

Roll No.

Total No. of Questions – 6

Total No. of Printed Pages – 12

Time Allowed – 3 Hours

Maximum Marks – 100

MGT2

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

Question No. 1 is compulsory.

Answer any **four** questions out of the remaining **five** questions.

Working notes should form part of the answers.

Marks

4×5

=20

✓ Answer the following :

(a) Following data is available for ABC Ltd :

Standard working hours	8 hours per day of 5 days per week
Maximum Capacity	60 employees
Actual working	50 employees
Actual hours expected to be worked per four week	8000 hours
Standard hours expected to be earned per four week	9600 hours
Actual hours worked in the four week period	7500 hours
Standard hours earned in the four week period	8800 hours

MGT2

P.T.O.

(2)

MGT2**Marks**

The related period is of four weeks.

Calculate the following Ratios :

- (i) Efficiency Ratio (ii) Activity Ratio
 (iii) Standard Capacity Usage Ratio (iv) Actual Capacity Usage Ratio
 (v) Actual Usage of Budgeted Capacity Ratio
- (b) M/s. Zeba Private Limited allotted a standard time of 40 hours for a job and the rate per hour is ₹ 75. The actual time taken by a worker is 30 hours.

You are required to calculate the total earnings under the following plans :

- (i) Halsey Premium Plan (Rate 50%) (ii) Rowan Plan
 (iii) Time Wage System (iv) Piece Rate System
 (v) Emerson Plan
- (c) A Factory is engaged in the production of chemical Bomex and in the course of its manufacture a by-product Cromex is produced which after further processing has a commercial value. For the month of April 2019 the following are the summarised cost data :

	Joint Expenses (₹)	Separate Expenses (₹)	
		Bomex	Cromex
Materials	1,00,000	6,000	4,000
Labour	50,000	20,000	18,000
Overheads	30,000	10,000	6,000
Selling Price per unit		100	40
Estimated profit per unit on sale of Cromex			5
Number of units produced		2000 units	2000 units

MGT2

(3)

MGT2

Marks

The factory uses net realisable value method for apportionment of joint cost to by-products.

You are required to prepare statements showing :

- (i) Joint cost allocable to Cromex
- (ii) Product wise and overall profitability of the factory for April 2019.

- (d) M/s. Abid Private Limited disclosed a net profit of ₹ 48,408 as per cost books for the year ending 31st March 2019. However, financial accounts disclosed net loss of ₹ 15,000 for the same period. On scrutinizing both the set of books of accounts, the following information was revealed :

	₹
Works Overheads under-recovered in Cost Books	48,600
Office Overheads over-recovered in Cost Books	11,500
Dividend received on Shares	17,475
Interest on Fixed Deposits	21,650
Provision for doubtful debts	17,800
Obsolescence loss not charged in Cost Accounts	17,200
Stores adjustments (debited in Financial Accounts)	35,433
Depreciation charged in financial accounts	30,000
Depreciation recovered in Cost Books	35,000

Prepare a Memorandum Reconciliation Account.

MGT2

P.T.O.

2. (a) M/s. Areeba Private Limited has a normal production capacity of 36000 units of toys per annum. The estimated costs of production are as under : 10

- | | |
|---|---|
| (i) Direct Material ✓ | ₹ 40 per unit |
| (ii) Direct Labour ✓ | ₹ 30 per unit (subject to a minimum of ₹ 48,000 p.m.) |
| (iii) Factory Overheads : | |
| (a) Fixed ✓ | ₹ 3,60,000 per annum |
| (b) Variable ✓ | ₹ 10 per unit |
| (c) Semi-variable | ₹ 1,08,000 per annum up to 50% capacity and additional ₹ 46,800 for every 20% increase in capacity or any part thereof. |
| (iv) Administrative Overheads | ₹ 5,18,400 per annum (fixed) |
| (v) Selling overheads are incurred at ₹ 8 per unit. | |
| (vi) Each unit of raw material yields scrap which is sold at the rate of ₹ 5 per unit. | |
| (vii) In year 2019, the factory worked at 50% capacity for the first three months but it was expected that it would work at 80% capacity for the remaining nine months. | |
| (viii) During the first three months, the selling price per unit was ₹ 145. | |

You are required to :

- (i) Prepare a cost sheet showing Prime Cost, Works Cost, Cost of Production and Cost of Sales.
- (ii) Calculate the selling price per unit for remaining nine months to achieve the total annual profit of ₹ 8,76,600.

