, calculate the time in which he should complete the job.

Question 16

The standard hours of job X is 100 hours. The job has been completed by Amar in 60 hours, Akbar in 70 hours and Anthony in 95 hours.

The bonus system applicable to the job is as follows:-

Percentage of time saved to time allowed (Slab rate)	Bonus
Saving upto 10%	10% of time saved
From 11% to 20%	15% of time saved
From 21% to 40%	20% of time saved

From 41% to 100%

25% of time saved

The rate of pay is Rs.1 per hour, Calculate the total earnings of each worker and also the rate of earning per hour.

Question 17

The present output details of a manufacturing department are as follows:

Average output per week 48,000 units from 160 employees

Saleable value of output Rs. 6,00,000

Contribution made by output
towards fixed expenses and profit Rs. 2,40,000

The Board of Directors plans to introduce more mechanisation into the department at a capital cost of Rs. 1,60,000. The effect of this will be to reduce the number of employees to 120, and increasing the output per individual employee by 60%. To provide the necessary incentive to achieve the increased output, the Board intends to offer a 1% increase on the piece work rate of Rs. 1 per unit for every 2% increase in average individual output achieved. To sell the increased output, it will be necessary to decrease the selling price by 4%. Calculate the extra weekly contribution resulting from the proposed change and evaluate for the Board's information, the desirability of introducing the change.

Question 18

The Cost Accountant of Bahubali Ltd. has computed labour turnover rate for the quarter ended 31st March, 2016 as 10%, 5% and 3% respectively under 'Flux method', 'Replacement method' and 'Separation method' respectively. If the number of workers replaced during that quarter is 30, find out the number of
(1) workers recruited and joined and (2) workers left and discharged

Question 19

From the following information, calculate Labour turnover rate and Labour flux rate:

No. of workers as on 01.01.2021 - 7,600

No. of workers as on 31.12.2021 - 8,400

During the year, 80 workers left while 320 workers were discharged 1,500 workers

were recruited during the year of these, 300 workers were recruited because of exits and the rest were recruited in accordance with expansion plans.

Question 20**HOMEWORK SUM**

Date:

Accountant of your company had computed labour turnover rates for the quarter ended 30th September, 2013 as 14%, 8% and 6% under Flux method, Replacement method and Separation method respectively. If the number of workers replaced during 2nd quarter of the financial year 2020-21 is 36, find the following:

- (i) The number of workers recruited and joined; and
- (ii) The number of workers left and discharged.

Question 21**HOMEWORK SUM**

Date:

Human Resources Department of Aunty Ltd. computed labour turnover by replacement method at 3% for the quarter ended June 2021. During the quarter, fresh recruitment of 40 workers was made. The number of workers at the beginning and end of the quarter was 990 and 1,010 respectively.

You are required to calculate the labour turnover rate by Separation Method and Flux Method.

Question 22

In a factory working six days in a week and eight hours each day, a worker is paid at the rate of Rs.100 per day basic plus D.A. @ 120% of basic. He is allowed to take 30 minutes off during his hours shift for meals-break and a 10 minutes recess for rest. During a week, his card showed that his time was chargeable to:

Job X	15 hrs
Job Y	12 hrs
Job Z	13 hrs

The time not booked was wasted while waiting for a job. In Cost Accounting how would you allocate the wages of the workers for the week?

Question 23

Both direct and indirect labours of a department in a factory are entitled to production bonus in accordance with a group incentive scheme, the outline of which is as follows:

- (a) For any production in excess of the standard rate fixed at 16,800 tonnes month (of 28 days) a general incentive of Rs. 15 per tonne is paid in aggregate. The total amount payable to each separate group is determined on the basis of an assumed percentage of such excess production being contributed by it, namely @ 65% by direct labour, @ 15% by inspection staff @ 12% by maintenance staff and @ 8% by supervisory staff,
 - (b) Moreover, if the excess production is more than 20% above the standard direct labour also get a special bonus @ Rs. 5 per tonne for all production in excess of 120% of standard,
 - (c) Inspection staff are penalized @ Rs. 20 per tonne for rejection by customer in excess of 2% of production,
 - (d) Maintenance staff are also penalized @ Rs. 20 per hour for breakdown,
- From the following particulars for a month, work out production bonus earned by each group:
- (a) Actual working days: 25
 - (b) Production : 21,000 tonnes
 - (c) Rejection by customer : 500 tonnes
 - (d) Machine breakdown: 40 hours

5. OVERHEADS

Question 1

The following information relates to the production department for a certain period in a factory:

Direct Materials consumed	Rs.75,000
Direct Wages	Rs.50,000
Production Overheads	Rs.1,50,000
Labour Hours	30,000 hours
Machine Hours	25,000 hours

For one Order No. 101 carried out in the department during the period, the relevant data were:

Direct Material consumed	Rs.14,000
Direct Wages	Rs.11,000
Machine hours worked	5000 hours
Labour hours worked	7000 hours

Required: Prepare a Comparative Statement of Cost of this order by using the following methods:

- (i) Direct Material Cost Percentage; (ii) Direct Labour Cost Percentage;
(iii) Prime Cost Percentage; (iv) Labour Hour Rate; (v) Machine Hour Rate

Question 2

HOMEWORK SUM

Date:

In an engineering company, the factory overheads are recovered on a fixed percentage basis on direct wages and the administrative overheads are absorbed on a fixed percentage basis on factory cost. The company has furnished the following data relating to two Jobs undertaken by it in a period

	Job 101	Job 102
Direct Materials	54000	37500
Direct Wages	42000	30000
Selling price	166650	128250
Profit % on Total Cost	10%	20%

Required:

- (i) Computation of percentage recovery rates of factory overheads and administrative overheads.
 (ii) Calculation of the amount of factory overheads, administrative overheads and profit for each of the two jobs.
 (iii) Using the above recovery rates fix the selling price of job 103. The additional data being:

Direct materials	Rs. 24,000
Direct wages	Rs. 20,000
Profit percentage on selling price	12-1/2%

Question 3

Pappu Ltd. manufactures pumps which pass through three departments- Foundry, Machine shop and Assembling. The manufacturing expenses are as follows:

	Foundry	Machine	Assembling	Total
Direct wages	Rs.10,000	Rs.50,000	Rs.10,000	Rs.70,000
Works overhead	5,000	90,000	10,000	1,05,000

The factory cost of manufacturing of 'X' type of pump is prepared by the company as follows:

	Rs.	Rs.
Material		160
Direct wages - Foundry	20	
Machine shop	40	
Assembling	20	80
Works overhead (150% of direct wages)		120
Total cost		360

It seems that there is some fallacy. Try to correct it.

Question 4

The preliminary budget for a company with 4 departments was as under

Departments	Direct Overheads Allocation (Rs.)	Apportioned Overheads (%)	Direct labour hours
Dept.1	14200	10	60000
Dept.2	7200	30	200000
Dept.3	16400	20	120000
Dept.4	22600	40	15000
Total	60400	176000	530000

It was decided to establish a new department (5) and to slightly re-organise the existing departments. The following alternations were agreed to in making a revised budget:-

- A Sum of Rs. 15,000/- being additional overheads will be allocated directly to department (5)
- An amount of Rs. 6600/- being overhead previously allocated directly to department (3) will now be transferred to department (5)
- Rs. 30,000/- additional overhead expected to be incurred due to re-organisation will be apportioned as follows:-

Department	1	2	3	4	5
Proportion(%)	10%	20%	-	10%	60%

- Revised direct labour hours are expected to be:

Department	Hours
1	69,600
2	2,00,000
3	1,00,000
4	1,60,000
5	90,000
Total	6,19,600

You are required to calculate:-

- The departmental direct labour hour rates of overhead based on the preliminary budget
- The departmental direct labour hour rates of overhead based on the revised budget.

iii) The overhead chargeable at the revised rates to one unit of product "X" for which the following hours are spent in each department:-

Department	1	3	4	5
Hours	6	4	8	3

Question 5:

Sarfira manufacturers a small-scale enterprise produces a single product and has adopted a policy to recover the production overheads of the factory by adopting a single blanket rate based on machine hours. The budgeted production overheads of the factory are Rs. 10,08,000 and budgeted machine hours are 96,000. For a period of first six months of the financial year 2021-2022, following information were extracted from the books:

Actual production overheads Rs. 6,79,000

Amount included in the production overheads

Paid as per court's order Rs. 45,000

Expenses of previous year booked in current year Rs. 10,000

Paid to workers for strike period under an award Rs. 42,000

Obsolete stores written off Rs. 18,000

Production and sales data of the concern for the first six months are as under:

Production

Finished goods 22,000 units

Works-in-progress (50% complete in every respect) 16,000 units

Sale:

Finished goods 18,000 units

The actual machine hours worked during the period were 48,000 hours. It is revealed from the analysis of information that of the under-absorption was due to defective production policies and the balance was attributable to increase in costs. You are required:

- (i) to determine the amount of under absorption of production over heads for the period,
- (ii) to show the accounting treatment of under-absorption of production overheads, and to apportion the unabsorbed overheads over the items.

Question 6

The total overhead expenses of a factory are Rs. 4,46,380. Taking into account the normal working of the factory, overhead was recovered in production at Rs. 1.25 per hour. The actual hours worked were 2,93,104. How would you proceed to close the books of accounts, assuming that besides 7,800 units produced of which 7,000 were sold, there were 200 equivalent units in work in-progress?

On investigation, it was found that 50% of the unabsorbed overhead was on account of increase in the cost of indirect materials and indirect labour and the remaining 50% was due to factory inefficiency. Also give the profit implication of the method suggested.

Question 7

Daimler Ltd. is a manufacturer of auto components and the details of its expenses for the year 2020 are given below:

	(Rs.)
(1) Opening Stock of Material	1,50,000
(2) Closing Stock of Material	2,00,000
(3) Purchase of Material	18,50,000
(4) Direct Labour	9,50,000
(5) Factory Overhead	3,80,000
(6) Administrative Overhead	2,50,400

During 2021, the company has received an order from a car manufacturer where estimates that the cost of material and labour will be Rs. 8,00,000 and Rs. 4,50,000 respectively. Daimler Ltd. charges factory overhead as a percentage of direct labour and administrative overhead as a percentage of factory cost based on previous year's cost. Cost of delivery of the components at customer's premises is estimated at Rs. 45,000

You are required to:

- Calculate the overhead recovery rates based on actual costs for 2020,
- Prepare a detailed cost statement for the order received in 2021 and the price to be quoted if the company wants to earn a profit of 10% on sales,

Question 8**HOMEWORK SUM****Date:**

In a manufacturing unit factory overhead was recovered at a pre-determined rate of Rs. 25 per man-day. The total factory overhead expenses incurred and the man-days actually worked were Rs. 41.50 lakhs and 1.5 lakh man-days respectively. Out of the 40,000 units produced during a period, 30,000 were sold. There were also 30,000 uncompleted units which may be reckoned at 66.66% complete. On analysing the reasons, it was found that 40% of the unabsorbed overheads were due to defective planning and the rest were attributable to increase in overhead costs. How would unabsorbed overhead be treated in cost accounts?

Question 9**HOMEWORK SUM****Date:**

Your company uses a historical cost system and applies overheads on the basis of "pre-determined" rates. The following are the figure from the Trial Balance as at 30th September, 2021:-

Manufacturing overheads	Rs.4,26,544 Dr.
Manufacturing overheads applied	Rs.3,65,904 Cr.
Work-in-progress	Rs.1,41,480 Dr.
Finished goods stocks	Rs.2,30,732 Dr.
Cost of goods sold	Rs.8,40,588 Dr.

Give two methods for the disposal of the unabsorbed overheads and show the profit implications of each method.

Question 10**HOMEWORK SUM****Date:**

In a factory, overheads of a particular department are recovered on the basis of Rs. 5 per machine hour. The total expenses incurred and the actual machine hours for the department for the month of August were Rs.80,000 and 10,000 hours respectively. Of the amount of Rs.80,000, Rs.15,000 became payable due to an award of the Labour Court and Rs.5,000 was in respect of expenses of the previous year booked in the current month (August). Actual production was 40,000 units, of which 30,000 units were sold. On analysing the reasons, it was found that 60% of the under-absorbed overhead was due to defective planning and the rest was attributed to normal cost increase. How would you treat the under- absorbed overhead in the cost accounts?

Question 11

Heroine Ltd is a manufacturing company having three production departments, A, B and C and two service departments X and Y. The following is the budget for December 2011:

	Total	A	B	C	X	Y
	(RS.)	(RS.)	(RS.)	(RS.)	(RS.)	(RS.)
Direct Material		1000	2000	4000	2000	1000
Direct Wages		5000	2000	8000	1000	2000
Factory Rent	4000					
Power	2500					
Depreciation	1000					
Other Overheads	9000					
Additional info						
Area (sq. Ft.)		500	250	500	250	500
Capital value assets (Rs. Lac)		20	40	20	10	10
Machine hrs		1000	2000	4000	1000	1000
Horse power of machine		50	40	20	15	25

A technical assessment of the apportionment of expenses of service departments is as under

	A	B	C	X	Y
Service X %	45	15	30	-	10
Service Y %	60	35	-	5	-

Required:

- (1) A statement showing distribution of overheads to various departments.
- (2) A statement showing re-distribution of service departments expenses to production departments.
- (3) Machine hour rates of the production departments 'A', 'B' and 'C'.

Question 12

Shakira Ltd., is a manufacturing company having three production departments, 'A', 'B' and 'C' and two service departments 'X' and 'Y'. The following is the budget for December 2013:

	Total	A	B	C	X	Y
	(RS.)	(RS.)	(RS.)	(RS.)	(RS.)	(RS.)
Direct Material		1000	2000	4000	2000	1000
Direct Wages		5000	2000	8000	1000	2000
Factory Rent	4000					
Power	2500					
Depreciation	1000					
Other Overheads	9000					
Additional info						
Area (sq. Ft.)		500	250	500	250	500
Capital value assets (Rs. Lac)		20	40	20	10	10
Machine hrs		1000	2000	4000	1000	1000
Horse power of machine		50	40	20	15	25

A technical assessment of the apportionment of expenses of service departments is as under

	A	B	C	X	Y
Service X %	45	15	30	-	10
Service Y %	60	35	-	5	-

Required:

- A statement showing distribution of overheads to various departments.
- A statement showing re-distribution of service departments expenses of production departments using Trial and error method.

Question 13

A company has three production cost centres A, B and C and two services cost centres X and Y. Costs allocated to service centres are required to be apportioned to the production centres to find out cost of production of different products. It is found benefit of service cost centres is also received by each other along with the production cost centres. Overheads costs as allocated to the five cost centres and estimates of benefit of service centres received by each of them are as under:

Cost Centres	Overheads cost as allocated (Rs)	Estimates of benefits received from services centres (%)	
		X	Y
A	80000	20	20
B	40000	30	25
C	20000	40	50
X	20000	-	5
Y	10000	10	-

Required: Work out final overhead costs of each of the production department apportioned cost of service centres using
 (a) Continuous distribution method and
 (b) Simultaneous equation method.

Question 14

Suppose the expenses of two production departments A and B and two service departments X and Y are as under:

	Amount (Rs)	Apportionment Basis		
		Y	A	B
X	2000	25%	40%	35%
Y	1500	-	40%	60%
A	3000			
B	3200			

Distribute the service department OH to production department by Step Ladder Method.

Question 15

Dum Dum Manufacturing Ltd., have three departments which are regarded as production departments. Service departments' costs are distributed to these production departments using the "Step Ladder Method" of distribution. Estimates of factory overhead costs to be incurred by each department in the forthcoming year are as follows. Data required for distribution is also shown against each department:

Department	Factory overhead	Direct labour hours	No. Of employees	Area in sq. m.
Production				
X	193000	4000	100	3000
Y	64000	3000	125	1500
Z	83000	4000	85	1500
Service				
P	45000	1000	10	500
Q	75000	5000	50	1500
R	105000	6000	40	1000
S	30000	3000	50	1000

The overheads costs of the 4 services departments are distributed in the same order i.e. P, Q, R, S respectively on the following basis:

- P Number of employees
 Q Direct labour hours
 R Area in square metres
 S Direct labour hours

You are required to:

- Prepare a schedule showing the distribution of overhead costs of the four service departments to the three production departments, and
- Calculate the overhead recovery rate per direct labour three production departments.

Question 16**HOMEWORK SUM****Date:**

Babli Company has the following account balances and distribution of direct charges for the current year.

	Total	Production Depts.		Service Depts.	
		Machine Shop	Packing	General Plant	Store & Maintenance
Allocated Overheads:	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
Indirect labour	14,650	4,000	3,000	2,000	5,650
Maintenance material	5,020	1,800	700	1,020	1,500
Misc. supplies	1,750	400	1,000	150	200
Superintendent's salary	4,000	-	-	4,000	-
Cost & payroll salary	10,000	-	-	10,000	-
Overheads to be apportioned :					
Power	8,000				
Rent	12,000				
Fuel and heat	6,000				
Insurance	1,000				
Taxes	2,000				
Depreciation	1,00,000				
	1,64,420	6,200	4,700	17,170	7,350

The following data were compiled by means of the factory survey made in the previous year:

	Floor Space	Radiator Sections	No. Of Employees	Investment Rs.	H.P hours
Machine Shop	2,000 Sq. ft.	45	20	6,40,000	3,500
Packing	800"	90	10	2,00,000	500
General Plant	400"	30	8	10,000	-
Store &	1,600"	60	5	1,50,000	1,000

Maintenance					
Total	4,800 "	225	38	1,000,000	5,000

Expenses charged to charged to the stores and maintenance departments are to be distributed to the other departments by the following percentage
 Machine shop 50%; Packing Shop 50%; Packing 20%; General Plant 30%, General Plant overhead is distributed on the basis of number of employees.

a) Prepare an overhead distribution statement with supporting schedules to show computations and basis of distribution including distribution of service department expenses to producing department.

b) Determine the service department distribution by the method of continued distribution. Carry through 3 cycles. Show all calculations to the nearest rupee.

Question 17

Monty Manufactures Ltd. has three Production Departments P1, P2, P3 and two Service Departments S1, and S2, details pertaining to which are as under,

	P1	P2	P3	S1	S2
Direct Wages	3000	2000	3000	1500	195
Working hrs	3070	4475	2418	-	-
Value of machines (Rs.)	60000	80000	100000	5000	5000
H.P. of machines	60	30	50	10	-
Light points	10	15	20	10	5
Floor space (sq. ft.)	2000	2500	3000	2000	500

The following figures extracted from the Accounting records are relevant
 (Rs.)

Rent and Rates	5,000
General Lighting	600
Indirect Wages	1,939
Power	1,500
Depreciation on Machines	10,000
Sundries	9,695

The expenses of the Service Departments are allocated as under:

	P1	P2	P3	S1	S2
--	----	----	----	----	----

S1	20%	30%	40%	-	10%
S2	40%	20%	30%	10%	-

Find out the total cost of product x which is processed for manufacture in Departments P, P, and P, for 4, 5 and 3 hours respectively, given that its Direct Material Cost is Rs. 50 and Direct Labour Cost is Rs. 30.

Question 18

A machine was purchased from a manufacturer who claimed that his machine could produce 36.5 tonnes in a year consisting of 365 days. Holidays, breakdown etc., were normally allowed in the factory for 65 days. Sales were expected to be 25 tonnes during the year and the plant actually produced 25.2 tonnes during the year. You are required to state the following figures:

Rated Capacity.

Practical Capacity

Normal Capacity.

Actual Capacity.

