

# M.K.G CA EDUCATION

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## TEST-3

## CA INTER

(19-06-2022)

## COST AND MANAGEMENT ACCOUNTING

### Topics Covered:

1. Labour Cost
2. Contract Costing

Roll No ...452185.....

Total No. of Question: 13

Time allowed: 3 hours

Total No. of Printed Pages: 7

Maximum Marks: 100

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

All Questions are compulsory.

Working notes should form part of the answer.

**Q.1** The following details are available from the books of accounts (for the year ended 31<sup>st</sup> March, 2022) of a contractor with respect to a particular contract (No. 13), he has undertaken for an organization:

Work in progress on 1-4-2021	₹2,00,000
Material in hand on 1.4.2021	18,000
Materials sent to site	5,11,800
Labour paid at site	4,66,100

Cost of plant installed at site	1,50,000
Direct expenses	24,000
Establishment expenses	29,000
Materials sent to other contract	22,120
Cost of work not certified	1,31,000
Materials in hand (as on 31 <sup>st</sup> March, 2022)	12,220
Accrued wages (as on 31 <sup>st</sup> March, 2022)	11,160
Accrued direct expenses (as on 31 <sup>st</sup> March, 2021)	1,330
Value of plant (as revalued on 31 <sup>st</sup> March, 2022)	128,000

The contract price agreed upon with contractee is ₹18,00,000. Payment of ₹10,50,000 has been received from the contractee which represents 80% of work certified. Material costing ₹15,000 found unsuitable and sold at a profit of 25% of sales. **You are required** to prepare the Contract Account No. 13 for the year ended 31<sup>st</sup> March 2022. [10]

**Q.2** The following is the trial balance of GS Construction Company, engaged on the execution of Contract No. 007, for the year ended 31<sup>st</sup> December, 2022:

Contractee's Account – amount received		₹3,60,000
Buildings	₹2,60,000	
Creditors		72,000
Bank Balance	35,000	
Capital Account		5,70,000
Materials	2,00,000	
Wages	1,80,000	
Expenses	47,000	
Plant	2,80,000	
	-----	-----
	<u>10,02,000</u>	<u>10,02,000</u>

The work on Contract No. 007 was commenced on 1<sup>st</sup> January 2022. Materials costing ₹1,70,000 were sent to the site of the contract but those of ₹6,000 were destroyed in an accident and insurance claim of ₹4,500 admitted. Wages of ₹1,80,000 were paid during the year. Plant costing ₹80,000 was used on the contract all through the year. Plant with a cost of ₹2 lakhs was used from 1<sup>st</sup> January to 30<sup>th</sup> September and was then returned to the stores. Materials of the cost of ₹8,000 were at site on 31<sup>st</sup> December, 2022. Wages of ₹10,000 is outstanding at the end of the year. Expenses of ₹5,000 paid for next year.

The contract was of ₹8,00,000 and the contractee pays 70% of the work certified. Work certified was 75% of the total contract work at the end of 2022. Uncertified work was estimated at ₹45,000 on 31<sup>st</sup> December, 2022.

Expenses are charged to the contract at 20% of Wages. Plant & Building is to be depreciated at 15% for the entire year.

**Prepare** Contract No, 007 Account for the year 2022 and make out the Balance Sheet as on 31<sup>st</sup> December 2022 in the books of GS Construction Co. [15]

- Q.3** Sethi Construction Limited commenced a contract on 1.4.2022. The total contract price was Rs.8,00,000 but Sethi Construction Limited accepted the same for Rs.7,50,000. It was decided to estimate the total profit. Actual expenditure till 31.12.2022 and estimated expenditure in 2023 are given below:

Expenses	Actual Till 31.12.22	Estimate For 2023
Materials issued to site	Rs.95,000	Rs.1,30,000
Labour paid	85,000	1,20,000
Accrued Wages	34,000	---
Plant Purchased (original cost)	1,40,000	---
Misc. Expenses	70,000	35,500
Plant Returned to Stores at original cost	80,000	50,000
	On 31.12.22	As at (30.9.23)
Materials at Site	5,000	4,000
Work Certified	4,50,000	Full
Work uncertified	7,500	Nil
Cash Received	3,80,000	Full

The plant is subject to annual depreciation @ 20% on WDV basis. The contract is likely to be completed on 30.9.23. **You are required to prepare** the contract account and Total Contract Account for the year ended 31.12.2022. Workings should be clearly given. It is the policy of the company to charge depreciation on time basis. [15]

- Q.4** A contract for construction of building is governed by an escalation clause in respect of prices of steel, cement and stone aggregate. The prices ruling on the date of tender for the building and the actual prices paid by the contractor were as follows:

	On the date of tender	Actual
Steel per ton	₹ 1,210	₹ 1,375
Cement per ton	400	440
Stone aggregate per 100 cft.	120	113

4,50,000 cft. reinforced cement concrete was laid in the building. If 100 lbs. of steel, 2,700 lbs. of cement and 90 cft. stone are the net quantities required to cast 100 cft. of RCC and the wastages are 5, 8 and 12 per cent respectively, **calculate** the difference in selling price according to the escalation clause (1 ton = 2,240 lbs.) Assume that the wastage percentage is based on the net quantity of material. [10]

- Q.5** In a factory, Ram and Sham produce the same product using the same input of same material and at the same normal wage rate.