- (b) KT Ltd. produces a product EMM which passes through two processes before it is completed and transferred to finished stock. The following data relate to May 2019 :

10

Particulars	Process		Finished stock
	A (₹)	B (₹)	(₹)
Opening Stock	5,000	5,500	10,000
Direct Materials	9,000	9,500	
Direct Wages	5,000	6,000	
Factory Overheads	4,600	2,030	
Closing Stock	2,000	2,490	5,000
Inter-process profit included in opening stock		1,000	4,000

Output of Process A is transferred to Process B at 25% profit on the transfer price and output of Process B 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 B. Sales during the period are ₹ 75,000.

Prepare the Process cost accounts and Finished stock account showing the profit element at each stage.

3. (a) A gang of workers normally consists of 30 skilled workers, 15 semi-skilled workers and 10 unskilled workers. They are paid at standard rate per hour as under :

10

Skilled	₹ 70
Semi-skilled	₹ 65
Unskilled	₹ 50

(6)

MGT2

Marks

In a normal working week of 40 hours, the gang is expected to produce 2000 units of output. During the week ended 31st March, 2019, the gang consisted of 40 skilled, 10 semi-skilled and 5 unskilled workers. The actual wages paid were at the rate of ₹ 75, ₹ 60 and ₹ 52 per hour respectively. Four hours were lost due to machine breakdown and 1600 units were produced.

Calculate the following variances showing clearly adverse (A) or favourable (F)

- (i) Labour Cost Variance (ii) Labour Rate Variance
(iii) Labour Efficiency Variance (iv) Labour Mix Variance
(v) Labour Idle Time Variance

- (b) MNO Ltd. manufactures two types of equipment A and B and absorbs overheads on the basis of direct labour hours. The budgeted overheads and direct labour hours for the month of March 2019 are ₹ 15,00,000 and 25,000 hours respectively. The information about the company's products is as follows :

10

	Equipment	
	A	B
Budgeted Production Volume	3200 units	3,850 units
Direct Material Cost	₹ 350 per unit	₹ 400 per unit
Direct Labour Cost		
A : 3 hours @ ₹ 120 per hour	₹ 360	
B : 4 hours @ ₹ 120 per hour		₹ 480

MGT2

Overheads of ₹ 15,00,000 can be identified with the following three major activities :

Order processing : ₹ 3,00,000

Machine processing : ₹ 10,00,000

Product Inspection : ₹ 2,00,000

These activities are driven by the number of orders processed, machine hours worked and inspection hours respectively. The data relevant to these activities is as follows :

	Orders processed	Machine hours worked	Inspection hours
A	400	22,500	5,000
B	200	27,500	15,000
Total	600	50,000	20,000

Required :

- (i) Prepare a statement showing the manufacturing cost per unit of each product using the absorption costing method assuming the budgeted manufacturing volume is attained.
- (ii) Determine cost driver rates and prepare a statement showing the manufacturing cost per unit of each product using activity based costing, assuming the budgeted manufacturing volume is attained.
- (iii) MNO Ltd's selling prices are based heavily on cost. By using direct labour hours as an application base, calculate the amount of cost distortion (under costed or over costed) for each equipment.

4. (a) X Ltd. distributes its goods to a regional dealer using single lorry. The dealer premises are 40 kms away by road. The capacity of the lorry is 10 tonnes. The lorry makes the journey twice a day fully loaded on the outward journey and empty on return journey. The following information is available :

✓ Diesel consumption ✓	8 km per litre
✓ Diesel cost	₹ 60 per litre
✓ Engine Oil	₹ 200 per week
✓ Driver's Wages (fixed)	₹ 2,500 per week
✓ Repairs	₹ 600 per week
✓ Garage Rent	₹ 800 per week
Cost of Lorry (excluding cost of tyres)	₹ 9,50,000
Life of Lorry	1,60,000 kms
✓ Insurance	₹ 18,200 per annum
✓ Cost of Tyres	₹ 52,500
✓ Life of Tyres	25,000 kms
✓ Estimated sale value of the lorry at end of its life is ₹ 1,50,000.	
✓ Vehicle License cost	₹ 7,800 per annum
✓ Other overhead cost	₹ 41,600 per annum

The lorry operates on a 5 day week.

Required :

- (i) A statement to show the total cost of operating the vehicle for the four week period analysed into Running cost and Fixed cost.
- (ii) Calculate the vehicle operating cost per km and per tonne km.
- (Assume 52 weeks in a year.)