Question 19

From the following data of a Textile factory machine-room, computer hourly machine rate, assuming that the machine-room will work on 80% capacity throughout the year and that a breakdown of 10% is reasonable

There are three days holiday at Deepawali, two days at Holi and two days at Christmas, exclusive of Sundays. The factory works 8 hours a day and 4 hours on Saturday

No. of Machines (each of same type)	40
Annual Expenses (of 40 machines)	(Rs)
Power	3120
Light	640
Salaries to Foreman	1200
Lubricating Oil	66
Repairs to machines	1446
Depreciation	785.60
Total	7257.60

Question 20

A machine was purchased on January 1, 2017, for 5 lakhs. The total cost of all machinery inclusive of the new machine was Rs. 75 lakhs. The following further particulars are available:

1. Expected life of the machine 10 years. Scrapped value at the end of 10 years Rs.5,000.
2. Repairs and maintenance for the machine during the year Rs. 2,000.
3. Expected number of working hours of the machine per year 4,000 hours. Insurance premium annually for all the machines Rs. 4,500.
4. Electricity consumption for the machine per hour @ 75 paise per unit) 25 units. Area occupied by the machine 100 sq. feet.
5. Area occupied by other machines 1,500 sq. ft.
6. Rent per month of the department Rs.800.
7. Lightening charges (20 points for the whole department, out of which three points are for this machine) Rs. 120 per month.

Compute the machine hour rate for the new machine on the basis of the data given above.

Question 21

A department has three machines. The figures indicate the departmental expenses.

	Rs.
Depreciation of machinery	12,000
Depreciation of building	2,880
Repairs to machinery	4,000
Insurance of machinery	800
Indirect wages	6,000
Power	6,000
Lighting	800
Miscellaneous expenditure	4,200
	36,680

Amount (Rs)	Machine I	Machine II	Machine III
Direct wages (Rs.)	1200	2400	2400
Power Units	30000	10000	20000
Number of workers	4	8	8
Light Points	8	24	48
Space sq. ft.	400	800	800
Cost of Machine (Rs.)	300000	120000	180000
Hours worked	200	300	200

From the above information calculate :

- (i) Simple machine hour rate,
- (ii) Composite or comprehensive machine hour rate.

6. JOB AND BATCH COSTING

Question 1

A factory uses a job costing system. The following cost data are available from the books for the previous year:

Direct material	Rs. 9,00,000	Selling and distribution overheads	Rs.5,25,000
Direct wages	Rs. 7,50,000	Administrative overheads (related with production activity)	Rs.4,20,000
Profit	Rs. 6,09,000	Factory overheads	Rs.4,50,000

- Prepare a Cost Sheet indicating the prime cost, works cost, production cost, cost of sales and sales value.
- In the next year, the factory had received an order for a number of jobs. It is estimated that the direct materials would be Rs. 12,00,000 and direct labour would cost Rs. 7,50,000. What would be the price for these jobs in the factory intends to earn the same rate of profit on sales, assuming that the selling and distribution overhead has gone up by 15%. The factory recovers factory overhead as a percentage of direct wages and administrative and selling and distribution overheads as a percentage of works cost, based on the cost rates prevalent in the previous year.

Question 2

Apni Motors Ltd. manufactures pistons used in car engines. As per the study conducted by the Auto Parts Manufacturers Association, there will be a demand of 80 million pistons in the coming year. Arnav Motors Ltd. is expected to have a market share of 1.15% of the total market demand of the pistons in the coming year. It is estimated that it costs 01.50 as inventory holding cost per piston per month and that the set-up cost per run of piston manufacture is 3,500.

- What would be the optimum run size for piston manufacturing?
- Assuming that the company has a policy of manufacturing 40,000 pistons per run, how much extra costs the company would be incurring as compared to the optimum run suggested in (i) above?

Question 3

The following information for the current year is obtained from the books and records of a factory:

	Completed Jobs	Work-in-progress
Raw materials supplied from stores	90,000	30,000
Wages	1,00,000	40,000
Chargeable expenses	10,000	4,000
Materials transferred to work-in-progress	2,000	2,000
Materials returned to stores	1,000	

Factory overhead is 80% of wages and office overhead 25% of factory cost. The price of the executed contracts during current year was Rs.4,10,000.

Prepare

- (i) Consolidated Completed Jobs Accounts showing the profit made or loss incurred & also,
- (ii) Consolidated Work-in-progress account

Question 4**HOMEWORK SUM**

Date:

The following budgeted cost information is available from the records of a manufacturing concern for a particular year:

	(Rs. In lakhs)
Direct Material	61.20
Direct Wages	
- Rolling Shop (1,20,000 hours)	6.00
- Milling Shop (2,40,000 hours)	14.40
Works Overheads	
- Rolling Shop	9.60
- Milling Shop	14.40
Administration overheads (related with production activity)	24.00
Selling Overheads	43.20

The works overheads are recovered on the basis of labour hours, the administration overheads on the basis of works cost and selling overheads on the basis of cost of production.

You are required to -

- (1) Prepare annual cost statement so as to compute the budgeted cost of sales.
- (2) Compute Overhead Recovery rates.
- (3) Compute total cost of a job which requires the following -
 - (a) Direct Material Rs.7,560.
 - (b) Labour Cost
 - Rolling Shop 40 hours @ Rs.6 per hour.
 - Milling Shop 70 hours @ Rs.5 per hour.

Question 5**HOMEWORK SUM****Date:**

Majnu Ltd. is committed to supply 24,000 bearings per annum to Y Ltd. on a steady basis. It is estimated that it costs 10 paise as inventory holding cost per bearing per month and that the set-up cost per run of bearing manufacture is Rs.324.

- (a) What would be the optimum run size for bearing manufacture?
- (b) What is the minimum inventory holding cost at optimum run size?
- (c) Assuming that the company has a policy of manufacturing 6,000 bearings per run, how much extra costs would the company be incurring as compared to the optimum run suggested in (a) ?

Question 6**HOMEWORK SUM****Date:**

In an engineering company, the factory overheads are recovered on fixed percentage basis on direct wages and administration overheads are absorbed on fixed percentage basis on factory cost. The company has furnished the following data relating to two jobs undertaken by it in a period

	Job 101	Job 102
Direct Material	Rs. 54,000	Rs. 37,500
Direct Wages	Rs.42,000	Rs.30,000

Selling Price	Rs.1,66,650	Rs.1,28,250
Profit percentage on Total Cost	10%	20%

Required:

- (i) Computation of percentage recovery rates of factory and administration overheads.
- (ii) Calculation of amount of factory overheads, administration overheads (related with production activity) and profit for each of the two jobs.
- (iii) Using the above recovery rates, fix the selling price of Job 103. The additional data being :

Direct Material Rs.24,000

Direct Wages Rs.20,000

Profit percentage on selling price 12 1/2%

Question 7**HOMEWORK SUM**

Date:

Component 'Pee' is made entirely in cost centre 100. Material cost is 6paise per component and each component takes 10 minutes to produce. The machine operator is paid 72 paise per hour, and machine hour rate is Rs. 1.50. The setting up of the machine to produce the component 'Pee' takes 2 hours 20 minutes.

On the basis of this information, prepare a cost sheet showing the production and setting up cost, both in total and per component, assuming that a batch of:

- (a) 10 components,
- (b) 100 components, and
- (c) 1,000 components is produced.

7. CONTRACT COSTING

CONTRACT ALC (FOR 1ST ACCOUNTING PERIOD) - FORMAT 1

Particulars	Rs.	Particulars	Rs.
To Material issued to site	XXX	By Materials at site (Closing Stock)	XXX
To Wages incurred (Paid + O/s - Prepaid)	XXX	By Materials returned from site i.e. returned to stores	XXX
To Direct Expenses (Paid + O/s - Prepaid)	XXX	By Bank A/c (Sale of Materials)	XXX
To Depreciation on Plant & Equipment	XXX	By Costing P&L A/c (Loss on sale)	XXX
To Office & Admin Exp. Incurred (Paid + O/s - prepaid)	XXX	By Cost of Contract (Works Cost) c/d	XXX
	XXX		XXX
To Cost of Contract (Works Cost) b/d	XXX	By Work-in-progress	XXX
To Notional Profit id	XXX	- Value of Work certified (Like Sale)	XXX
	XXX	- Cost of Work Uncertified (Like closing stock)	XXX
	XXX		XXX

CONTRACT ALC (FOR 1ST ACCOUNTING PERIOD) - FORMAT 2

Particulars	Rs.	Particulars	Rs.
To Material issued to site	XXX	By Materials at site (Closing Stock)	XXX
To Wages incurred (Paid + O/s - Prepaid)	XXX	By Materials returned from site i.e. returned to stores	XXX
To Direct Expenses (Paid + O/s - Prepaid)	XXX	By Bank A/c (Sale of Materials)	XXX
To Depreciation on Plant & Equipment	XXX	By Costing P&L A/c (Loss on sale)	XXX
To Office & Admin Exp. Incurred	XXX	By Work-in-progress	XXX

(Paid + Ols- prepaid)			
To National Profit Id	XXX	- Value of Work certified (Like Sale)	XXX
		- Cost of Work Uncertified (Like closing stock)	XXX
	XXX		XXX

CONTRACT ALC (FOR 2 YEAR)

Particulars	Rs.	Particulars	Rs.
To Work-in-progress bld		By Reserve against WIP	XXX
Value of Work Certified	XXX		
Cost of Work Uncertified	XXX		
Remaining Portion same as in previous format			

Note: Fines & Penalties are not shown in the Contract Account

BALANCE SHEET (EXTRACT)

Liabilities	Rs.	Assets	Rs.
Capital	XXX	Land & Building (Less: Depreciation)	XXX
Profit & Loss Alc	XXX	Plant & Equipment (Less: Depreciation)	XXX
Outstanding Expenses	XXX	Materials :-	
Contractee's Cr. Bal.	XXX	At Stores.....	XXX
		At Site	XXX
		Work-in-progress :	
		Value of work certified ... XXX	
		Cost of work uncertified XXX	XXX
		Cash & Bank Balance	XXX
		Prepaid Expenses	XXX

Question 1

A contract to be completed in year 4 exhibits the following information:

End of Year	Value of work certified (Rs.)	Cost of work to date (Rs.)	Cost of work not yet certified (Rs.)	Cash received (Rs.)
1	0	50,000	50,000	0
2	3,00,000	2,30,000	10,000	2,75,000
3	8,00,000	6,60,000	20,000	7,50,000

The contract price is Rs. 10,00,000 and the estimated profit is 20%. You are required to calculate how much profit should have been credited to the Profit and Loss AC the end of years 1,2 and 3.

Question 2

The following expenses were incurred on a contract :

	(Rs.)
Material purchased	6,00,000
Material drawn from stores	1,00,000
Wages	2,25,000
Plant issues	75,000
Chargeable expenses	75,000
Apportioned indirect expenses	25,000

The contract was for Rs. 20,00,000 and it commenced on January 1, 2011. The value of the work completed and certified upto 30th November, 2011 was Rs. 13,00,000 of which Rs. 10,40,000 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 December, 2011 was Rs.60,000. There were also find on the materials of the value of Rs 40,000. It was estimated that the value of plant as at 31stDecember, 2011 was Rs 30,000.

Prepare Contract Account

Question 3

A Construction company undertook a contract at an estimated price of Rs. 108 lakhs, which includes a budgeted profit of Rs. 18 lakhs. The relevant data for the year ended 31.03.2014 are as under:

Particulars	(Rs. 000)
Materials issued to site	5,000
Direct wages paid	3,800
Plant hired	700
Site office costs	270
Materials returned from site	100
Direct expenses	500
Work certified	10,000
Work not certified	230
Progress payment received	7,200

A special plant was purchased specifically for this contract at Rs.8,00,000 and after use on this contract till the end of 31.02.2014, it was valued at Rs 5,00,000. This cost of materials at site at the end of the year was estimated at Rs.18,00,000. Direct wages accrued as on 31.03.2014 was Rs. 1,10,000,

Required

Prepare the Contract Account for the year ended 31st March, 2014

Question 4

A contractor commenced a building contract on October 1, 2010. The contract price is Rs.4,40,000. The following data pertaining to the contract for the year 2011-12 has been compiled from his books and is as under:

		(Rs.)
April 1, 2011	Work-in-progress not certified	55,000
	Materials at site	2,000
2011-12	Expenses incurred	
	Materials issued	1,12,000
	Wages paid	1,08,000
	Hire of plant	20,000
	Other expenses	34,000

March 31, 2012	Materials at site	4,000
	Work-in-progress : Not certified	8,000
	Work-in-progress : Certified	4,05,000

The cash received represents 80% of work certified. It has been estimated that further costs to complete the contract will be Rs. 23,000 including the materials at site as on March 31, 2012

Required

Determine the profit on the contract for the year 2011-12 on prudent basis which has to be credited to Costing P/L A/c.

Question 5

Brandy Construction Ltd. commenced a contract on April 1, 2010 total contract was for Rs. 17,50,000. Actual expenditure in 2010-11 and estimated expenditure in 2011-2012 are given below

	2010-2011 (Actual) (Rs.)	2011-2012 (Estimated) (Rs.)
Materials issued	3,00,000	2,00,000
Labour : Paid	2,00,000	2,50,000
Outstanding at end	20,000	30,000
Plant purchased	1,50,000	-
Expenses : Paid	75,000	1,50,000
Prepaid at end	15,000	-
Plant returns to store (historical cost)	50,000	1,00,000
		(on Dec. 31 2011)
Material at site	20,000	50,000
Work certified	8,00,000	FULL
Work uncertified	25,000	-
Cash received	6,00,000	FULL

The plant is subject to annual depreciation @ 25% of WDV Cost. The contract is likely to be completed on Dec 31, 2011. Prepare the Contract A/c for the year 2010-11 & also determine the estimated profit on the contract.

Question 6

M/s. Fraud Construction Company Ltd. took a contract for Rs. 60,00,000 expected to be completed in three years. The following particulars relating to the contract are available:

	2011 (Rs.)	2012 (Rs.)	2013 (Rs.)
Materials	6,75,000	10,50,000	9,00,000
Wages	6,20,000	9,00,000	7,50,000
Cartage	30,000	90,000	75,000
Other expenses	30,000	75,000	24,000
Cumulative work certified	13,50,000	45,00,000	60,00,000
Cumulative work uncertified	15,000	75,000	-

Plant costing Rs. 3,00,000 was bought at the commencement of the contract. Depreciation was to be charged at 25% per annum, on the written down value method. The contractee pays 75% of the value of work certified as and when certified, and makes the final payment on completion of the contract. You are required to make a contract account and contractee account as they would appear in each of the three years. Also show how the work-in-progress and other items should appear in the balance sheet.

Question 7

PeriPeri Engineers are engaged in construction and erection of a bridge under a long-term contract. The cost incurred upto 31.03.2014 was as under

Particulars	Amount (Rs.) in lakhs
Fabrication Costs:	
Direct Materials	280
Direct Labour	100
Overheads	60
	440
Erection Cost to date	110
	550

The contract price is Rs 11 crores and the cash received on account till 31.03.2014 was Rs. 6 crores. The technical estimate of the contract indicates the following degree of completion of work.

Fabrication - Direct Material - 70%.

Direct labour and Overheads 60% Erection - 40%.

You are required to estimate the profit that could be taken to Costing Profit and Loss Account against this partly completed contract as at 31.03.2014.

Question 8

Patiala House (P) Ltd. is engaged in building two residential housing projects in the city. Particulars related to two housing projects are as below:

Particulars	HP-1 (Rs.)	HP-2 (Rs.)
Work in Progress on 1 st April 2013	7,80,000	2,80,000
Materials Purchased	6,20,000	8,10,000
Land purchased near to the site to open an office	-	12,00,000
Brokerage and registration fee paid on the above purchase	-	60,000
Wages paid	85,000	62,000
wages outstanding as on 31st March, 2014	12,000	8,400
Donation paid to local clubs	5,000	2,500
Plant hire charges paid for three years effecting from 1st April 2013	72,000	57,000
Value of materials at site as on 31st March, 2014	47,000	52,000
Contract price of the projects	48,00,000	36,00,000
Value of work certified	20,50,000	16,10,000
Work not certified	1,90,000	1,40,000

A concrete mixture machine was bought on 1st April 2013 for Rs. 8,200 used for 180 days in HP-1 and for 100 days in HP-2 Depreciation is provided @ 15% p.a (this machine can be used for any other projects). As per the contract agreement contractee shall retain 20% of work certified as retention money.

Prepare contract account for the two housing projects showing the profit or loss on each project for the year ended 31st March, 2014.

Question 9

Morni Construction Ltd. obtained a contract No. B-37 for Rs. 40 lakhs. The following balances and information relate to the contract for year ended 31st March, 2014:

Particulars	1.4.2103 (Rs.)	1.4.2014 (Rs.)
Work in progress		
Work certified	9,40,000	30,00,000
Work uncertified	11,200	32,000
Materials at site	8,000	20,000
Accrued wages	3,000	3,000

Particulars	Amt (Rs.)
Materials issued from store	4,00,000
Materials directly purchased	1,50,000
Wages paid	6,00,000
Architect's fees	51,000
Plant hire charges	50,000
Indirect expenses	10,000
Share of general overheads for B-37	18,000
Materials returned to store	25,000
Materials returned to supplier	15,000
Fines and penalties paid	12,000

The contractee pays 80% of work certified in cash. You are required to prepare:

- (i) Contractee's Account showing clearly the amount of profits transferred to Profit and Loss Account
- (ii) Balance Sheet

Question 10**HOMEWORK SUM****Date:**

TeAmo Limited obtained a contract for Rs. 50 lacs. The following details are available in respect of this contract for the year ended March 31, 2014:

Particulars	Rs.
Materials purchased	1,60,000
Materials issued from stores	5,00,000

Wages and salaries paid	7,00,000
Drawing and maps	60,000
Sundry expenses	15,000
Electricity charges	25,000
Plant hire expenses	60,000
Sub-contract cost	20,000
Materials returned to stores	30,000
Material returned to suppliers	20,000

The following balances relating to the contract No. 999 for the year ended on March 31, 2013 & March 31, 2014 are available

Question 11**HOMEWORK SUM****Date:**

Compute a conservative estimate of profit on a contract (which has been 90% complete) from the following particulars. Calculate the proportion of profit to be taken to Costing Profit & Loss Account under various methods and give your recommendation

	(Rs.)
Total expenditure to date	4,50,000
Estimated further expenditure to complete the contract (including contingencies)	25,000
Contract price	6,12,000
Work certified	5,50,800
Work uncertified	34,000
Cash received	4,40,640

Question 12**HOMEWORK SUM****Date:**

M'S Rocky Constructions undertook a contract at a price of Rs.171.00 lacs. The relevant data for the year ended 31st March, 2014 are as under:

Particulars	Amt (Rs.)
Material issued at site	7,700
Direct Wages paid	3,300
Site office cost	550

Material return to store	175
Work certified	12,650
Work uncertified	225
Progress Payment Received	10,120
Prepaid site office cost as on 31-03-2014	50
Direct wages outstanding as on 31-03-2014	100
Material at site as on 31-03-2014	110

Additional Information:

(a) A plant was purchased for the contract at Rs. 8,00,000 on 01-12-2013.

(b) Depreciation @ 15% per annum is to be charged.

(c) Material which cost Rs. 1,30,000 was destroyed by fire.

Prepare:

(i) Contract Account for the year ended 31st March, 2014 and compute the profit to be taken to the Profit & Loss Account.

(ii) Account of Contractee.

(ii) Profit & Loss Account showing the relevant items.

(iv) Balance Sheet showing the relevant items.

Question 13

HOMEWORK SUM

Date:

Sunny Constructions Limited has entered into a big contract at an agreed price of Rs. 1,50,00,000 to an escalation clause for material and labour as spent out on the contract and corresponding actual are as follows:

Material	Standard		Actual	
	Quantity	Rate per Ton	Quantity	Rate per Ton
	(Tons)	(Rs.)	(Tons)	(Rs.)
A	3,000	1,000	3,400	1,100
B	2,400	800	2,300	700
C	500	4,000	600	3,900
D	100	30,000	90	31,500

Labour:	Hours	Hourly Rate (Rs.)	Hours	Hourly Rate (Rs.)
---------	-------	-------------------	-------	-------------------

L1	60,000	15	56,000	18
L2	40,000	30	38,000	35

You are required to:

(i) Give your analysis of admissible escalation claim and determine the final contract price payable.

(ii) Prepare the contract account, if the all expenses other than material and labour related to the contract are Rs. 13,45,000

Question 14

HOMEWORK SUM

Date:

A contractor prepares his accounts for the year ending 31st Dec each year.

He commenced a contract on 1st April, 2011

The following information relates to the contract as on 31st December 2011 (Rs.)

Material issued 2,51,000

Labour charges 5,65,600

Salary to Foreman 81,300

A machine costing Rs. 2,60,000 has been on the site for 146 days its working life is estimated at 7 years and its final scrap value at Rs. 15,000. A supervisor, who is paid Rs. 8,000 p.m. has devoted one-half of his time contract. All other expenses and administration charges amount to Rs. 1,36,500

Material in hand at site costs Rs. 35,400 on 31st December, 2011. The contract price is Rs. 20,00,000. On 31st December, 2011 two-third of the contract was completed. The architect issued certificates covering 50% of the contract price, and the contractor had been paid Rs. 7,50,000 on account.

Prepare Contract A/c and show how much profit or loss should be included in financial accounts to 31st December, 2011.

Question 15**HOMEWORK SUM****Date:**

A contract is estimated to be 80% complete in its first year of construction as certified. The contractee pays 75% of value of work certified as and when certified and makes the final payment on the completion of contract. Following information is available for the first year:

	(Rs.)
Cost of work-in-progress uncertified	8,000
Profit transferred to Costing P & L A/c at the end of year- 1 on incomplete contract	12,000
Cost of work to date	88,000

Calculate the value of work-in-progress certified and amount of contract price.

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G1 -255 Marks &
G2- 240 Marks

**VENKATESH
ISHWARAN**
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GROUP OF CMA INTER
EXAM WITH
G1- 279 marks
(having 82 Marks in DT)
G2- 208 Marks



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8. JOINT AND BY PRODUCT

Question 1

2 products A and B are manufactured using same process & total cost incurred cost in producing both products is Rs. 6,00,000.

Product	A	B
Units manufactured	10000 units	20000 units
Selling price per unit at split off point (Rs.)	Rs. 10 per	Rs. 20 per

Calculate Joint cost of each product using physical unit method and sale value at separation point method?

Question 2

Suppose 2 products A and B are manufactured using same process & their joint cost is Rs. 6,00,000.

Units manufactured	10000 units	20000 units
Selling price per unit after further processing (Rs.)	Rs. 70 per unit	Rs. 65 per unit
Additional processing cost after split off point (Rs.)	200000	300000

Calculate Joint cost of each product using Net realizable value method?

Question 3

Humpty Dumty Ltd. operates a simple chemical process to convert material into three separate items referred to here as X, Y and Z. All three products are separated simultaneously at a single split-off point.

Product X & Y are ready for sale immediately upon split off without to processing or any additional cost but Product Z can be sold only after fun processing

X - 366 units sold for Rs. 1,500 per unit

Y-587 units sold for Rs. 1,125 per unit

Z - 761 units sold for Rs. 750 per unit

The total joint manufacturing costs for the year were Rs. 6,25,000. An additional cost of Rs. 3,10,000 was spent to finish product Z.

There were no opening and closing inventories of X, Y & Z.

Required:-

- (a) Calculate joint cost of each product using Constant gross margin % NRV method?

Question 4

Find out the cost of joint products A, B and C using average unit cost method from the following data:

Pre-separation Joint Cost Rs. 60,000

Production data:

Products	Units Produced
A	500
B	200
C	300
Total	1000

Question 5

Find out the cost of joint products A and B using contribution margin method from the following data:

Sales

A: 100 kg @ Rs. 60 per kg.

B: 120 kg @ Rs. 30 per kg.

Joint costs

Marginal cost Rs. 4,400

Fixed cost Rs. 3,900

Question 6**HOMEWORK SUM**

Date:

The Jimmy Oil Company purchases crude vegetables oil. It does refining of the same. The refining process results in four products at the split off point: M, N, O and P.

Product O is fully processed at the split off point. Product M, N and P can be individually further refined into 'Super M', 'Super N' and 'Super P'. In the most recent month (March, 2014), the output at split off point was:

Product M	3,00,000 gallons
Product N	1,00,000 gallons
Product O	50,000 gallons
Product P	50,000 gallons

The joint cost of purchasing the crude vegetables oil and processing it were Rs.40,00,000.

Sunshine had no beginning or ending inventories. Sales of Product O in March, 2014 were Rs.20,00,000. Total output of products M, N and P was further refined and then sold. Data related to March, 2014 are as follows:

	Further Processing Costs to Sales Make Super Products	
Super M	Rs. 80,00,000	Rs. 1,20,00,000
Super N'	Rs. 32,00,000	Rs. 40,00,000
Super P	Rs. 36,00,000	Rs. 48,00,000

Sunshine had the option of selling products M, N and P at the split off point. This alternative would have yielded the following sales for the March, 2014 production:

Product M = Rs. 20,00,000

Product N = Rs. 12,00,000

Product P = Rs. 28,00,000

You are required to answer:

1. How the joint cost of Rs. 40,00,000 would be allocated between each product under each of the following methods (a) sales value at split off; (b) physical output (gallons); and (c) estimated net realizable value?
2. Could Sunshine have increased its March, 2014 operating profits by making different decisions about the further refining of product M, N or P? Show the effect of any change you recommend on operating profits.

Question 7**HOMEWORK SUM**

Date:

A company produces two joint product X and Y, from the same basic materials. The processing is completed in three departments.

Materials are mixed in Department I. At the end of this process X and Y get separated. After separation X is completed in the Department II and Y is finished in Department III. During a period 2,00,000 kg. of raw material were processed in Department I, at a total cost of Rs. 8,75,000, and the resultant 60% becomes X and 30% becomes Y and 10% normally lost in processing. In Department II $\frac{1}{6}$ th of the quantity received from Department I is lost in processing. X is further processed in Department II at a cost of Rs. 1,80,000.

In Department III further new material added to the material received from Department I and weight mixture is doubled, there is no quantity loss in the department. Further processing cost (with material cost) in Department III is Rs. 1,50,000

The details of sales during the year are:

	Product X	Product Y
Quantity sold (kg.)	90,000	1,15,000
Sales price per kg (Rs.)	10	4

There were no opening stocks. If these products sold at split-off-point. The price of X and Y would be Rs. 8 and Rs. 4 per kg respectively.

Required:

- (1) Prepare a statement showing the apportionment of joint cost to X and Y proportion of sales value at split off point.
- (ii) Prepare a statement showing the cost per kg of each product indicating joint cost, processing cost and total cost separately.
- (ii) Prepare a statement showing the product wise profit for the year.
- (iv) On the basis of profits before and after further processing of product X and Y give your comment that products should be further processed or not.

Question 8

A company manufactures one main product (M1) and two by-products B1 and B2. For the month of January 2013, following details are available:

Total Cost upto separation Point Rs. 2,12,400

Particulars	M1	B1	B2
Cost after separation	-	Rs. 35,000	Rs. 24,000
No. of units produced	4,000	1,800	3,000
Selling price per unit	Rs. 100	Rs. 40	Rs. 30
Estimated net profit as percentage to sales value	-	20%	30%
Estimated selling expenses as percentage to sales value	20%	15%	15%

There are no beginning or closing inventories.

Prepare statement showing:

- Allocation of joint cost; and
- Product-wise and overall profitability of the company for January 2013.

9. PROCESS COSTING

Question 1

MC Pvt. Ltd. produces a product "SKY" which passes through two processes, viz. Process-A and Process-B. The details for the year ending 31st March, 2014 are as follows:

	Process - A	Process - B
40,000 Units introduced at a cost of	Rs. 3,60,000	-
Material Consumed	Rs. 2,42,000	2,25,000
Direct Wages	Rs. 2,58,000	1,90,000
Manufacturing Expenses	Rs. 1,96,000	1,23,720
Output in Units	37,000	27,000
Normal Wastage of Input	5%	10%
Scrap Value (per unit)	Rs. 15	20
Selling Price (per unit)	Rs. 37	61

Additional Information:

(a) 80% of the output of Process-A, was passed on to the next process and the balance was sold. The entire output of Process-B was sold.

(b) Indirect expenses for the year was Rs. 4,48,080

(c) It is assumed that Process-A and Process-B are not responsibility center

Required:

(i) Prepare Process-A and Process-B Account

(ii) Prepare Profit & Loss Account showing the net profit / net loss for the year

Question 2

RST Limited processes Product Z through two distinct processes- Process I & Process II. On conversion, it is transferred to finished stock. From the following information for the year 2011-12, prepare Process I, process II & Finished stock

	Process I	process II
Raw material used	7,500 units	-
Raw material cost per unit	Rs. 60	-
Transfer to next process/ finished stock	7,050 units	6,525 units
Normal loss (on inputs)	5%	10%

Direct wages	Rs. 1,35 750	Rs. 1,29,250
Direct expenses	60% of Direct wages	65% of Direct wages
Manufacturing overheads	20% of Direct wages	15% of Direct wages
Realisable value of scrap per unit	Rs. 12.50	Rs. 37.50

6,000 units of finished goods were sold at a profit of 15% on cost. Assume that there was no opening or closing stock of work-in-progress.

Question 3

HOMEWORK SUM

Date:

A product passes through three processes. The output of each process is treated as the raw material of the next process to which it is transferred and output of the third process is transferred to finished stock.

	1 st Process	2 nd Process	3 rd Process
Materials issued	40,000	20,000	10,000
Labour	6,000	4,000	1,000
Manufacturing overhead	10,000	10,000	15,000

10,000 units have been issued to the 1st process and after processing, the output of each process is as under:

	Output	Normal Loss
1 st Process	9750 units	2%
2 nd Process	9400 units	5%
3 rd Process	8000 units	10%

No stock of materials or of work-in-progress was left at the end. Calculate the cost of the finished articles

Question 4

HOMEWORK SUM

Date:

A product passes from Process I and Process II. Materials issued to Process I amounted to Rs. 40,000, Labour Rs. 30,000 and manufacturing overheads were Rs. 27,000. Normal loss was 3% of input as estimated. But 500 more units of output of Process I were lost due to the carelessness of workers. Only 4,350 units of output were transferred to Process II. There were no opening stocks, Input raw material issued to Process I were 5,000 units.

You are required to show Process account.

Question 5**HOMEWORK SUM**

Date:

A product passes through two processes A and B. basic raw material was 8,000 units @ Rs. 9 per unit

During the year 2013, the input to process A of Other information for the year is as follows:

	Process A	Process B
Output units	7,500	4,800
Normal loss % to input)	5%	10%
Scrap value per unit (Rs.)	2	10
Direct wages (Rs.)	12,000	24,000
Direct expenses (Rs.)	6,000	5,000
Selling price per unit (Rs.)	15	25

Total overheads Rs. 17,400 were recovered as percentage of direct wages. Selling expenses were Rs.5,000. These are not allocated to the processes. 2/3 of the output of Process A was passed process and the balance was sold. The entire output of Process B was sold.

Prepare Process A and B Accounts

Question 6**HOMEWORK SUM**

Date:

A product passes through three processes A, B and C. The normal wastage of each process is as follows:

Process A - 3 percent, Process B-5 percent, Process C - 8 percent.

wastage of Process A was sold at 25 p. per unit, that of Process B at 50 p. per unit and that of Process C at Re. 1 per unit. 10,000 units were issued to Process A in the beginning of October, 2008 at a cost of Rs. 1 per unit. The other expenses were as follows:

	Process A (Rs)	Process B (Rs)	Process C (Rs)
Sundry Material	1,000	1,500	500
Labour	5,000	8,000	6,500
Direct Expenses	1,050	1,188	2,009

Actual Output was

Process A 9,500; Process B 9,100; Process C 8,100 units.

Prepare the Process Accounts, normal loss account, abnormal Loss and abnormal Gain Account.

Question 7

The following details are available of Process X for August 2013

1)	Opening work in progress	8,000 units
	Degree of completion and cost	
	Material 100%	Rs. 63,900
	Labour (60%)	Rs. 10,800
	Overheads (60%)	Rs. 5,400
2)	Input 1,82,000 units at	Rs. 7,56,900
3)	Labour paid	Rs. 3,28,000
4)	Over heads incurred	Rs. 1,64,000
5)	Units scrapped	
	Degree of completion	
	Material	100%
	Labour and overhead	80%
6)	Closing work-in-process	18,000 units
	Degree of completion	
	Material	100%
	Labour and overhead	70%
7)	1,58,000 units were completed and transferred to next process	
8)	Normal loss is 8% of total input including opening work in process	
9)	Scrap value is Rs. 8 per unit to be adjusted in direct material cost	

You are required to computer, assuming that average method of inventory is used.
i. Equivalent production and ii. Cost per unit

Question 8

Following information is available regarding Process A for the month of October 2013

Production Record	
(i) Opening work in progress (Material: 100% complete, 25% complete for labour & overheads)	40,000 Units
(ii) Units Introduced	1,80,000 Units
(iii) Units Completed	1,50,000 Units
iv) Units in-process on 31.10.2013 (Material: 100% complete, 50% complete for labour & overheads)	70,000 Units

Cost Record	(Rs.)
Opening work in progress	
Material	1,00,000
Labour	25,000
Overheads	45,000
Cost incurred during the month:	
Material	6,60,000
Labour	5,55,000
Overheads	9,25,000

Assure that FIFO method is used for WIP Inventory valuation

Required:

- Statement of Equivalent Production
- Statement showing Cost for each element
- Statement of apportionment of Cost
- Process A Account

Question 9

The following information relate to Process A:

(i)	Opening Work-in-Progress	8,000 units at Rs. 75,000
	Degree of Completion: Material	100%
	Labour and Overhead	60%
(ii)	Input 1,82,000 units at	Rs. 7.37,500
(iii)	Wages paid	3,40,600
(iv)	Overheads paid	1,70,300
(v)	Units scrapped	14,000
	Degree of Completion: Material	100%
	Wages and Overheads	80%
(iv)	Closing Work - in- Progress	18,000 units
	Degree of Completion: Material	100%
	Wages and Overheads	70%
(vii)	Units completed and transferred to next process	1,58,000
(viii)	Normal loss 5% of total input including opening WIP	
(ix)	Scrap value is Rs. 5 per unit to be adjusted out of direct material cost	

You are required to compute on the basis of FIFO

(i) Equivalent Production

(ii) Cost Per Unit

(iii) Value of Units transferred to next process.

Question 10**HOMEWORK SUM**

Date:

Opening work-in-progress 1,000 units (60% complete): Cost Rs. 1,100. Units introduced during the period 10,000 units; Cost Rs. 19,300. Transferred to next process - 9,000 units. Closing work-in-progress. 800 units (75% complete). Normal loss is estimated at 10% of total input including units in process at the beginning. Scrap realize Rs.1 per unit. Scraps are 100% complete. Compute equivalent production and cost per equivalent unit. Also evaluate the output solve this by Average Cost Method

Question 11**HOMEWORK SUM**

Date:

From the following information for the month ending October, 2013, prepare Process Cost accounts for Process III. Use First-in-first-out (FIFO) method to value equivalent production:-

Direct materials added in Process III	2,000 units at Rs.25,750	
(Opening WIP)		
Transfer from Process II	53,000 units at Rs. 4,11,500	
Transferred to Process IV	48,000 units	
Closing stock of Process II	5,000 units	
Units scrapped		2,000 units
Direct material added in Process III	Rs. 1,97,600	
Direct wages		Rs. 97,500
Production Overheads		Rs. 48,800

Degree of completion:

	Opening Stock	Closing Stock	Scrap
Materials	80%	70%	100%
Labour	60%	50%	70%
Overheads	60%	50%	70%

The normal loss in the process was 5% of production and scrap was sold at Rs. 3 per unit.

Question 12**HOMEWORK SUM**

Date:

ABC Limited manufactures a product 'ZX' by using the process namely RT. For the month of May, 2014, the following data are available:

	Process RT
Material introduced (units)	16,000
Transfer to next process (units)	14,400
Work in process:	
At the beginning of the month (units) (4/5 completed)	4,000
At the end of the month (units) (2/3 completed)	3,000
Cost records	
Work in process at the beginning of the month	
Material	
Conversion cost	Rs. 30,000
Cost during the month : materials	Rs. 29,200
Conversion cost	Rs. 1,20,000
	Rs. 1,60,800

Normal spoiled units are 10% of good finished output transferred to next process. Defects in these units are identified in their finished state. Material for the product is put in the process at the beginning of the cycle of operation, whereas labour and other indirect cost flow evenly over the year. It has no realizable value for spoiled units.

Required:

- Statement of equivalent production (Average cost method);
- Statement of cost and distribution of cost
- Process accounts

Question 13**HOMEWORK SUM**

Date:

XP Ltd. furnishes you the following information relating to process II

- Opening work-in-progress - NIL
- Units introduced 42,000 units @ Rs. 12
- Expenses debited to the process:

(Rs.)

Direct material 61,530
Labour 88,820

Overhead 1,76,400

iv. Normal loss in the process = 2 % of input.

v. Closing work-in-progress - 1,200 units

Degree of completion -

Materials 100%

Labour 50%

Overhead 40%

vi. Finished output - 39,500 units

vii. Degree of completion of abnormal loss:

Material 100%

Labour 80%

Overhead 60%

viii. Units scrapped as normal loss were sold at Rs. 4.50 per unit.

ix. All the units of abnormal loss were sold at Rs. 9 per unit.

Prepare:

(a) Statement of equivalent production

(b) Statement showing the cost of finished goods, abnormal loss and closing work-in-progress

(c) Process II account and abnormal loss account.

Question 14

HOMEWORK SUM

Date:

Following details are related to the work done in Process 'A' XYZ Company during the month of March, 2015:

(Rs.)

Opening work-in progress (2,000 units)

Materials 80,000

Labour 15,000

Overheads 45,000

Materials introduced in Process 'A' (38,000 units) 14,80,000

Direct Labour 3,59,000

Overheads 10,77,000

Units scrapped: 3,000 units

Degree of completion :

Materials 100%

Labour and overheads 80%
Closing work in progress 2,000 units
Degree of completion
Materials 100%
Labour and overheads 80%
units finished and transferred to Process 'B': 35,000 units
Normal Loss
5% of total input including opening work-in-progress
Scrapped units fetch Rs. 20 per piece
You are required to prepare
1. Statement of equivalent production
2 Statement of cost
3. Statement of distribution cost, and
4. Process 'A' Account, Normal Loss Account Normal Loss Account and Abnormal Loss Account

Question 15**HOMEWORK SUM**

Date:

A Company produces a component, which passes through two processes. During the month of April materials for 40,000 components were put into Process of which 30,000 were completed & transferred to Process II. Those not transferred to Process II were 100% complete as to materials cost and complete as to labour and overheads cost. The Process I costs incurred were as follow

Direct Materials Rs. 15,000

Direct Wages Rs. 18,000

Factory Overheads Rs. 12,000

Of those transferred to Process II, 28,000 units were completed and transferred to finished goods stores

There was a normal loss with no salvage value of 200 units in Process II. There were 1,800 units Remained unfinished in the process with 100% complete as to materials and 25% complete as regard to wages and overheads. No further process material costs occur after introduction at the first process until the end of the second process, when protective packing is applied to the completed components. The process and packing costs incurred at the end of the Process II were:

Packing Materials	Rs. 4,000
Direct Wages	Rs. 3,500
Factory Overheads	Rs. 4,500
Required:	

- (i) Prepare Statement of Equivalent Production, Cost per unit and Process I Alc.
 (ii) Prepare statement of Equivalent Production, Cost per unit and Process II Alc.