(9)

MGT2

Marks

- (b) The following are the details of receipt and issue of material 'CXE' in a manufacturing Co. during the month of April 2019 : 10

Date	Particulars	Quantity (kg)	Rate per kg
April 4	Purchase	3000	₹ 16
April 8	Issue	1000	
April 15	Purchase	1500	₹ 18
April 20	Issue	1200	
April 25	Return to supplier out of purchase made on April 15	300	
April 26	Issue	1000	
April 28	Purchase	500	₹ 17

Opening stock as on 01-04-2019 is 1000 kg @ ₹ 15 per kg

On 30th April, 2019 it was found that 50 kg of material 'CXE' was fraudently misappropriated by the store assistant and never recovered by the Company.

Required :

- Prepare a store ledger account under each of the following method of pricing the issue :
 - Weighted Average Method
 - LIFO
- What would be the value of material consumed and value of closing stock as on 30-04-2019 as per these two methods ?

MGT2

P.T.O.

5

- (a) M/s. Gaurav Private Limited is manufacturing and selling two products :

5

'BLACK' and 'WHITE' at selling price of ₹ 20 and ₹ 30 respectively.

The following sales strategy has been outlined for the financial year 2019-20 :

- (i) Sales planned for the year will be ₹ 81,00,000 in the case of 'BLACK' and ₹ 54,00,000 in the case of 'WHITE'.
- (ii) The selling price of 'BLACK' will be reduced by 10% and that of 'WHITE' by 20%.
- (iii) Break-even is planned at 70% of the total sales of each product.
- (iv) Profit for the year to be maintained at ₹ 8,26,200 in the case of 'BLACK' and ₹ 7,45,200 in the case of 'WHITE'. This would be possible by reducing the present annual fixed cost of ₹ 42,00,000 allocated as ₹ 22,00,000 to 'BLACK' and ₹ 20,00,000 to 'WHITE'.

You are required to calculate :

- (1) Number of units to be sold of 'BLACK' and 'WHITE' to Break even during the financial year 2019-20.
- (2) Amount of reduction in fixed cost product-wise to achieve desired profit mentioned at (iv) above.

- (b) M/s. Zaina Private Limited has purchased a machine costing ₹ 29,14,800 and it is expected to have a salvage value of ₹ 1,50,000 at the end of its effective life of 15 years. Ordinarily the machine is expected to run for 4500 hours per annum but it is estimated that 300 hours per annum will be lost for normal repair & maintenance. The other details in respect of the machine are as follows :

5

- (i) Repair & Maintenance during the whole life of the machine are expected to be ₹ 5,40,000.

- (ii) Insurance premium (per annum) 2% of the cost of the machine.
- (iii) Oil and Lubricants required for operating the machine (per annum) ₹ 87,384.
- (iv) Power consumptions : 10 units per hour @ ₹ 7 per unit. No power consumption during repair and maintenance.
- (v) Salary to operator per month ₹ 24,000. The operator devotes one-third of his time to the machine.

You are required to calculate comprehensive machine hour rate.

- (c) A contractor prepares his accounts for the year ending 31st March each year. He commenced a contract on 1st September, 2018. The following information relates to contract as on 31st March, 2019 : 10

✓ Material sent to site ₹	₹ 18,75,000
✓ Wages paid ₹	₹ 9,28,500
✓ Wages outstanding at end ₹	₹ 84,800
✓ Sundry Expenses ₹	₹ 33,825
Material returned to supplier ₹	₹ 15,000
✓ Plant purchased ₹	₹ 3,75,000
✓ Salary of supervisor ₹	₹ 15,000 per month
✓ (Devotes 1/3 rd of his time on contract)	
✓ Material at site as on 31-03-2019 ₹	₹ 2,16,800

Some of material costing ₹ 10,000 was found unsuitable and was sold for ₹ 11,200. On 31-12-2018 plant which costs ₹ 25,000 was transferred to some other contract and on 31-01-2019 plant which costs ₹ 32,000 was returned to stores. The plant is subject to annual depreciation @ 15% on written down value method.

The contract price is ₹ 45,00,000. On 31st March, 2019 two-third of the contract was completed. The architect issued certificate covering 50% of the contract price.

Prepare Contract A/c. and show the notional profit or loss as on 31st March, 2019.

6. Answer any four of the following :

4×5
=20

- (a) Differentiate between cost control and cost reduction.
- (b) What are the cases when a flexible budget is found suitable ?
- (c) Explain integrated accounting system and state its advantages.
- (d) Explain Direct Expenses and how these are measured and their treatment in cost accounting.
- (e) What are the limitations of marginal costing ?

MGT2