Question 16

A product passes through three processes X, Y and Z. The output of process 'X' & 'Y' is transferred to next process at cost plus 20 per cent each on transfer price and the output of process 'Z' is transferred to finished Stock at a profit of 25 per cent on transfer price. The following information are available in respect of the current year ending on 31st March-

	Process- X (Rs.)	Process- X (Rs.)	Process- X (Rs.)	Finished Stock (Rs.)
Opening stock	15,000	27,000	40,000	45,000
Material	80,000	65,000	50,000	-
Wages	1,25,000	1,08,000	92,000	-
Manufacturing Overheads	96,000	72,000	66,500	-
Closing stock	20,000	32,000	39,000	50,000
Inter process profit included in Opening stock	NIL	4,000	10,000	20,000

Stock in processes is valued at prime cost. The finished stock is valued at the price at which it is received

from process Z. Sales of the finished stock during the period was Rs. 14,00,000.

You are required to prepare:

- (i) Process accounts and finished stock account showing profit element at each stage.
 (ii) Costing Profit and Loss account.
 (iii) Show the relevant items in the Balance Sheet.

Question 17**HOMEWORK SUM**

Date:

A Ltd, produces product AXE which passes through two processes before it is completed and transferred to finished stock. The following data relate to October 2014

	Process I (Rs.)	Process II (Rs.)	Finished Stock (Rs.)
Opening stock	7,500	9,000	22,500
Direct material	15,000	15,750	-
Direct wages	11,200	11,250	-
Factory overheads	10,500	4,500	-
Closing stock	3,700	4,500	11,250
Inter process profit included in opening stock	-	1,500	8,250

Output of Process I is transferred to Process II at 25% profit on the transfer price. Output of Process II is transferred to finished stock at 20% profit on the transfer price. Stock in process is valued at prime cost.

Finished stock is valued at the price at which it is received from process II. Sales during the period are Rs. 1,40,000

Prepare Process cost accounts and finished goods account showing the profit element at each stage.

Question 18

Following information is available regarding process A for the month of February, 2014

Production Record

Units in process as on 01.02.2014 (All materials used, 25% complete for labour and overhead)	4,000
New units introduced	16,000
Units completed	14,000
Units in process as on 28.02.2014 (All materials used, 33-1/3% complete for labour and overhead)	6,000

Cost Records:

Work-in-process as on 01.02.2014	(Rs.)
Materials	6,000
Labour	1,000
Overhead	1,000
	8,000

Cost during the month	
Material	25,600
Labour	15,000
Overhead	15,000
	55,600

Presuming that average method of inventory is used, prepare

- Statement of Equivalent Production
- Statement showing cost for each element
- Statement of Apportionment of cost.
- Process Cost Account for Process A

10. RECONCILIATION OF COST AND FINANCIAL

Question 1

The Profit and Loss Accounts of Hutiya Ltd. for the year ended 31st March, 2007 is as follows:

Particulars	Rs.	Particulars	Rs.
To Materials	4,80,000	By Sales	9,60,000
To Wages	3,60,000	By Closing Stock	1,50,000
To Factory Expenses	2,40,000	By Work-in-progress:	
To Gross Profit	1,20,000	Materials 30,000	
		Wages 18,000	
		Factory Exp. 12,000	60,000
	12,00,000		12,00,000
To Administration Expenses (related with production activity)	60,000	By Gross Profit	1,20,000
To Net Profit		By Dividend received	6,000
	66,000		
	1,26,000		1,26,000

As per the costing records the indirect factory overheads have been absorbed at 50% of wages and administrative overheads at Rs. 15 per kg. During the year 6,000 kgs. were manufactured and 4,800 kgs. were sold.

Prepare a statement of cost and profit as per Cost Accounts and reconcile the costing profit with the financial profit.

Question 2

The Following figures have been extracted from the Financial Accounts of a Manufacturing Firm for the first year of its operation:

	Rs.
Direct Material Consumption	50,00,000
Direct Wages	30,00,000
Factory Overheads	16,00,000
Administrative Overheads related with production activities	7,00,000
Selling and Distribution Overheads	9,60,000
Bad Debts	80,000
Preliminary Expenses written off	40,000
Legal Charges	10,000
Dividends Received	1,00,000
Interest Received on Deposits	20,000
Sales (1,20,000 units)	1,20,000
Closing Stocks:	
Finished Goods (4,000 units)	3,20,000
Work-in-progress	2,40,000

The cost accounts for the same period reveal that the direct material consumption was Rs. 56,00,000. Factory Overheads are recovered at 20% on Prime Cost.

Administration Overheads are recovered at Rs. 6 per unit produced. Selling and Distribution Overheads are recovered at Rs. 8 per unit sold.

Required: Prepare the Profit and Loss Statement both as per financial records and as per cost records. Reconcile the profits as per the two records.

Question 3

The following information is available from the financial books of a company having a normal production capacity of 60,000 units for the current year ended on 31 st March.

(i) Sales Rs. 10,00,000 (50,000 units).

(ii) There was no opening and closing stock of finished units.

(iii) Direct Material and Direct Wages cost were Rs. 5,00,000 and Rs. 2,50,000 respectively

- (iv) Actual Factory Expenses were Rs. 1,50,000 of which 60% are fixed,
 (v) Actual Administrative Expenses related with production activities were Rs. 45,000 which are completely fixed.
 (vi) Actual Selling and Distribution Expenses were Rs. 30,000 of which 40% are fixed
 (vii) Interest and dividends received Rs. 15,000.
 You are required to:
- Find out profit as per financial books for the current year ended on 31st March.
 - Prepare Statement of Cost and Profit as per cost accounts for the current year ended on 31st March, 2013 assuming that the indirect expenses are absorbed on the basis of normal production capacity, and
 - Prepare a statement reconciling profits shown by financial and cost books

Question 4**HOMEWORK SUM**

Date:

The following information is available in the financial accounts of a manufacturing company for the year ending on 31st March.

	Rs.
Direct Material Consumption	3,55,000
Direct Wages	3,60,000
Manufacturing expenses	2,45,000
Office & Administrative Overheads related with production activities	2,40,000
Selling and Distribution Overheads	2,00,000
Donation and charity	20,000
Interest on debentures	48,000
Preliminary expenses (written off)	20,000
Provision for income - tax	75,000
Interest received on deposits	25,000
Sales: 1,80,000 units	16,20,000
Closing stock of finished goods: 30,000 units	1,50,000

The Cost accounts reveals:

- Manufacturing overheads recovered at 80 percent on direct wages,

ii. Office and administrative overheads recovered at 25 percent on factory cost.

iii. Selling and distribution overheads at Rs. 1.00 per unit sold.

iv. Closing stock of finished goods valued at cost of production.

You are required to:

(i) Prepare Profit and Loss Account showing net profit in financial accounts.

(ii) Prepare a statement showing profit in the cost accounts.

(iii) Prepare a statement reconciling the profits disclosed as per above (i) and (ii)

Question 5

A manufacturing company has disclosed net loss of Rs. 48,700 as per their cost accounting records for the current year ended 31st March. However their financial accounting records disclosed net profit of Rs. 35,400 for the same period. A scrutiny of data of both the sets of books of accounts revealed the following information:

	Particulars	Rs.
1	Factory overheads under absorbed	30,500
2	Administrative overheads over absorbed	65,000
3	Depreciation charged in financial accounts	2,25,000
4	Depreciation charged in cost accounts	2,70,000
5	Income - tax provision	52,400
6	Transfer fee (credited in financial accounts)	10,200
7	Obsolescence loss charged in financial accounts	20,700
8	Notional rent of own premises charged in cost accounts	54,000
9	Value of opening stock:	
	(a) in cost accounts	1,38,000
	(b) in financial accounts	1,15,000
10	Value of closing stock:	
	(a) in cost accounts	1,22,000
	(b) in financial accounts	1,12,500

Prepare a Memorandum Reconciliation Account by taking costing loss as base.

Question 6

From the following information (i) determine the profit as it would be shown by cost accounts; and (ii) prepare a statement reconciling it with profit shown by financial accounts:

TRADING AND PROFIT AND LOSS ACCOUNT			
Dr.		Cr.	
For the current year Ended on 31st March			
Particulars	Rs.	Particulars	Rs.
Materials Consumed	2,00,000	Sales (1,00,000 units)	4,00,000
Direct Wages	1,00,000		
Indirect Expenses (Works)	60,000		
Admin Expenses related with production activities	18,000		
Selling and Distribution Expenses	12,000		
Net Profit	10,000		
	4,00,000		4,00,000

The normal output of the factory is 1,50,000 units. Works expenses of a fixed nature are Rs. 36,000. Admin expenses are for all practical purposes constant. Selling and distribution expenses are constant to the extent of Rs.6,000, and the balance varies directly with sales.

Question 7

The following is the Trading and Profit and Loss Account of Gangster Limited:

Dr.		Cr.	
Particulars	Rs.	Particulars	Rs.
To Material Consumed	28,01,000	To Net Profit for the year	48,75,000
To Direct Wages	12,05,750	By Finished Goods Stock (1,000 units)	1,30,000
To Production Overheads	6,92,250	By Work-in - Progress:	
To Administration	3,10,375	Materials 55,250	

Overheads related with production activities			
To Selling and Dist. Overheads	3,68,875	Wages	26,000
To Preliminary Expenses written off	22,750	Production Overhead	97,500
To Goodwill written off	45,500	16,250	
To Fines	3,250	By Dividends received	3,90,000
To interest on Mortgage	13,000	By interest on bank deposits	65,000
To Loss on Sale of Machine	16,250		
To Taxation	1,95,000		
To Net Profit for the year	3,83,500		
	55,57,500		55,57,500

Gangster Limited manufactures a standard unit.

The Cost Accounting records of Omega Ltd. Shows the following:

- (i) Production Overheads have been charged to work - in - progress at 20% on Prime cost.
- (ii) Administration Overheads have been recovered at Rs.9.75 per finished Unit.
- (iii) Selling and Distribution Overheads have been recovered at Rs. .13 per Unit sold.
- (iv) The under or Over - absorption of Overheads has not been transferred to, Costing P/L Account.

Required:

- i. Prepare a proforma Costing Profit and Loss Account, indicating net profit
- ii. Prepare Control accounts for Production Overheads, Administration Overheads and Selling and Distribution Overheads.
- iii. Prepare a statement reconciling the profit disclosed by the cost records with that shown in Financial accounts

Question 8**HOMEWORK SUM**

Date:

The following figures are available from financial accounts for the current year ended 31st March:

Particulars	Rs.	Particulars	Rs.
Direct Material Consumption	2,50,000	Legal Charges	5,000
Direct Wages	1,00,000	Dividend Received	50,000
Production Overheads	3,80,000	Interest on Deposit received	10,000
Administration Overheads related with production activities	2,50,000	Sales 1,20,000 units	7,00,000
Selling and Distribution	4,80,000	Closing Stock:	
Bad Debts	20,000	Finished Stock - 40,000 units	1,20,000
Preliminary Expenses (written off)	10,000	Work-in-progress 10,000 units	80,000

The cost accounts reveal:

Direct Material Consumption: Rs. 2,80,000.

Production Overhead recovered at 20% on Prime Cost.

Administration Overhead at Rs. 3 per unit of production

Selling and Distribution Over head at Rs. 4 per unit sold.

The under or over absorption of overheads has not been transferred to Costing P&L A/C

Required: Prepare:

- Costing Profit and Loss Account.
- Financial Profit and Loss Account
- Statement reconciling the profits disclosed by the Costing Profit and Loss Account and Financial Profit and Loss Account
- Production Overheads A/c, Administration Overheads Account and Selling & Distribution Overheads A/C

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11. INTEGRATED AND NON- INTEGRATED ACCOUNTING

Stores Ledger Control Account

Particulars	Amt	Particulars	Amt
To balance b/d	XXX	By WIP Ledger Control A/c (issued for production)	XXX
To GLA A/c (Material Purchased)	XXX	By factory OH control A/c	XXX
		By Adm. PH Control A/c	XXX
		By selling OH control A/c	XXX
		By GLA A/c (Insurance claim)	XXX
		By Costing P & L A/c (Loss on fire)	XXX
		By GLA A/c (return to stores)	XXX
		By balance c/d	XXX
	XXX		XXX

There happened fire on material worth Rs. 10,000 and insurance company gave only Rs. 8,000

Cash A/cDr.	8,000 (GLA A/c)
P & L A/c Dr.	2,000 (Costing P & L A/c)
To Raw material A/c	10,000 (Stores ledger control A/c)

Wages Control Account

Particulars	Amt	Particulars	Amt
To GLA A/c (Wages paid)	XXX	By WIP Ledger Control A/c (wages incurred for production)	XXX
		By factory OH control A/c	XXX

		(indirect wages for factory)	
		By Adm. PH Control A/c (indirect wages for Adm. office)	XXX
		By selling OH control A/c (indirect wages for selling office)	XXX
	XXX		XXX

Factory/ Production Overheads

Particulars	Amt	Particulars	Amt
To Stores Ledger Control A/c (Indirect material)	XXX	By WIP Ledger Control A/c (OH Recovered)	XXX
To wages control A/c (indirect wages)	XXX	By costing P & L (OH under recovered)	XXX
To GLA A/c (Factory overhead incurred)	XXX		
To Costing P&L A/C	XXX		
	XXX		XXX

WIP Ledger Control A/c

Particulars	Amt	Particulars	Amt
To balance b/d	XXX	By FG Ledger Control A/c (FG T/F to warehouse)	XXX
To Stores Ledger Control A/c (Raw material issued to factory)	XXX	By balance c/d	XXX
To wages control A/c (wages for production)	XXX		
To factory OH control A/c (OH factory)			
To GLA A/c (purchase material directly by factory)			

To GLA A/c (Direct exp. Charged)	XXX		
	XXX		XXX

Admin Overheads Control A/c

Particulars	Amt	Particulars	Amt
To Stores Ledger Control A/c (Indirect material)	XXX	By FG Ledger Control A/c (OH recovered)	XXX
To wages control A/c (indirect wages)	XXX	BY costing P & L A/c (OH Under- recovered)	XXX
To GLA A/c (Admin OH incurred)	XXX		
To costing P & L A/c (OH Over- recovered)			
	XXX		XXX

FG Ledger control A/c

Particulars	Amt	Particulars	Amt
To balance b/d	XXX	By cost of Sales A/c (cost of sold goods)	
TO WIP ledger control A/c (FG transferred to warehouse)	XXX	By balance c/d	
To admin OH Control A/c (OH Recovered)	XXX		
	XXX		XXX

Selling & Distribution overheads control account

Particulars	Amt	Particulars	Amt
To Stores Ledger Control A/c (Indirect material)	XXX	By cost of sales A/c (OH recovered)	XXX
To wages control A/c	XXX	BY costing P & L A/c	XXX

(indirect wages)		(OH Under- recovered)	
To GLA A/c (Admin OH incurred)	XXX		
To costing P & L A/c (OH Over- recovered)			
	XXX		XXX

Cost of sales account

Particulars	Amt	Particulars	Amt
To FG ledger control A/c (FG T/F from warehouse to showroom)	XXX	By costing P & L a/c (on sale of finished goods) actual cost of sales	XXX
To selling OH control A/c (OH recovered)	XXX		XXX
	XXX		XXX

Costing Profit & Loss Account

Particulars	Amt	Particulars	Amt
To cost of sales a/c	XXX	By GLA A/c (Sales)	XXX
To Stores Ledger Control A/c	XXX	BY Factory OH Control A/c (Over recovered OH)	XXX
To Factory OH Control A/c (Under recovered OH)	XXX	BY Admin OH Control A/c (Over recovered OH)	XXX
To Admin OH Control A/c (Under recovered OH)		By selling OH Control A/c (Over recovered OH)	XXX
To selling OH Control A/c (Under recovered OH)	XXX		
To GLA A/c (Net Profit)	XXX		

	XXX		XXX
--	-----	--	-----

GLA Account

Particulars	Amt	Particulars	Amt
To costing P & L A/c (Sales)	XXX	By balance c/d	XXX
To stores ledger control (return to stores)	XXX	By stores ledger control A/c (Purchased)	XXX
To balance c/d	XXX	By wages control A/c (wages incurred)	XXX
		By factory OH control A/c	XXX
		By Admin OH control A/c	XXX
		By selling OH control A/c	XXX
		By costing P & L A/c (profit)	XXX
		By WIP Ledger Control A/c (Material purchase directly by factory)	XXX
		By WIP Ledger control A/c (Direct exp. Charged)	XXX
	XXX		XXX

Trial Balance

<u>Particulars</u>	<u>DR</u>	<u>CR</u>
Stores ledger control A/c		
WIP Ledger		
FG Ledger control A/c		
GLA A/c		

Question 1

Pass the journal entries in the cost books (non-integrated system) for the following transactions:

- (i) Materials worth Rs. 25,000 returned to stores from job.
 (ii) Gross total wages paid Rs. 48,000. Employer's contribution to PF and State Insurance amount to Rs.2,000. Wages analysis book detailed 40% Direct Labour and Indirect Labour to be distributed as 50% towards Production, 20% towards Administration and 30% towards Selling and Distribution.

Question 2

The balance in the cost ledger of manufacturing company on 1st January was:

	Rs.
Stores Ledger Control Account	7,000
Work in Progress Ledger Control Account	12,800
Finished Goods Ledger Control Account	2,000
General Ledger Adjustment Account	21,800
You are given the following information for the current year:	
Purchase of Material	40,000
Direct Factory Wages	60,000
Manufacturing Expenses	34,600
Selling and Distribution Expenses	5,400
Material Issued to Production	37,200
Manufacturing Expenses Recovered	34,440
Selling and Distribution expenses Recovered	5,320
Sales	1,50,000
Stock of Finished Goods at December 31st	4,700
Work in progress at December	14,700

You are required to show the account in the cost ledger for the above year, to prepare the costing Profit & Loss A/c for the year & extract the Trial Balance

Solution to Question 2

	Rs.	Concept No.	Debit	Credit
Stores Ledger Control Account	7,000			
Work in Progress Ledger Control Account	12,800			
Finished Goods Ledger Control Account	2,000			
General Ledger Adjustment Account	21,800			
Purchase of Material	40,000			
Direct Factory Wages	60,000			
Manufacturing Expenses	34,600			
Selling and Distribution Expenses	5,400			
Material Issued to Production	37,200			
Manufacturing Expenses Recovered	34,440			
Selling and Distribution expenses Recovered	5,320			
Sales	1,50,000			
Stock of Finished Goods at December 31st	4,700			
Work in progress at December	14,700			

Stores Ledger Control Account

Particulars	Amt	Particulars	Amt
To balance b/d		By WIP Ledger Control A/c	
To GLA A/c		By balance c/d	

Wages Control Account

Particulars	Amt	Particulars	Amt
To GLA A/c		By WIP Ledger Control A/c	

Manufacturing OH Control A/c

Particulars	Amt	Particulars	Amt
To GLA A/c		By WIP Ledger Control A/c	
		BY costing P & L	

WIP Ledger Control A/c

Particulars	Amt	Particulars	Amt
To balance b/d		By FG Ledger Control A/c	
To Stores Ledger Control A/c		BY balance c/d	
To wages control A/c			
To factory OH control A/c			
To manufacturing OH			

FG Ledger control A/c

Particulars	Amt	Particulars	Amt
To balance b/d		By cost of Sales A/c	
TO WIP ledger control A/c		BY balance c/d	

Selling & Distribution overheads control account

Particulars	Amt	Particulars	Amt
To GLA A/c		By cost of sales A/c	
		BY costing P & L A/c	

Cost of sales account

Particulars	Amt	Particulars	Amt
To FG ledger control A/c		By costing P & L a/c	
To selling OH control A/c			

Costing Profit & Loss Account

Particulars	Amt	Particulars	Amt
To cost of sales a/c		By GLA A/c (Sales)	
To Manufacturing OH Control A/c			
To selling OH Control A/c			
To GLA A/c (Net Profit)			

GLA Account

Particulars	Amt	Particulars	Amt
To costing P & L A/c		BY balance c/d	
To bal c/d		By stores ledger control A/c	
		By wages control A/c	
		BY factory OH control A/c	
		By Admin OH control A/c	
		BY selling OH control A/c	
		BY costing P & L A/c (profit)	

Trial Balance

Particulars	DR	CR
Stores ledger control A/c		
WIP Ledger		
FG Ledger control A/c		
GLA A/c		

Question 3

HOMEWORK SUM

Date:

The following balances are shown in the Cost Ledger as 1st January

	DR. (Rs)	CR (Rs.)
Finished goods Control Account	2,000	
Work in progress control Account	4,000	
Store ledger control Account	10,000	
Cost Ledger Control Account	-----	16,000
	16,000	16,000

Transaction for the year ended 31 December were as follows:

Purchase of Material		59,000
Purchase of Material directly by factory		8,600
Return to Suppliers Stores		400
Wages/Salary Paid		
Direct	41,000	
Factory Indirect	9,000	
Administrative Staff	7,800	
Selling & Distribution	4800	62,600
Expenses (Direct)		4,400
Production Expenses		10,200
Administration Expenses (production related)		8,200
Selling & Distribution Expenses		5,200
Material Issued to Production		61,000
Material Lost by fire in the Store		800
Stores issued to Maintenance account		2,600
Production Overhead recovered		22,000
Administration Overhead recovered from Finished Goods		15,600
Selling and Distribution overhead recovered from cost of sales		10,400
Finished Goods Produced		1,32,000
Cost of Goods Sold		1,40,000
Sales		1,60,000

Solution to Question 3:-

	Rs.	Concept No.	Debit	Credit
Stores Ledger Control Account	10,000			
Work in Progress Control Account	4,000			
Finished Goods Control Account	2,000			
Cost ledger control Account	16,000			
Purchase of Material	59,000			
Purchase of Material Directly by Factory	3,600			
Return to supplier stores	400			
Wages/ Salaries Paid:				
Direct	41,000			
Factory Indirect	9,000			
Admin Staff	7,800			
Selling & Distribution	4,800			
	62,600			
Expenses (Direct)	4,400			
Production Expenses	10,200			
Administration Expenses	8,200			
Selling & Distribution expenses	5,200			
Material issued to production	61,000			
Material lost by fire in the store	800			
Stores issued to maintenance account	2,600			
Production Overhead recovered	22,000			
Administration overhead recovered from finished goods	15,600			
Selling & Distribution OH recovered from cost of sales	10,400			
Finished Goods produced	1,32,000			
Cost of goods sold	1,40,000			

Sales	1,60,000			
-------	----------	--	--	--

Stores Ledger Control Account

Particulars	Amt	Particulars	Amt
To balance b/d		By WIP Ledger Control A/c	
To GLA A/c		BY factory OH control A/c	
		By Costing P & L A/c (Loss on fire)	
		By GLA A/c (return to stores)	
		By balance c/d	

Wages Control Account

Particulars	Amt	Particulars	Amt
To GLA A/c (Wages paid)		By WIP Ledger Control A/c	
		BY Production OH control A/c	
		By Adm. PH Control A/c	
		By selling OH control A/c	

Factory/ Production Overheads

Particulars	Amt	Particulars	Amt
To Stores Ledger Control A/c		By WIP Ledger Control A/c	
To wages control A/c			
To GLA A/c			
TO Costing P&L A/C			

WIP Ledger Control A/c

Particulars	Amt	Particulars	Amt
To balance b/d		By FG Ledger Control A/c	

To Stores Ledger Control A/c		BY balance c/d	
To wages control A/c			
To factory OH control A/c			
To GLA A/c			
To GLA (Direct)			

Admin Overheads Control A/c

Particulars	Amt	Particulars	Amt
To wages control A/c		By FG Ledger Control A/c	
To GLA A/c		BY costing P & L A/c (OH Under- recovered)	

FG Ledger control A/c

Particulars	Amt	Particulars	Amt
To balance b/d		By cost of Sales A/c	
TO WIP ledger control A/c		BY balance c/d	
To admin OH Control a/c			

Selling & Distribution overheads control account

Particulars	Amt	Particulars	Amt
To wages control A/c		By cost of sales A/c	
To costing P & L A/c (OH Over- recovered)			

Cost of sales account

Particulars	Amt	Particulars	Amt
To FG ledger control A/c		By costing P & L a/c	
To selling OH control A/c			

Costing Profit & Loss Account

Particulars	Amt	Particulars	Amt
To cost of sales a/c		By GLA A/c (Sales)	
To Stores Ledger Control A/c		By Production OH Control A/c (Over recovered OH)	
To Admin OH Control A/c (Under recovered OH)		By selling OH Control A/c	
To GLA A/c (Net Profit)			

GLA Account

Particulars	Amt	Particulars	Amt
To costing P & L A/c (Sales)		BY balance c/d	
To stores ledger control		By stores ledger control A/c	
To balance c/d		By wages control A/c	
		BY factory OH control A/c	
		By Admin OH control A/c	
		BY selling OH control A/c	
		BY costing P & L A/c (profit)	
		BY WIP Ledger Control A/c	
		BY WIP Ledger control A/c	

Trial Balance

<u>Particulars</u>	<u>DR</u>	<u>CR</u>
Stores ledger control A/c		
WIP Ledger		
FG Ledger control A/c		
GLA A/c		

Question 4

HOMEWORK SUM

Date:

As of 31 March the following balances existed in a Firm's Cost Ledger which is maintained separately on a double entry basis-

Account Head	Debit Rs.	Credit Rs.
Stores Ledger Control A/C	3,00,000	-
Work-in-Progress Control A/c	1,50,000	-
Finished Goods Control A/C	2,50,000	-
Manufacturing Overhead Control A/c	-	15,000
Cost Ledger Control A/C	-	6,85,000
Total	7,00,000	7,00,000

During the next quarter, the following items arose -

Transaction	Rs.	Transaction	Rs.
Finished product (at cost)	2,25,000	Cost of goods sold	1,75,000
Manufacturing OH incurred	90,000	Materials issued to production	1,35,000
Raw material purchased	1,25,000	Sales returned (at cost)	9,000
Factory wages	40,000	Materials returned to suppliers	13,000
Indirect labour	20,000	Manufacturing OH charged	85,000

to production

You are required to prepare the following

Cost Ledger Control A/c,	Manufacturing Overhead Control A/c
Stores Ledger Control Alc	Wages control A/c
Work in progress control A/c	Cost of Sales A/c
Finished Stock ledger control A/c	Trial Balance at the end of the quarter

Solution to Question 4 :-

Following table is just for understanding the concepts (Not for exam)

	Rs.	Concept No.	Debit	Credit
Stores Ledger Control Account	3,00,000			
Work in Progress Control Account	1,50,000			
Finished Goods Control Account	2,50,000			
Cost ledger control Account	6,85,000			
Finished product (at cost)	2,25,000			
Manufacturing OH	90,000			
Raw Material Purchased	1,25,000			
Factory Wages	40,000			
Indirect Labour	20,000			
Cost of goods sold	1,75,000			
Materials issued to production	1,35,000			
Sales Returned (at cost)	9,000			
Materials returned to supplier	13,000			
Manufacturing OH charged to production	85,000			

Stores Ledger Control Account

Particulars	Amt	Particulars	Amt
To balance b/d		By WIP Ledger Control A/c	
To GLA A/c		BY GLA A/c	
		By balance c/d	

Wages Control Account

Particulars	Amt	Particulars	Amt
To GLA A/c		By WIP Ledger Control A/c	
		BY manufacturing OH control A/c	
		By Adm. PH Control A/c (indirect wages for Adm. office)	
		By selling OH control A/c (indirect wages for selling office)	

Factory/ Production Overheads

Particulars	Amt	Particulars	Amt
To Stores Ledger Control A/c (Indirect material)		By WIP Ledger Control A/c (OH Recovered)	
To wages control A/c (indirect wages)		BY costing P & L (OH under recovered)	
To GLA A/c (Factory overhead incurred)			
TO Costing P&L A/C			

WIP Ledger Control A/c

Particulars	Amt	Particulars	Amt
To balance b/d		By FG Ledger Control A/c (FG T/F to warehouse)	
To Stores Ledger Control A/c (Raw material issued to factory)		BY balance c/d	
To wages control A/c (wages for production)			
To factory OH control A/c (OH factory)			
To GLA A/c (purchase material directly by factory)			
To GLA A/c (Direct exp. Charged)			

FG Ledger control A/c

Particulars	Amt	Particulars	Amt
To balance b/d		By cost of Sales A/c (cost of sold goods)	
TO WIP ledger control A/c (FG transferred to warehouse)		BY balance c/d	
To admin OH Control A/c (OH Recovered)			

Selling & Distribution overheads control account

Particulars	Amt	Particulars	Amt
To Stores Ledger Control A/c (Indirect material)		By cost of sales A/c (OH recovered)	
To wages control A/c (indirect wages)		BY costing P & L A/c (OH Under- recovered)	

To GLA A/c (Admin OH incurred))			
To costing P & L A/c (OH Over- recovered)			

Cost of sales account

Particulars	Amt	Particulars	Amt
To FG ledger control A/c (FG T/F from warehouse to showroom)		By costing P & L a/c (on sale of finished goods) actual cost of sales	
To selling OH control A/c (OH recovered)			

Costing Profit & Loss Account

Particulars	Amt	Particulars	Amt
To cost of sales a/c		By GLA A/c (Sales)	
To Stores Ledger Control A/c		BY Factory OH Control A/c (Over recovered OH)	
To Factory OH Control A/c (Under recovered OH)		BY Admin OH Control A/c (Over recovered OH)	
To Admin OH Control A/c (Under recovered OH)		BY selling OH Control A/c (Over recovered OH)	
To selling OH Control A/c (Under recovered OH)			
To GLA A/c (Net Profit)			

GLA Account

Particulars	Amt	Particulars	Amt
To costing P & L A/c (Sales)		BY balance c/d	
To stores ledger control (return to stores)		By stores ledger control A/c (Purchased)	
To balance c/d		By wages control A/c (wages incurred)	
		BY factory OH control A/c	
		By Admin OH control A/c	
		BY selling OH control A/c	
		BY costing P & L A/c (profit)	
		BY WIP Ledger Control A/c (Material purchase directly by factory)	
		BY WIP Ledger control A/c (Direct exp. Charged)	

Trial Balance

Particulars	DR	CR
Stores ledger control A/c		
WIP Ledger		
FG Ledger control A/c		
GLA A/c		

Question 5

After the annual stock taking you come to know of some significant discrepancies between book stock & physical stock. You gather the following information

Item	Stock card	Stores ledger	Physical check	Cost/ Unit
	Units	Units	Units	Rs.
A	600	600	560	60
B	380	380	385	40

Pass necessary journal entries to record the above situation under different circumstances

Question 6**HOMEWORK SUM**

Date:

Journalise the following transactions assuming cost and financial accounts

Particulars	Amount (Rs.)
i) Materials issued	
Direct	3,25,000
Indirect	1,15,000
ii) Allocation of wages (25% indirect)	6,50,000
iii) Under/Over absorbed overheads:	
Factory (Over)	2,50,000
Administration (production related) (Under)	1,75,000
(iv) Payment to Sundry Creditors	1,50,000
(v) Collection from Sundry Debtors	2,00,000

12. MARGINAL COSTING

Question 1

Following information are available for the year 2020 and 2021 of PEG Limited:

Year	2020	2021
Sales	Rs.32,00,000	Rs.57,00,000
Profit/(Loss)	(Rs. 3,00,000)	Rs.7,00,000

Calculate - (a) P/V ratio, (b) Total fixed cost, and (c) Sales required to earn a Profit of Rs 12,00,000.

Question 2

The ratio of variable cost to sales is 70%. The break-even point occurs at 60% of the capacity sales. Find the capacity sales when fixed costs are Rs.90,000. Also compute profit at 75% of the capacity sales

Question 3

JOJO Ltd sells its product at Rs. 15 per unit. In a period, if it produces and sells 8,000 units, it incurs a loss of Rs. 5 per unit. If the volume is raised to 20,000 units, it earns a profit of Rs. 4 per unit. Calculate break-even point both in terms of rupees as well as in units.

Question 4 (Nov 2007)

A company produces single product which sells for Rs. 20 per unit. Variable cost is Rs. 15 per unit and Fixed overhead for the year is Rs. 6,30,000

Required:

- Calculate sales value needed to earn a profit of 10% on sales.
- Calculate sales price per unit to bring BEP down to 1,20,000 units.
- Calculate margin of safety sales if profit is Rs. 60,000

Question 5

L Lalit Ltd. reports the following cost structure at capacity levels:

	(100% capacity)	(75% capacity)
	2,000 units	1,500 units
Production overhead I	Rs. 3 per unit	Rs. 4 per unit
Production overhead II	Rs.2 per unit	Rs.2 per unit

If the selling price, reduced by direct material and labour is Rs. 8 per unit, what unit, would be its break-even point?

Question 6

By noting "P/V will increase or P/V will decrease or P/V will not change", as the case may be, state how the following independent situations will affect the P/V ratio:

- (i) An increase in the physical sales volume;
- (ii) An increase in the fixed cost;
- (iii) A decrease in the variable cost per unit;
- (iv) A decrease in the contribution margin;
- (v) An increase in selling price per unit;
- (vi) A decrease in the fixed cost;
- (vii) A 10% increase in both selling price and variable cost per unit;
- (viii) A 10% increase in the selling price per & 10% decrease in the physical sales volume
- (ix) A 50% increase in the variable cost per unit and 50% decrease in cost.

Question 7

The following information is given by Guddu Ltd.

Margin of safety = Rs. 1,87,500

Total Cost = Rs.1,93,750

Margin of Safety = 3,750 units

Break even Sales = 1,250 units

Required

Calculate Selling Price Per unit, Profit, P/V Ratio, BEP Sales (in Rs.) and Fixed Cost

Question 8

You are given the following data:

	Sales	Profit
Year 2020	Rs. 1,20,000	Rs.8,000
Year 2021	Rs. 1,40,000	Rs.13,000

Find out-

- (i) P/V ratio,
- (ii) B.E. Point,
- (iii) Profit when sales are Rs. 1,80,000,
- (iv) Sales required earn a profit of Rs. 12,000,
- (v) Margin of safety in year 2014.

Question 9

Jethalal Ltd maintains margin of safety of 37.5% with an overall contribution to sales ratio of 40%. Its fixed costs amount to Rs. 5 lakhs.

Calculate the following:

- i. Break-even sales
- ii. Total sales
- iii. Total variable cost
- iv. Current profit
- v. New margin of safety in Rs. if the sales volume is increased by $7\frac{1}{2}\%$.

Question 10

Majnu company had incurred fixed expenses of Rs. 4,50,000, with sales of Rs. 15,00,000 and earned a profit of Rs. 3,00,000 during the first half year. In the second half, it suffered a loss of Rs. 1,50,000

Calculate

- (i) The profit-volume ratio, break-even point and margin of safety for the first half
- (ii) Expected sales volume for the second half year assuming that selling price and fixed expenses remained unchanged during the second half year.
- (iii) The break-even point and margin of safety for the whole year.

Question 11

HOMEWORK SUM

Date:

1. If margin of safety is Rs. 2,40,000 (40% of sales) and P/V ratio is 30% of Shila Ltd, calculate its

(i) Break even sales, and (ii) Amount of profit on sales of Rs.9,00,000

2. Saffron Ltd. has earned a contribution of Rs.2,00,000 and net profit of Rs.1,50,000 of sales of Rs.8,00,000. What is its margin of safety?

Question 12

HOMEWORK SUM

Date:

Tripathi company earned a profit of Rs. 30,000 during the year 2021. If the marginal cost and selling price of the product are Rs. 8 and Rs. 10 per respectively, find out the amount of margin of safety.

Question 13

HOMEWORK SUM

Date:

(Rs.)

(i) Ascertain profit, when sales	=	2,00,000
Fixed Cost	=	40,000
BEP	=	1,60,000
(ii) Ascertain sales, when fixed cost	=	20,000
Profit	=	10,000
BEP	=	40,000

Question 14 (MAY 2008)

HOMEWORK SUM

Date:

A company has fixed cost of Rs. 90,000, Sales Rs. 3,00,000 and Profit of Rs. 60,000.

Required:

- (i) Sales volume if in the next period, the company suffered a loss of Rs. 30,000,
 (ii) What is the margin of safety for a profit of Rs. 90,000?

Question 15

HOMEWORK SUM

Date:

You are given the following data for the year 2021 of Gotya & Co, Ltd

Variable cost	60,000	60%
Fixed cost	30,000	30%
Net profit	10,000	10%
Sales	1,00,000	100%

Find out (a) Break-even point, (b) P/V ratio, and (c) Margin of safety.

Question 16**HOMEWORK SUM**

Date:

You are given the following particulars calculate:

- (a) Break-even point
- (b) Sales to earn a profit of Rs. 20,000
 - i. Fixed cost Rs. 1,50,000
 - ii Variable cost Rs. 15 per unit
 - iii. Selling price is Rs. 30 per unit

Question 17**HOMEWORK SUM**

Date:

The P/V Ratio of Babli Ltd. is 50% and margin of safety is 40%. The company sold 500 units for Rs. 5,00,000. You are required to calculate:

- (i) Break-even point, and
- (ii) Sales in units to earn a profit of 10% on sales

Question 18**HOMEWORK SUM**

Date:

Lootera Ltd, manufactures a product "N-joy". In the month of August 2014, 14,000 units of the product "N-joy" were sold, the details are as under

	(Rs.)
Sale Revenue	2,52,000
Direct Material	1,12,000
Direct Labour	49,000
Variable Overheads	35,000
Fixed Overheads	28,000

A forecast for the month of September 2021 has been carried out by the General manger of Lootera Ltd. As per the forecast, price of direct material and variable overhead will be increased by 10% and 5% respectively.

Required to calculate:

- (a) Number of units to be sold to maintain the same quantum of profit that made in August 2021
- (b) Margin of safety in the month of August 2021 and September 2021.

Question 19**HOMEWORK SUM**

Date:

If P/V ratio is 60% and the Marginal cost of the product is Rs. 20. What will be the selling price?

Question 20

Baburao Ltd is having a proposal to purchase two machines X and Y, the cost structure for the products with these two machines is as follows:-

Particular	Machine X	Machine Y
Variable Cost per unit	Rs. 6.00	Rs. 4.00
Fixed Cost	Rs. 2,00,000	Rs. 3,00,000
Selling Price per unit	Rs. 10	Rs. 10

What is cost indifference point? Which machine should be preferred and when?

Question 21

Two firms Lala & Co. and Lalli & Co. sell the same product in the same market. Their budgeted profit and loss account for the year ending 31st march, 2021 are as follows:-

Particulars	Lala & Co. (Rs.)	Lalli & Co. (Rs.)
Sales	5,00,000	6,00,000
Variable Costs	4,00,000	4,00,000
Fixed Costs	30,000	70,000
Net Profit	70,000	1,30,000

Required:

- Calculate at which sales volume both the firms will earn equal profit.
- State which firm is likely to earn greater profits in condition of:
 - Heavy demand for the product
 - Low demand for the product. Give reasons

Question 22

Coke, Pepsi and Slice are three similar plants under the same management who want them to be merged for better operation. The details are as under:

Particulars	Plant Coke at 100% (Rs. in Lakhs)	Plant Pepsi at 70% (Rs. in Lakhs)	Plant Slice at 50% (Rs. in Lakhs)
Turnover	300	280	150

Variable Cost	200	210	75
Fixed Cost	70	50	62

Required:-

- Compute the capacity of the merged plant for break-even
- Compute the profit of the merged plant at 75% capacity
- Compute the capacity utilization of the merged plant to earn a profit of Rs.28 lakhs

Question 23

HOMEWORK SUM

Date:

There are two similar plants under the same management. The management desires to merge these plants.

The following particulars are available:-

Particulars	Factory 1	Factory 2
Capacity operation	100%	60%
Sales	Rs. 300 Lakhs	Rs. 120 Lakhs
Variable Costs	Rs. 220 Lakhs	Rs. 90 Lakhs
Fixed Costs	Rs. 40 Lakhs	Rs. 20 Lakhs

You are required to calculate:-

What would be capacity of the merged plant to be operated for the purpose of break-even and

What would be the profitability on working at 75% of the merged capacity ?

Question 24

BBC Ltd sold 2,75,000 units of its product at Rs. 37.50 per unit. Variable costs are Rs. 17.50 per unit (manufacturing costs of Rs. 14 and selling cost Rs. 3.50 per unit). Fixed costs are incurred uniformly throughout the year and amount to Rs. 35,00,000 (including depreciation of Rs. 15,00,000), there are no beginning or ending inventories.

Required:

- Estimate breakeven sales level quantity and cash breakeven sales level Quantity.
- Estimate the P/V ratio.
- Estimate the number of units that must be sold to earn an income (EBIT) of Rs. 2,50,000
- Estimate the sales level achieve an after-tax income (PAT) of Rs. 2,50,000,

Assume 40% corporate Income Tax rate.

Question 25

Kukoo Ltd. Manufactures and sells four products A,B,C and D. The total budgeted sales (100%) are Rs. 6,00,000 per month. The Fixed Costs are Rs. 1,59,000 per month

Sales mix in value comprises of:

Product	Present %	Proposed %
A	33.33%	25%
B	41.67%	40%
C	16.67%	30%
D	8.33%	5%

The operating cost as a % of selling prices are:-

A-60%, B-68%, C-80% and D-40%

Calculate break even sales for the company for both these periods.

Question 26

MMC Ltd. Manufactures three products P, Q and R. The unit selling prices of these products are Rs.100, Rs.80 and Rs.50 respectively. The corresponding unit variable cost are Rs.50, Rs.40 and Rs.20 the proportions (quantity wise) in which these products are manufactured and sold are 20%, 30% and 50% respectively. Total fixed cost are Rs.14,80,000.

Given the above information, you are required to work out the overall break-even quantity and the product-wise break-up of such quantity.

Question 27**HOMEWORK SUM**

Date:

The product mix of a Bhopa Ltd. is as under:

	Products	
	M	N
Units	54,000	18,000
Selling price	Rs.7.50	Rs.15.00
Variable cost	Rs.6.00	Rs.4.50

Find the break-even points in units, if the company discontinues product M and replace with product O. The quantity of product O is 9,000 units and its selling price and variable costs respectively are Rs.18 and Rs.9. Fixed Cost is

Rs. 15,000

Question 28

HOMEWORK SUM

Date:

A Company sells two products, Barfi and Heroine. The sales mix is 4 units of Barfi and 3 units of Heroine. The contribution margins per unit are Rs. 40 for Barfi and Rs. 20 for Heroine. Fixed costs are Rs. 6,16,000 per month. Compute the break-even point.

Question 29

Mogambo Limited sells its product at Rs. 30 per unit. During the quarter ending on 31 March, 2021, it produced and sold 16,000 units and suffered a loss of Rs. 10 per unit. If the volume of sales is raised to 40,000 units, it can earn a profit of Rs. 8 per unit.

You are required to calculate:

- (i) Break Even Point in Rupees.
- (ii) Profit if the sale volume is 50,000 units.
- (ii) Minimum level of production where the company needs not to close the production if unavoidable fixed cost is Rs. 1,50,000.

Question 30

HOMEWORK SUM

Date:

Mr. Selmon has Rs. 2,00,000 investments in his business firm. He wants a 15 per cent return on his money. From an analysis of recent cost figures, he finds that his variable cost of operating is 60 per cent of sales, his fixed costs are Rs. 80,000 per year. Show computations to answer the following questions:

- (i) What sales volume must be obtained to break even?
- (ii) What sales volume must be obtained to get 15 per cent return on investment?
- (iii) Mr Salman estimates that even if he closed the doors of his business, he would incur Rs. 25,000 as expenses per year. At what sales would he be better off by locking his business up?

Question 31**HOMEWORK SUM**

Date:

Maximum Production capacity of Munni Ltd. is 28000 units per month. Output at different levels along with cost data is furnished below:

Particulars of Costs	Activity Level		
	16,000 units	18,000 units	20,000 units
Direct Material	Rs.12,80,000	Rs.14,40,000	Rs.16,00,000
Direct labour	Rs.17,60,000	Rs.19,80,000	Rs.22,00,000
Total factory overheads	Rs.22,00,000	Rs.23,70,000	Rs.25,40,000

You are required to work out the selling price per unit an activity level of 24,000 units by considering profit at the rate of 25% on sales.

Question 32**HOMEWORK SUM**

Date:

An automobile manufacturing company produces different models of Cars. The budget in respect of model 007 for the month of March, 2015 is as under:

Budgeted Output 40,000 Units

	Rs. In lakhs	Rs. In lakhs
Net Realization		700
Variable Cost		
Materials	264	
Labour	52	
Direct expenses	124	440
Specific Fixed Costs	90	
Allocated Fixed Costs	112.50	202.50
Total Costs		642.50
Profit		57.50
Sales		700.00

- (i) Profit with 10 percent increase in selling price with a 10 percent reduction in sales volume.
- (ii) Volume to be achieved to maintain the original profit after a 10 percent rise in material costs, at the originally budgeted selling price per unit.

Question 33

HOMEWORK SUM

Date:

Laila Limited started its operation in the year 2021 with total production capacity of 2,00,000 units. The following information, for two years are made available to you:

	Year 2020	Year 2021
Sales (units)	80,000	1,20,000
Total Cost (Rs.)	34,40,000	45,60,000

There has been no change in the cost structure and selling price and it is anticipated that it will remain unchanged in the year 2015 also. Selling price is Rs. 40 per unit.

Calculate

- Variable cost per unit.
- Profit Volume Ratio.
- Break-Even Point (In units)
- Profit if the firm operates at 75% of the capacity!

Question 34

HOMEWORK SUM

DATE:

Bala Ltd. is operating at 80 % capacity and presents the following information:

Break-even Sales Rs.400 crores

P/V Ratio 30 %

Margin of Safety Rs. 120 crores

Management has decided to increase production to 95 % capacity level with the following modifications:

- The selling price will be reduced by 10%.
 - The variable cost will be increased by 2% on sales
 - The fixed costs will increase by Rs. 50 crores, including depreciation on additions, but excluding interest on additional capital.
- Additional capital of Rs. 100 crores will be needed for capital expenditure and working capital.

Required:

- Indicate the sales figure, with the working, that will be needed to earn Rs. 20 crores over and above the present profit and also meet 15% interest on the additional capital.
- What will be the revised Break-even Sales, P/V Ratio and Margin of Safety.

Question 35

Guddu Ltd, manufacture and sales its product R-9. The following figures have been collected from cost records of last year for the product R-9

Elements of Cost	Variable Cost portion	Fixed Cost
Direct Material	30% of Cost of Goods Sold	-
Direct Labour	15% of Cost of Goods Sold	-
Factory Overhead	10% of Cost of Goods Sold	Rs.2,30,000
Administration Overhead production activity	2% of Cost of Goods Sold	Rs 71,000
Selling & Distribution Overhead	4% of Cost of Sales	Rs.68,000

Last Year 5,000 units were sold at Rs.185 per unit. From the given data find the followings:

- Break-even Sales (in rupees)
- Profit earned during last year
- Margin of safety (in %)
- Profit if the sales were 10% less than the actual sales.

7B – TRANSFER PRICING

Question 36

A manufacturing company has two divisions-X and Y. Division X is mainly engaged in production of an electronic devices and Division Y packs and labels the Product and sells it in market. Division X supplies 25,000 units of the product per month to Y for packing and labelling. Division X incurs Rs.16 as the variable cost for the product fixed cost of Rs.8,40,000 per year. Investment in fixed assets is Rs.9,60,000. The division plans to have 12% return on fixed assets as normal profits. Division Y incurs Rs.10 per product as variable expenses for packaging and marketing .

- Find the Transfer Price per unit of the product that Division X can charge for Transfer to Y.

- (ii) What will be profit of Division Y if it can sell all the products in the market at Rs.80 per unit?
- (iii) If Division Y can sell only 15,000 units of the product per month and asks Division X to supply only 15,000 units, what will be the effect on the Transfer Price and the profits of the divisions?

Solution 37

- (i) Computation of Transfer Price:
To be charged by 'X' to 'Y'

Variable Cost per unit	16
Fixed Cost per Unit (8,40,000/3,00,000)	2.80
Return per Unit (9,60,000 x 12%)/3,00,000	0.384
	19.184

- (ii) Computation of Profit of Division 'Y'

Transfer Price	19.184
Variable cost	10
	29.184
Contribution and Profit per Unit	= (80 - 29.184)
	= 50.815
Monthly Profit	= 25,000 x 50.186
	= 12,70,400
and	
Yearly Profit	= 3,00,000 x 50.186
	= Rs.1,52,44,800

Transfer Price :

Variable cost per unit	16
Fixed Cost per Unit (8,40,000/ 1,80,000)	4.67
Return per Unit (9,60,000 x 12%)/1,80,000	0.64
	21.31
Variable Cost for Packaging and Marketing	10
	31.31
Contribution and Profit per Unit	48.69

(80 - 31.31)

Question 38

A company has two divisions, manufacturing and assembly. At a normal volume of component YPY per year, production cost per unit are:

Direct materials	40
Direct labour	20
Variable factory overhead	12
Fixed factory overhead	42

The manufacturing division has been manufacturing and selling 2,50,000 components per year to outside buyers for Rs.136 each. However, the division can manufacture 3,50,000 components per year. The assembly division has been buying the components from outside suppliers for Rs.130 each. The assembly division has offered to purchase 90,000 units of component YPY from the manufacturing division at the rate of Rs.104 per unit. Should the manager of Electrical Division accept the offer? Will an internal transfer be of any benefit to the company?

Solution 38

There is surplus capacity in manufacturing division. So, the relevant cost for production will be variable cost only amounting to Rs.72 per unit (40 + 20 + 12). This will result in a profit Rs.28,80,000 [(104 - 72) x 90,000].

Therefore, manufacturing division should accept the offer. Internal transfer will be beneficial to the company. The company is paying Rs.130 for the component which can be made internally at an incremental cost Of Rs.72.

The company will save Rs.52,20,000. [(130 - 72) x 90,000].

Question 39

Material costs, labour costs and variable overhead costs are Rs.125, Rs.150 and Rs.50 per unit respectively. If the fixed expenses for 20,000 units are Rs.6,40,000 and required rate of return is 25% on transfer price, then find out the transfer price per unit.

Solution 39

Adding Desired return 25% on transfer price (1/3 of cost) = $357 \times \frac{4}{3} = 476$

Particulars	Rs.
Per unit variable cost (125 + 150 + 50)	325
Add : Fixed expenses per unit (Rs.6,40,000/20,000)	32
Total cost per unit	357

Question 40

The following information relates to budgeted operations of Division P of a Manufacturing company.

Particulars	Amount in Rs.
Sales- 50,000 units @ Rs 8	4,00,000
Less: Variable Costs @ Rs.6 per unit	3,00,000
Contribution margin	1,00,000
Less: Fixed Costs	75,000
Divisional Profits	25,000

The amount of divisional investments is Rs.1,50,000 and the minimum desired rate of return on the investments is the cost of capital of 20%.

Calculate

- Divisional expected ROI and
- Divisional expected RI

Solution 40

(i) ROI = $\text{Rs.}25,000 / 1,50,000 \times 100 = 16.7\%$

(ii) RI = Divisional Profits - Minimum desired rate of return
 $= 25,000 - 20\% \text{ of } 1,50,000 = (\text{Rs.}5000)$

Question 41

A company fixes the inter- divisional transfer prices for its products on the basis of costs plus an estimated return on investment in its divisions. The relevant portion of the budget for the Division X for the year 2015-16 is given below :

Particulars	Amount in Rs.
Fixed Assets	5,00,000
Current Assets (other than debtors)	3,00,000
Debtors	2,00,000
Annual fixed cost for the division	8,00,000
Variable cost per unit of product	10
Budgeted volume of production per year (units)	4,00,000
Desired Return on Investment	28%

You are required to determine the transfer price for Division X.

Solution 41**Computation of Transfer Price per unit for division X**

Particulars	Amount in Rs.
Variable cost	10
Fixed cost (8,00,000/ 4,00,000)	2
Total cost	12
Add: Desired return (10,00,000 x 28%) ÷ 4,00,000	0.70
Transfer Price	12.70

Question 42

XYZ Ltd has a system of assessment of Divisional Performance on the basis of residual income has two Divisions, Alfa and Beta. Alfa has annual capacity to manufacture 15,00,000 numbers of special components that is sells to outside customers, but has idle capacity. The budgeted residual income of Beta is Rs.1,20,00,000 while that of Alfa is Rs.1,00,00,000. Other relevant details extracted from the budget of Alfa for the current years were as follows:

Particulars	
Sale (outside customers)	12,00,000 units @ 180 per unit

Variable cost per unit	Rs.160
Divisional fixed cost	Rs.80,00,000
Capital employed	Rs.7,50,00,000
Cost of capital	12%

Beta has just received a special order for which it requires components similar to the ones made by Alfa. Fully aware of the idle capacity of Alfa, beta has asked Alfa to quote for manufactures and supply of 3,00,000 numbers of the components with a slight modification during final processing. Alfa and Beta agree that this will involve an extra variable cost of Rs.5 per unit.

You are required to calculate,

The transfer price which Alfa should quote to Beta to achieve its budgeted residual income.

Solution 42

Computation of contribution per labour hour from external sales:

	X	Y	Z
Market price (Rs.)	48	46	40
Variable cost (Rs.)	33	24	28
Contribution	15	22	12
Labour hours required	3	4	2
Contribution per labour hour (Rs.)	5	5.50	6
Priority	III	II	I

Computation of transfer price when

The capacity is 3800 hours

Hours required for Z = $300 \times 2 = 600$

Y = $500 \times 4 = 2000$

X = $800 \times 3 = 2400$
= 5000

The existing capacity is not sufficient to produce the units to meet the external Sales. In order to transfer 300 units of Y, 1200 hours are required in which Division A will give up the production of X to this extent.

	Rs.
--	-----

Variable cost of Y	24
(+) contribution lost by giving up production of X to the Extent of 1200 hours = $1200 \times 5 = \text{Rs.}6000$	
\therefore Opportunity cost per unit = $(6000/300)$	20
Required transfer price	44

(c) If the capacity is 5600 hours:

	Rs.
Variable cost	24
(+) contribution lost by giving up X to the Extent of 600 hours (being opportunity cost) = $600 \times 5 = \text{Rs.}3000$	
\therefore Opportunity cost per unit = $(3000/300)$	10
Required transfer price	34

13. STANDARD COSTING

Question 1

Following are the details of the product Panoti for the month of April 2013

Standard quantity of material required per unit	5 kg
Actual output	1000 units
Actual cost of materials used	Rs.7,14,000
Material price variance	Rs. 51,000(Fav)
Actual price per kg of material is found to be less than standard price per of material by Rs. 10.	

You are required to calculate:

- (i) Actual quantity and Actual price of materials used.
- (ii) Material Usage Variance
- (iii) Material Cost Variance.

Question 2

Besharam Manufacturing Concern furnishes the following information:-

Standard	Material for 70 kg finished 100 kg. products	100 Kg
	Price of material	Rs.1 per kg.
Actual:	Output	2,10,000 kg.
	Material used	2,80,000 kg.
	Cost of Materials	Rs 2,52,000

You are required to calculate

- (1) Material Usage Variance
- (2) Material Price Variance
- (3) Material Cost Variance

Question 3

The standard cost of a chemical mixture is as follows: 40% material A at Rs 20 per kg. 60% material B at Rs 30 per kg. A standard loss of 10% of input is expected in production. The cost records for a period showed the following usage: 90 kg material A at a cost of Rs.18 per kg. 110 kg material B at a cost of Rs.34 per.

The quantity produced was 182 kg. of good product.
Calculate all material variances.

Question 4**HOMEWORK SUM**

Date:

Sanju Ltd. presents the following information for November, 2013:

Budgeted production of product P = 200 units.

Standard consumption of Raw materials = 2 kg. per unit of P.

Standard price of material A = Rs. 6 per kg.

Actually, 250 units of P were produced and material A was purchased at Rs. 8 per kg and consumed at 1.8 kg per unit of P. Calculate the Material Cost Variances.

Question 5**HOMEWORK SUM**

Date:

The standard mix to produce one unit of product is as follows:

Material X 60 units @ Rs. 15 per unit = 900

Material Y 80 units @ Rs.20 per unit = 1,600

Material Z 100 units @ Rs.25 per unit = 2,500

240 units

5,000

During the month of April, 10 units were actually produced and consumption was as follows:

Material X 640 units @ Rs.17.50 per unit= 11,200

Material y 950 units @ Rs.18.00 per unit= 17,100

Material Z 870 units @ Rs.27.50 per unit= 23,925

Calculate all material variances.

Question 6

The standard labour employment and the actual labour engaged in a 40 hours week for a job are as under:

Category of Workers	Standard		Actual	
	No. Of workers	No. of Wage Rate per hour (Rs.)	No. Of workers	No. of Wage Rate per hour (Rs.)
Skilled	65	45	50	50
Semi-skilled	20	30	30	35
Unskilled	15	15	20	10

Standard output: 2,000 units; Actual output: 1,800 units

Abnormal Idle time 2 hours in the week

Calculate:

(i) Labour Cost Variance

(ii) Labour Efficiency Variance

(iii) Labour Idle Time Variance

Question 7**HOMEWORK SUM**

Date:

The standard labour employment and the actual labour engaged in a week for a job are as under

	Skilled workers	Unskilled workers	Semi-skilled workers
Standard no. of workers in the gang	32	12	6
	28	18	4
Actual no. of workers employed	3	2	1
	4	3	2
Standard wage rate per hour			
Actual wage rate per hour			

During the 40 hours working week, the gang produced 1,800 standard labour hours of work. Calculate.

- Labour Cost Variance
- Labour Rate Variance
- Labour Efficiency Variance
- Labour Mix Variance
- Labour Yield Variance

Question 8**HOMEWORK SUM**

Date:

The standard and actual figures of a firm are as under:-

Standard time for the job	1,000 hours
Standard rate per hour	Rs.0.50
Actual time taken	900 hours
Actual wages paid	Rs.360

Compute the variances.

Question 9

The following information has been provided by a company

Number of units produced and sold	6,000
Standard labour rate per hour	Rs. 8
Standard hours required for 6,000 units	-
Actual hours required	17,094 hours
Labour efficiency	105.3%

Labour rate variance

Rs. 68,376 (A)

You are required to calculate:

- (i) Actual labour rate per hour
- (ii) Standard hours required for 6,000 units
- (iii) Labour Efficiency variance
- (iv) Standard labour cost per unit
- (v) Actual labour cost per unit.

Question 10**HOMEWORK SUM**

Date:

Badrinath Ltd, manufactures NXE by mixing three raw materials. For every batch of 100 kg of NXE, 125 kg. of raw materials are used. In April, 2012, 60 batches were prepared to produce an output of 5,600 kg. of NXE. The standard and actual particulars for April, 2012, are as follows:

Raw Materials	Standard		Actual		Quantity of Raw Materials Purchased
	Mix %	Price per kg (Rs.)	Mix %	Price per kg (Rs.)	
A	50	20	60	21	5000
B	30	10	20	8	2000
C	20	5	20	6	1200

Calculate all variances. Also calculate material price variance at the time of purchase of raw material?

Question 11**HOMEWORK SUM**

Date:

Laila Ltd. had prepared the following estimation for the month of April:

	Quantity	Rate (Rs.)	Amount (Rs.)
Material-A	800 Kg	45.00	36,000
Material-B	600 kg.	30.00	18,000
Skilled labour	1,000 hours	37.50	37,500
Unskilled labour	800 hours	22.00	17,600

Normal loss was expected to 10% of total input materials and an idle labour time of 5% of expected labours was also estimated. At the end of the month the following information has been collected from the cost accounting department: The company has produced 1,480 kg. finished product by using the followings:

	Quantity	Rate (Rs.)	Amount (Rs.)
--	----------	------------	--------------

Material-A	900 Kg	43.00	38,700
Material-B	650 kg.	32.50	21,125
Skilled labour	1,200 hours	35.50	42,600
Unskilled labour	860 hours	23.00	19,780

You are required to calculate:

- i) Material Cost Variance;
- ii) Material Price Variance;
- iii) Material Mix Variance;
- iv). Material Yield Variance;
- v) Labour Cost Variance;
- vi) Labour Efficiency Variance and
- vii) Labour Yield Variance

Question 12 **HOMEWORK SUM** **DATE:**

RDX Construction Limited has entered into a big contract at an agreed price of Rs 15000.000 subject to an escalation clause for material and labour as spent out on the contract and corresponding details are as follows:

Material	Standard		Actual	
	Quantity	Rate per Ton	Quantity	Rate per Ton
	(Tons)	(Rs)	(Tons)	(Rs)
A	3000	1000	3400	1100
B	2400	800	2300	700
C	500	4000	600	3900
D	100	30000	90	31500
Labour	Hours	Hourly rate	Hours	Hourly rate
L1	60000	15	56000	18
L2	40000	30	38000	35

You are required to:

Calculate the following variances and verify them

- (a) Material Cost Variance
- (b) Material Price Variance
- (c) Material Usage Variance
- (d) Labour Cost Variance
- (e) Labour Rate Variance
- (f) Labour Efficiency Variance.

14. BUDGET AND BUDGETARY CONTROL

Question 1

Calculate efficiency and activity ratio from the following data:

Capacity ratio	75%
Budgeted output	6,000 units
Actual output	5,000 units
Standard Time per unit	4 hours

Question 2

HOMEWORK SUM

Date:

Kukko Co. Ltd manufactures two products viz., X and Y and sells them through two divisions. East and West. For the purpose of Sales Budget to Budget Committee, following information has been made available for the year 2014-15

Product	Budgeted Sales		Actual Sales	
	East Division	West Division	East Division	West Division
X	400 units at Rs. 9	600 units at Rs 9	500 units at Rs 9	600 units at Rs 9
Y	300 units at Rs. 21	500 units at Rs. 21	200 units at Rs. 21	500 units at Rs. 21

Adequate market studies reveal that product X is popular but under priced. It is expected that if the price of X is increased by Rs. 1, it will find a ready market. On the other hand, Y is overpriced and if the price of Y is reduced by Rs. 1 it will have more demand in the market. The company management has agreed for the aforesaid price changes. On the basis of these price changes and the reports of salesmen, following estimates have been prepared by the Divisional Managers:

Percentage increase in sales over budgeted sales

Product	East Division	West Division
X	+ 10%	+ 5%
Y	+ 20%	+ 10%

With the help of intensive advertisement campaign, following additional sales (over and above the above mentioned estimated sales by Divisional Managers) are possible:

Product	East Division	West Division
X	60 units	70 units
Y	40 units	50 units

You are required to prepare Sales Budget for 2015-16 after incorporating above estimates and also show the Budgeted Sales and Actual Sales of 2014-15

Question 3

Raees Ltd. is drawing a production plan for its two products Mini max (MM) and Heavy high (HH) for the upcoming year. The company's policy is to hold closing stock of finished goods at 25% of the anticipated volume of sales of the succeeding month. The following are the estimated data for two products:

	Mini max (MM)	Heavy high (HH)
Budgeted Production units	1,80,000	1,20,000
	(Rs.)	(Rs.)
Direct material cost per unit	220	280
Direct labour cost per unit	130	120
Manufacturing overhead	4,00,000	5,00,000

The estimated units to be sold in the first four months of the year 2013-14 are as under

HBA	April	May	June	July
Mini max	8,000	10,000	12,000	16,000
Heavy high	6,000	8,000	9,000	14,000

Prepare production budget and production cost budget for the first quarter in month - wise.

Question 4

Following is the sales budget for the first six months of the current year in respect of Ghungroo Ltd. :

Month	Jan	Feb	March	April	May	June
Sales (units)	10,000	12,000	14,000	15,000	15,000	16,000

Finished goods inventory at the end of each month is expected to be 20% of budgeted sales quantity for the following month. Finished goods inventory was 2,700 units on January 1 of current year. There would be no work-in-progress at the end of any month.

Each unit of finished product requires two types of materials as detailed below

Material X: 4 kg. @ Rs. 10/kg

Material Y: 6 kg. @ Rs. 15/kg

Material on hand on January 1 of current year was 19,000 kg. of material X and 29,000 kg. of material Y. Monthly closing stock of material is budgeted to be equal to half of the requirements of next month's production.

Budgeted direct labour hour per unit of finished product is 4 hour.

Budgeted direct labour cost for the first quarter of the current year is Rs.10,89,000.

Actual data for the quarter one, ended on March 31 of current year is as under:

Actual production quantity	40,000 units
Direct material cost (Purchase cost based on materials actually issued to production)	
Material X: 1,65,000 kg. @ Rs. 10.20 / kg.	
Material Y: 2,38,000 kg. @ Rs. 15.10/ kg.	
Actual direct labour hours worked :	32,000 hours
Actual direct labour cost:	Rs.13,12,000

Required: Prepare the following budgets:

(i) Monthly production quantity for the quarter one.

(ii) Monthly raw material consumption quantity budget from January to April of current year.

(ii) Materials purchase quantity budget for the quarter one.

Question 5

HOMEWORK SUM

Date:

Ali Baba Limited produces and sells a single product Sales budget for current year by a quarters is as under:

Quarters	I	II	III	IV
No. of units to be sold	16,000	22,000	25,000	27,000

The year is expected to open with an inventory of 6,000 units of finished products and close with inventory of 8,000 units. Production is customarily scheduled to provide for 70% of the current quarter's sales demand plus 30% of the following quarter demand. The budgeted selling price per unit is Rs. 40. The standard cost details for one unit of the product are as follows:

Variable Cost Rs. 34.50 per unit

Fixed Overheads @Rs. 2 per hour based on a budgeted production volume of 1,10,000 direct labour hours for the year. Fixed overheads are evenly distributed

through-out the year.

You are required to:

- (i) Prepare Quarterly Production Budget for the year.
- (ii) In which quarter of the year, company expected to achieve bread-even point

Question 6**HOMEWORK SUM**

Date:

Bahubali Ltd a single product company estimated its sales for the next year quarter-wise as under:

Quarter	Sales (Units)
I	30,000
II	37,500
III	41,250
IV	45,000

The opening stock of finished goods is 10,000 units and the company expects to maintain the closing stock of finished goods at 16,250 units at the end of the year. The production pattern in each quarter is based on 80% of the sales of the current quarter and 20% of the sales of the next quarter.

The opening stock of raw materials in the beginning of the year is 10,000 kg & the closing stock at the end of the year is required to be maintained at 5,000 kg. Each unit of finished output requires 2 kg. of raw materials.

The company proposes to purchase the entire annual requirement of raw material in the first three quarters in the proportion and at the prices given below:

Quarter	Purchase of raw materials % to total annual requirement in quantity (Rs.)	Price per kg. (Rs.)
I	30%	2
II	50%	3
III	20%	4

The value of the opening stock of raw materials in the beginning of the year is Rs. 20,000. You are required to present the following for the next year, quarter wise :

- (1) Production budget (in units).
- (2) Raw material consumption budget (in quantity).
- (3) Raw material purchase budget (in quantity and value).

Question 7

Prepare a cash budget for three months ending on 30th June of current year from the information given below:-

	Sales	Materials	Wages	Overheads
(a) Months	(Rs.)	(Rs.)	(Rs.)	(Rs.)
February	14,000	9,600	3,000	1,700
March	15,000	9,000	3,000	1,900
April	16,000	9,200	3,200	2,000
May	17,000	10,000	3,600	2,200
June	18,000	10,400	4,000	2,300

(b) Credit items are:

Sales / Debtors : 10% sales are on cash, 50% of the credit sales are collected next month and the balance in the following month

Creditors : Materials 2 months
 Wages 1/4 month
 Overheads 1/2 month

(c) Cash and Bank balance on 1st April of current year is expected to be Rs.6,000

(d) Other relevant information is :

1. Plant and machinery will be installed in February of current year at a cost of Rs.96,000. The monthly instalment of Rs.2,000 is payable from April onwards.
2. Dividend @5% on preference share capital of Rs.2,00,000 will be paid on 1st June.
3. Advance to be received for sales of vehicles Rs.9,000 in June.
4. Dividends from investments amounting to Rs. 1,000 are expected to be received in June.
5. Income Tax (advance) to be paid in June is Rs.2,000.

Question 8**HOMEWORK SUM**

Date:

From the information given below, prepare a Cash Budget of Bablu Ltd. for the quarter January - March, 2017:

		Dec., 16	Jan., 17	Feb., 17	March., 17	April., 17
a.	Sales Budget Units	60	60	65	75	80
b.	Selling price per unit Rs.	1,000	1,000	1,000	1,000	1,000

c.	Off-season discount	20%	20%	10%	-	-
d.	End of Month Inventory Units	10	120	15	25	25

- e) Half the sales proceeds are collected in the month of sale and the other half in the month following.
- f) Materials amounting to Rs. 300 per unit manufactured are purchased one month in advance of manufacture and paid for in cash earning 5% cash discount on half of the material purchased.
- g) Direct Labour Budget was Rs.50 per unit and variable overheads Rs. 100 per unit
- h) Indirect Labour Budget was Rs.6,000 per month.
- i) Depreciation was provided uniformly at Rs.3,000 per month.
- j) The fixed overheads budget was Rs.6,000 per month during off-season and Rs.7,000 during the season. Out of this, the quarterly premium for fire insurance amounting to Rs.600 was payable in the first month of each quarter.
- k) Dividends for the year 2016, amounting to Rs.2,000 were expected to be declared in March, 2017 and payments were to be spread between March and April.
- i) A machine was sold for Rs. 10,000 in December, 2016 on 3 months Credit. The cash balance as on January 1, 2017 is Rs.1,000.

Question 9

Chammak Challo Ltd. has furnished the following information for the month ending 30th June of current year

	Master Budget	Actual	Variance
Units produced and sold	80,000	72000	
Sales (Rs.)	320000	280000	40000 (A)
Direct material (Rs.)	80000	73600	6400 (F)
Direct wages (Rs.)	120000	104800	15200 (F)
Variable overheads (Rs.)	40000	37600	2400 (F)
Fixed overhead (Rs.)	40000	39200	800 (F)
Total Cost	280000	255200	

The Standard costs of the products are as follows:

	Per unit (Rs.)
Direct materials (1 kg, at the rate of Rs. 1 per kg.)	1.00

Direct wages (1 hour at the rate of Rs. 1.50)	1.50
Variable overheads (1 hour at the rate of Rs. 0.50)	0.50

Actual results for the month showed that 78,400 kg. of material were used and 70,400 labour hours were recorded.

Required:

(i) Prepare Flexible budget for the month and compare with actual result.

Question 10

Rotadi Ltd. is currently operating at 75% of its capacity. In the past two years, the levels of operations were 55% and 65% respectively. Presently, the production is 75,000 units. The company is planning for 85% capacity level during 20X3-20X4. The cost details are as follows:

Particulars	55% (Rs.)	65% (Rs.)	75% (Rs.)
Direct Material	11,00,000	13,00,000	15,00,000
Direct Labour	5,50,000	6,50,000	7,50,000
Factory Overheads	3,10,000	3,30,000	3,50,000
Selling and Distribution Overheads	3,20,000	3,60,000	4,00,000
Administrative Overheads	1,60,000	1,60,000	1,60,000
Total	24,40,000	28,00,000	31,60,000

Profit is estimated @ 20% on sales.

The following increases in costs are expected during the year

Particulars	In percentage
Direct Materials	8
Direct Labour	5
Variable Factory Overheads	5
Variable Selling Overheads	8
Fixed Factory Overheads	10
Fixed Selling Overheads	15
Administrative Overheads	10

Prepare flexible budget for the period 20X3-20X4 at 85% level of capacity Also ascertain profit and contribution.

Question 11**HOMEWORK SUM**

Date:

Dadda Ltd. has prepared budget for the coming year for its two products Bade and Chote.

	Product Bade (Rs.)	Product Chote (Rs.)
Production & Sales unit	6,000 units	9,000 units
Raw material cost per unit	60.00	42.00
Direct labour cost per unit	30.00	18.00
Variable overhead per unit	12.00	6.00
Fixed overhead per unit	8.00	4.00
Selling price per unit	120.00	78.00

After some marketing efforts, the sales quantity of the Product Bade & Chote can be increased by 1,500 units and 500 units respectively but for this purpose the variable overhead and fixed overhead will be increased by 10% and 5% respectively for the both products.

You are required to prepare flexible budget for both the products:

- Before marketing efforts
- After marketing efforts.

Question 12**HOMEWORK SUM**

Date:

A department of Company Shakira attains sale of Rs. 6,00,000 at 80 per cent of its normal capacity and its expenses are given below:

	(Rs.)
Administration costs:	
Office salaries	90,000
General expenses	2 per cent of sales
Depreciation	7,500
Rates & Taxes	8,750
Selling costs:	
Salaries	8 per cent of sales
Travelling expenses	2 per cent of sales
Sales office expenses	1 per cent of sales
General expenses	1 per cent of sales
Wages	15,000
Rent	1 per cent of sales
Other expenses	4 per cent of sales

Draw up flexible administration, selling and distribution costs budget, operating

at 90 per cent, 100 per cent and 110 per cent of normal capacity.

Question 13**HOMEWORK SUM**

Date:

Vasooli Ltd, specialized in manufacturing of piston rings for motor vehicle. It has prepared budget for 8,000 units per annum at budgeted cost of Rs. 21,64,400 as detailed below:

	(Rs.)	(Rs.)
Fixed cost (Manufacturing)		2,28,000
Variable costs:		
Power	18,000	
Repairs, etc.	16,000	
Other variable cost	6,400	
Direct material	6,16,000	
Direct labour	12,80,000	19,36,400
		21,64,400

Considering the possible impact on sales turnover by market trends, the company decides to prepare flexible budget with a production target of 4,000 and 6,000 units. On behalf of the company you are required to prepare a flexible budget for production levels at 50% and 75%

Assuming the selling price per unit is maintained at Rs. 400 as at present, indicate the effect on net profit. Administration, selling and distribution overheads continue at Rs. 72,000

Question 14**HOMEWORK SUM**

Date:

The cost accountant of manufacturing company provides you the following details for current year:

	(Rs.)		(Rs.)
Direct materials	1,75,000	Other variable costs	80,000
Direct Wages	1,00,000	Other fixed costs	80,000
Fixed factory overheads	1,00,000	Profit	1,15,000
Variable factory	1,00,000	Sales	7,50,000

During the year, the company manufactured two products A and B and the output

	A	B
Output (units)	2,00,000	1,00,000
Selling price per unit	Rs.2.00	Rs.3.50

Direct materials per unit	Rs.0.50	Rs.0.75
Direct wages per unit	Rs.0.25	Rs.0.50

Variable factory overhead is absorbed as a percentage of direct wages. Other variable costs have been computed as: Product A Rs. 0.25 per unit; and B Rs. 0.30 per unit.

During next year, it is expected that the demand for product A will fall by 25 % and for B by 50%. It is decided to manufacture a further product C, the cost for which are estimated as follows:

	Product C
Output (units)	2,00,000
Selling price per unit	Rs.1.75
Direct materials per unit	Rs.0.40
Direct wages per unit	Rs.0.25

It is anticipated that the other variable costs per unit will be the same as for product A.

Prepare a budget to present to the management, showing the current position and the position for next year. Comment on the comparative results.

Question 15

Mastani & Co is engaged in the manufacture of specialized sub-assemblies required for certain electronic equipments. The company estimates that in the forthcoming month, December, 20X2, the sales will take a pattern in the ratio of 3:4:2 respectively of sub-assemblies, ACB, MCB and DP.

The following is the schedule of components required for manufacture:

Component requirements

Sub- assembly	Selling price	Base board	IC08	IC12	IC26
ACB	520	1	8	4	2
MCB	500	1	2	10	6
DP	350	1	2	4	8
Purchase price(Rs.)		60	20	12	8

The direct labour time and variable overheads required for each of the sub-assemblies are:

Labour hours per sub-assembly

	Grade A	Grade B	Variable overhead per sub-assembly (Rs.)

ACB	8	16	36
MCB	6	12	24
DP	4	8	24
Direct wage rate per hour (Rs.)	5	4	-

The labours work 8 hours a day for 25 days a month. The opening stocks of sub-assemblies and components for December, 20X2 are as under:

Sub-assemblies		Components	
ACB	800	Base Board	1,600
MCB	1,200	IC08	1,200
DP	2,800	C12	6,000
		IC26	4,000

Fixed overhead amount to Rs. 7,57,200 for the month and a monthly profit target of Rs. 12 lacs has been set.

The company is eager for a reduction of closing inventories for December, 20X2 of sub-assemblies and components by 10% of quantity as compared to the opening stock. Prepare the following budgets for December 2012

- Sales budget in quantity and value.
- Production budget in quantity
- Component usage budget in quantity.
- Component purchase budget in quantity and value.
- Manpower budget showing the number of workers and the amount of wages payable.

Question 16

Hasmukh Limited is presently operating at 50% capacity and producing: 30000 units. The entire output is sold at a price of Rs. 200 per unit. The cost structure at the 50% level of activity is as under:

Particulars	Amount (Rs.)
Direct Material	75 per unit
Direct Wages	25 per unit
Variable Overheads	25 per unit
Direct Expenses	15 per unit
Factory Expenses (25% fixed)	20 per unit

Selling and Distribution Exp. (80% variable)	10 per unit
Office and Administrative Exp. (100% fixed)	5 per unit

The company anticipates that the variable costs will go up by 10% and fixed costs will go up by 15%.

You are required to prepare an Expense budget, on the basis of marginal cost for the company at 50% and 60% level of activity and find out the profits at respective levels.

Question 17

Lootera Ltd. manufactures two products using two types of materials and one grade of labour. Shown below is an extract from the company's working papers for the next month's budget:

	Product A	Product B
Budgeted sales (in units)	2,400	3,600
Budgeted material consumption per unit (in kg):		
Material-X	5	3
Material-Y	4	6
Standard labour hours allowed per unit of product	3	5

Material-X and Material-Y cost Rs. 4 and Rs. 6 per kg and labours are paid Rs. 25 per hour. Overtime premium is 50% and is payable, if a worker works for more than 40 hours a week. There are 180 direct workers.

The target productivity ratio (or efficiency ratio) for the productive hours worked by the direct workers in actually manufacturing the products is 80%. In addition the non-productive down-time is budgeted at 20% of the productive hours worked.

There are four 5-days weeks in the budgeted period and it is anticipated that sales and production will occur evenly throughout the whole period.

It is anticipated that stock at the beginning of the period will be:

Product-A	400 units
Product-B	200 units
Material-X	1,000 kg
Material-Y	500 kg

The anticipated closing stocks for budget period are as below:

Product-A	4 days sales
Product-B	5 days sales

Material-X	10 days consumption
Material-Y	6 days consumption

Required:

Calculate the Material Purchase Budget and the wages Budget for the workers, showing the quantities and values, for the next month.

Question 18

Gabbar glass Manufacturing Company requires you to present the Master budget for the next year from the following information:

Sales :	
Toughened Glass	Rs.6,00,000
Bent Glass	Rs.2,00,000
Direct material cost	60% of sales
Direct wages	20 workers @ Rs. 150 per month
Factory overheads :	
Indirect labour -	
Works manager	Rs.500 per month
Foreman	Rs.400 per month
Stores and spares	2.5% on sales
Depreciation on machinery	Rs. 12,600
Light and power	Rs.3,000
Repairs and maintenance	Rs.8,000
Others sundries	10% on direct wages
Administration, selling and distribution expenses	Rs.36,000 per year

Question 19

HOMEWORK SUM

Date:

Hutiya Manufacturers normally produce 8,000 units of their product in a month, in their Machine Shop. For the month of January, they had planned for a production of 10,000 units. Owing to a sudden cancellation of a contract in the middle of January, they could only produce 6,000 units in January. Indirect manufacturing costs are carefully planned and monitored in the Machine Shop and the Foreman of the shop is paid a 10% of the savings as bonus when in any month the indirect manufacturing cost incurred is less than

the budgeted provision. The Foreman has put in a claim that he should be paid a bonus of Rs. 88.50 for the month of January. The Works Manager wonders how anyone can claim a bonus when the Company has lost a sizeable contract. The relevant figures are as under:

Indirect manufacturing	Expenses for a normal month	Planned for January	Actual in costs January
	(Rs)	(Rs)	(Rs)
Salary of foreman	1,000	1,000	1,000
Indirect labour	720	900	600
Indirect material	800	1,000	700
Repairs & Maintenance	600	650	600
Power	800	875	740
Tools consumed	320	400	300
Rates and taxes	150	150	150
Depreciation	800	800	800
Insurance	100	100	100
Total	5,290	5,875	4,990

Do you agree with the Works Manager? Is the Foreman entitled to any bonus for the performance in January? Substantiate your answer with facts and figures.

Question 20

HOMEWORK SUM

Date:

Gaitonde Limited has prepared its expense budget for 20,000 units in its factory for the year 2017 as detailed below:

Particulars	(Rs per unit)
Direct Materials	50
Direct Labour	20
Variable Overhead	15
Direct expenses	6
Selling Expenses (20% fixed)	15
Factory Expenses (100% fixed)	7
Administration expenses (100% fixed)	4
Distribution expenses (85% variable)	12
Total	129

Prepare an expense budget for the production of 15,000 units and 18,000 units.

Question 21**HOMEWORK SUM**

Date:

Tequila Motor Vehicle manufacturer has prepared sales budget for the next few months, and the following draft figures are available:

Month	No. of vehicles
October	4,000
November	3,500
December	4,500
January	6,000
February	6,500

To manufacture a vehicle a standard cost of Rs. 2,85,700 is incurred and sold through dealers at an uniform selling price of Rs. 3,95,600 to customers. Dealers are paid 12.5% commission on selling price on sale of a vehicle.

Apart from other materials four units of Part-X are required to manufacture a vehicle. It is a policy of the company to hold stocks of Part-X at the end of the each month to cover 40% of next month's production. 4,800 units of Part-X are in stock! as on 1st October

There are 950 nos. of completed vehicles are in stock as on 1st October and it is policy to have stocks at the end of each month to cover 20% of the next month's sales

You are required to

- Prepare Production budget (in nos.) for the month of October, November, December and January
- Prepare e Purchase budget for Part-X (in units) for the months of October, November and December
- Calculate the budgeted gross profit for the quarter October to December.

Question 22

A company is at present working at 90% of its capacity and producing 13,500 Units per annum. It operates a flexible budgetary control system. The following. Figures are obtained from its budget:

	(90%)	(100%)
	(Rs.)	(Rs.)
Sales	15,00,000	16,00,000
Fixed expenses	3,00,500	3,00,600

Semi-fixed expenses	97,500	1,00,500
Variable expenses	1,45,000	1,49,500
Units made	13,500	15,000

Labour and material costs per unit are constant under present conditions.
Profit margin is 10%

- (i) You are required to determine the differential cost of producing 1,500 Units by increasing capacity to 100%.
- (ii) What would you recommend for an export price for these 1,500 units if overseas prices are much lower than indigenous prices?

Solution 22

Sales at 90% capacity utilization	15,00,000
Less: Profits (10%)	1,50,000
Cost of goods sold	13,50,000
Less: Expenses (fixed, semi-fixed and variable)	5,43,000
Cost of materials and labour	8,07,000

Therefore, cost of materials and labour at 100% capacity utilization
 $= 8,07,000 \times 100/90 = \text{Rs.} 8,96,667$

Differential cost analysis will be as follows :

	Capacity utilization	
	90 %	100%
Production (units)	13,500	15,000
Materials and Labour	8,07,000	8,96,667
Variable expenses	1,45,000	1,49,500
Semi-variable expenses	97,500	1,00,500
Fixed expenses	3,00,500	3,00,600
Total cost	13,50,000	14,47,267

(a) Differential cost = $14,47,267 - 13,50,000 = \text{Rs.} 97,267$

(b) Minimum price for export = $97,267/1,500 = \text{Rs.} 64.84$ per unit

At this price there is no addition to revenue. Any price above Rs.64.84 per unit

may be accepted. A price below this may be considered, if other benefits (i.e., other than mere sales and revenue) are likely to accrue. It is assumed that no capital investment is necessary and no export charges have to be incurred and that the export price will have no effect on the home market where the product will continue to be sold at the old price, it is also assumed that necessary precautions have been taken to ensure that the product is not "dumped" back.

Question 23

As a Cost and Management Accountant of MJK Ltd., prepare a Sales Overhead Budget for the months of January, February and March from the estimates given below:

Expenses per month:

	Rs.
Advertisement	2,500
Salaries of the Sales Department	5,000
Expenses of the Sales Department	1,500
Counter Salesmen's Salaries and Dearness Allowance	6,000
Commission Salesmen's Salaries and Dearness Allowance	6,000

Commission to counter salesmen @ 1% on their sales. Travelling salesmen's Commission @ 10% on their sales and expenses @ 5% on their sales.

The sales during the period were estimated as under"

Month	Counter Sales (Rs.)	Travelling Salesmen Sales (Rs.)
January	80,000	10,000
February	1,20,000	15,000
March	1,40,000	20,000

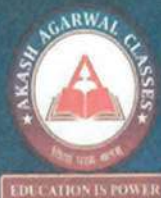
Solution 23

Sales Overhead Budget (for the period ending....)

Estimated Sales (Rs.)	90,000	1,35,000	1,60,000
Fixed Overhead :			
Advertising	2500	2500	2500
Salaries of sales department	5000	5000	5000
Expenses of Sales department	1500	1500	1500
Counter salesman Salaries and			
Dearness Allowances	6000	6000	6000
	15000	15000	15000
Variable Overhead:			
Counter Salesman Commission @			
1% on Sales	800	1200	1400
Traveling Salesman Commission @			
10%	1000	1500	2000
Expenses	500	750	1000
	2300	3450	4400
Total Sales Overhead	17,300	18,450	4,400



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 SHRUTI K. 314	 REENA RAO 312	 ABHISHEK 310	 SANIKA P. 306	 KHUSHI S. 306	 OMKAR Y. 303	 APURVA S. 302	 PRATIK J. 301	 AMAN S. 299	 RAKSHIT C. 299
 PRANJAL 298	 SAI 281	 VAISHNAVI 278	 RUSHIKESH 278	 KUSHAL 275	 SAKSHI W. 275	 VAISHNAVI 274	 AKSHAD P. 273	 SHREYAS 273	 MADHURA G. 271
 SUJATA R. 270	 KHUSHI R. 269	 VAISHNAVI 269	 NIKITA T. 266	 POONAM B. 266	 YSHMIN S. 259	 SHRUSTHI 257	 DIVYA K. 257	 NIKHIL T. 256	 DIVYAL T. 251
 SAKSHI N. 248	 ADITYA 248	 MADHURI 247	 DIKSHA K. 244	 SALONI N. 236	 SWARALI 232	 SAKSHI J. 230	 SHITAL K. 229	 ASHUTOSH 229	 SHAKTI H. 225

& MANY MORE



KULJOT SINGH
380 Marks



PUSHPESH S.
378 Marks



SHUBHAM A.
378 Marks



RAJPUROHIT
374 Marks



ISHU S.
370 Marks



VIKAS M.
360 Marks



SHUBHANGSHU
358 Marks



MIHIR M.
358 Marks



NEHA M.
358 Marks



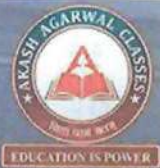
NEHA K.
354 Marks



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344
Marks
NADIA



344
Marks
AYUSH



338
Marks
SHAISTA



338
Marks
MANYA



334
Marks
BHAVESH



336
Marks
AMAN



332
Marks
MADHUR



330
Marks
SANYA



330
Marks
RISHABH



328
Marks
AAYSHA



326
Marks
ARCHI



326
Marks
ATHARVA



326
Marks
HARSHITA



324
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FARHIN



324
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RIYA



324
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ARYA



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ADITHYA



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VICKY



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RUTUJA



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FIRDOUS



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DIVYA



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DHWANI



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DEEPIKA



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BHAVANA



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KOTNI



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RIK



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MANISHA



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PRERNA



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ABBAS



306
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JYOTI



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RIYA



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DARSHNA



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Marks
SHRIKANT



300
Marks
AKHILESH

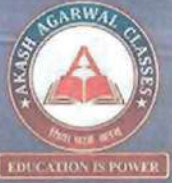
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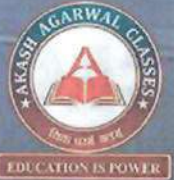
LAW TOP SCORER

Divya K.	92	Arya L.	84	Ram	80
Farhin P.	92	Keshav S.	84	Swet K.	80
Madhur	92	Harshad	84	Alok P.	80
Rimpi	90	Komal C.	84	Khushi	80
Nadia	88	Akhilesh	84	Krishna	80
Shaista	88	Aaysha	84	Karan	80
Adithya	88	Atharva	84	Manya	80
Rutuja	88	Harshita	84	Riya	78
Vaibhav	88	Bhavesh	84	AND MANY MORE...	
Bhavana	86	Nitish	84		
Rik	86	Govind B.	84		
Prerna	86	Sana	82		
Firdous	86	Zaid	82		
Ayush	86	Shalini	82		
Rishabh	86	Soumik	82		
Anuj	86	Somyadeep	82		

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MATHS TOP SCORER

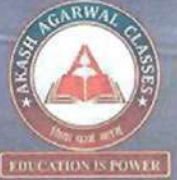
Rahul D.	92	Keshav	78	Alok P.	68
Manya K.	88	Bhavna	76	Sourav K.	68
Bhavesh	88	Shaista	76	Vadgama	66
Sanya K.	88	Harshita	76	Komal C.	66
Ayush P.	84	Vaibhav	76	Vinita D.	66
Deepika	84	Divya	74	Samra	66
Kotni S.	82	Sameer	74	Nupur S.	66
Atharva	82	Sameer	74	Anjali G.	66
Madhur	80	Farhin	72	Swet K.	64
Nadia	80	Ritik K.	72	AND MANY	
Aaysha K.	80	Misbah	72	MORE...	
Prerna	80	Rik	72		
Arya L.	78	Somyadeep	72		
Vicky S.	78	Riya	70		
Adithya	78	Rutuja	70		
Rishabh	78	Bhavana	68		



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ECO & MANAGEMENT TOP SCORER

Ritik K.	94	Jyoti	86	Ritik	80
Nadia	94	Aaysha	86	Anirudh	80
Vicky	94	Ayush	86	Anushka	80
Anchal	92	Archi	86	Priya	80
Harshita	92	Sana	84	Aman	80
Manya	92	Aman	84	Siafat	80
Srikant	90	Sourav	84	Siddharth	80
Bhavna	90	Dhwani	82	Priyanka	80
Rutuja	88	Jagdish	82	AND MANY MORE...	
Deepika	88	Adithya	82		
Soumyadip	88	Vaibhav	82		
Farhin	88	Alok	82		
Suman	88	Karan	82		
Radhika	88	Anshh	82		
Pinky P.	86	Sunny	82		
Riya	86	Vicky	82		

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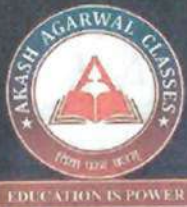


ACCOUNTS TOP SCORER

Chaithaya	100	Nitish	80	Adithya	74
Atharva	88	Piyush	78	Harshita	74
Ayush	88	Saika	78	Rutuja	74
Firdous	88	Manya	78	Arya	72
Archi	86	Jagdish	78	Farhin	72
Dhwani	86	Aaysha	78	Abdul	72
Madhur	86	Rimpi	76	Zaid	72
Shaista	84	Khushi	76	Simran	72
Bhavesh	84	Shashwat	76	AND MANY	
Rahul	84	Anushya	76	MORE...	
Rishabh	82	Harshit	76		
Abhishek	82	Narayan	76		
Manisha	82	Hari Darsan	74		
Nadia	82	Vadgama	74		
Rishabh	82	Jyoti	74		
Sanya	80	Prerna	74		



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CMA INTER JULY 23 RESULTS

Students Scoring Exemption In **DT**



OM D.
78 MARKS



JAGDISH SINGH
74 MARKS



REEYA JAIN
72 MARKS



DIYA PERIMGEEL
72 MARKS



HIRAL MANKAD
71 MARKS



LAKKIMSETTY
70 MARKS



RATNAKAR C.
70 MARKS



VAIDIK S.
70 MARKS



AYUSH SHAW
68 MARKS



ASHISH MISHRA
67 MARKS



ARCHIT GUPTA
66 MARKS



PRIYANKA S.
65 MARKS



ASMITA BHISE
65 MARKS



SATYAM KUMAR
64 MARKS



RAHUL S.
64 MARKS



VISHAL S.
64 MARKS



BHAVANI S.
64 MARKS



YASH DAHALE
63 MARKS



ABHISHEK G.
63 MARKS



KIRTI PATRA
63 MARKS



RUCHIKA RATHI
62 MARKS



VANSHIKA A.
61 MARKS



SONIYA C.
61 MARKS



KANNIKA G.
60 MARKS



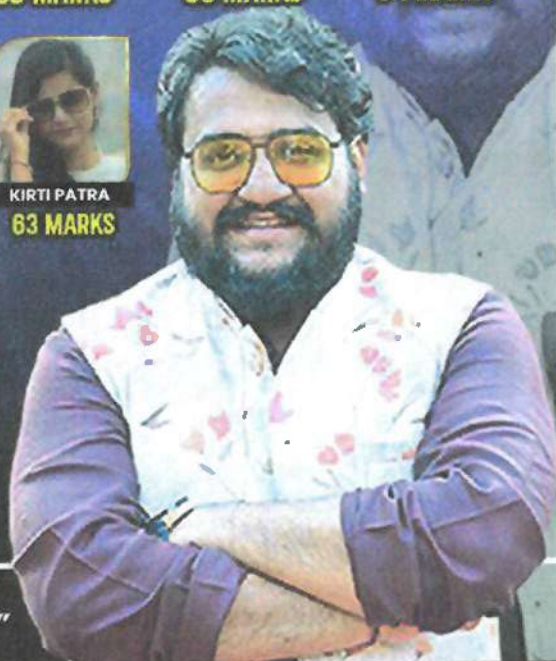
SHWETA GURAV
60 MARKS

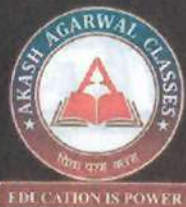
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SONIYA C.
79 MARKS



VAIDIK SAHANE
72 MARKS



DIYA PERIMGEEL
70 MARKS



LAKSHIMSETTY
68 MARKS



BHAVANI SURVI
69 MARKS



ASHISH MISHRA
67 MARKS



TULSI JHA
67 MARKS



HIRAL MANKAD
67 MARKS



YAMINI C.
67 MARKS



BHARGAVI
66 MARKS



NIKHIL P.
66 MARKS



OM DARWATKAR
65 MARKS



SATYAM KUMAR
65 MARKS



ROUNAK J.
64 MARKS



SHIFA SHIAKH
64 MARKS



TANNU JHA
64 MARKS



RITESH PAWAR
63 MARKS



VEDANT M.
63 MARKS



KRISHNA K.
62 MARKS



ZAINAB
62 MARKS



MIRYALA VIKAS
61 MARKS



NATRANJAN
60 MARKS



ZUVERIYA H.
60 MARKS



KANNIKA G.
60 MARKS



TAPAS M.
60 MARKS

and many more ...

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IAKKIMSETTY
89 MARKS



AYUSHI GALA
80 MARKS



ADITI BALGI
80 MARKS



LAVISH MISHRA
78 MARKS



PRACHI AGARWAL
78 MARKS



SARTHAK APTE
75 MARKS



SWATI SARDA
74 MARKS



TANVI PATIL
73 MARKS



DNYANESHWAR
73 MARKS



BIBHUTI NAYAK
73 MARKS



DIYA PERIMGEL
73 MARKS



SHIVAM KHETAN
68 MARKS



VAISHNAVI A.
68 MARKS



NIKHIL KHUBLE
68 MARKS



KESHAV SHARMA
68 MARKS



SANKET G.
68 MARKS



ANJU YADAV
66 MARKS



RUCHI KAMTHE
66 MARKS



HARSH DARJI
65 MARKS



SWATI VAISHNAV
65 MARKS



ANANYA RAO
64 MARKS



YASHAN SINGLA
63 MARKS



LUV SINGH
63 MARKS



TAHER KAYDA
61 MARKS



JAYM FIRODIYA
60 MARKS

and many more ...

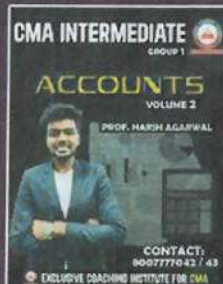
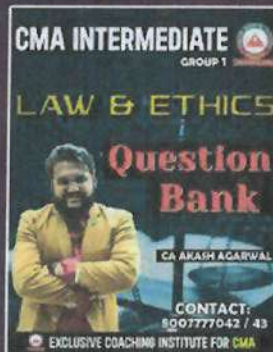
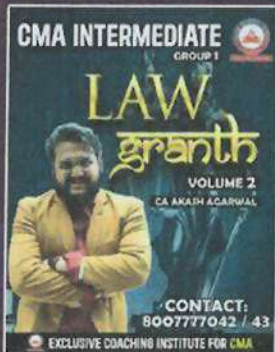
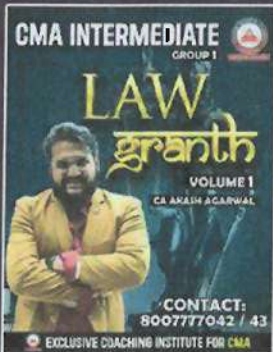
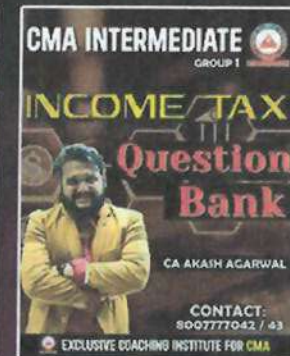
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2. [Name]	[Date]	[Time]
3. [Name]	[Date]	[Time]
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