Bonus is paid to both of them in the form of normal time wage rate adjusted by the proportion which time saved bears to the standard time for the completion of the product. The time allotted to the product is fifty hours. Ram takes thirty hours and Sham takes forty hours to produce the product. The

Factory Cost of the product for Ram is ₹3,100 and for Sham ₹3,280. The Factory Overhead Rate is ₹12 per man-hour.

**Calculate** (i) Normal Wage Rate; (ii) Cost of material used for the product and (iii) the input of material if the unit material cost is ₹ 16. [6]

**Q.6** The management of Sunshine Ltd wants to have an idea of the profit lost/foregone as a result of labour turnover last year.

Last year sales accounted to ₹ 99,00,000 and the Variable cost to sales ratio was 75%. The total number of actual hours worked by the direct labour force was 3.45 lakhs. As a result of the delays by the Personnel Department in filling vacancies due to labour turnover, 95,000 potentially productive hours were lost. The actual direct labour hours included 30,000 hours attributable to training new recruits, out of which half of the hours were unproductive. The costs incurred consequent on labour turnover revealed on analysis the following:

	₹
Settlement cost due to leaving	35,420
Recruitment costs	20,525
Selection costs	12,750
Training costs	16,105

Assuming that the potential production lost due to labour turnover could have been sold at prevailing prices, **ascertain** the profit foregone/lost year on account of labour turnover. [6]

**Q.7** A worker is allowed 60 hours to complete the job on a guaranteed wage of ₹10 per hour. Under the Rowan Plan, he gets an effective hourly wage of ₹ 12 per hour. For the same saving as time, **how** much he will get under the Halsey Plan? [3]

**Q.8** From the following data provided to you **find out** the Labour Turnover Rate by applying:  
(a) Flux Method (b) Replacement Method (c) Separation Method.

No. of workers on the payroll	
At the beginning of the month	?
At the end of the month	600 Representing 120% of workers in the beginning

During the month, 5 workers left, 20 persons were discharged and 75 workers were recruited. Of these, 10 workers were recruited in the vacancies of those leaving, while the rest engaged for an expansion scheme. [6]

**Q.9** **Calculate** the earnings of A & B from the particulars for a month & allocate the labour cost to each job X, Y, Z:

	A	B
(i) Basic Wages	₹1,500	1,800
(ii) Dearness Allowances	50%	50%
(iii) Contribution to provident Fund (on basic wages)	8%	8%
(iv) Contribution to Employee's State Insurance (On basic wages)	5%	7%
(v) Overtime	Hours 10	

The normal working hours for the month are 200. Overtime is paid at double the total of normal wages and dearness allowance. Employer's contribution to state Insurance and Provident Fund are at equal rates with employee's contributions. The two workers were employed on jobs X, Y and Z in the following proportions:

	Job X	Job Y	Job Z
Worker A	50%	30%	20%
Worker B	40%	25%	35%

Overtime was done on job Y.

[6]

**Q.10** The cost accountant of Y Ltd. has computed labour turnover rates for the quarter ended 31<sup>st</sup> March 2022 as 12%, 7% and 4% respectively under 'Flux Method', Replacement Method' and 'Separation Method'. If the number of workers replaced during that quarter is 80, **find** out the number of

(1) workers recruited and joined and

(2) workers left and discharged.

[5]

**Q.11** A worker, whose day-work wages is ₹2.50 an hour, received production bonus under the Rowan Scheme. He carried out the following work in a 48 hour week.

Job 1 1,800 items at 4 hours per 1,000

Job 2 1,500 items at 3 hours per 1,000

Job 3 9,000 items at 6 hours per 1,000

Job 4 1,800 items for which no "standard time" was fixed and it was agreed that the worker would be paid a bonus at 25 per cent. Actual time on the job was 5 hours.

Job 5 2,000 items at 8 hours per 1,000, each item was estimated to be 60% finished.

Job 2 was carried out on a machine running at 90 per cent efficiency and an extra allowance of 1/9<sup>th</sup> of actual time was given to compensate the worker.

5 hours were lost due to power cut.

**Calculate** the earnings of the worker, clearly stating your assumption for the treatment given by you for the hours lost due to power cut.

[6]

**Q.12** An article passes through five hand operations as follows:

Operation No	Time per article	Grade of worker	Wage rate per hour
1	25 minutes	A	₹65
2	35 minutes	B	₹55
3	20 minutes	C	₹45
4	40 minutes	D	₹35
5	20 minutes	E	₹30

The factory works 44 hours a week of which 4 hrs. is normal idle time and the production target is 800 dozens per week. **Prepare** a statement showing for each operation and in total the number of operators required, the labour cost per dozen and the total Labour cost per week to produce the total targeted output.

[5]

**Q.13** The present output details of a manufacturing department are as follows:

Average output per week	60,000 units from 160 employees
Saleable value of output	₹9,00,000
P. V Ratio	40%

The Board of Directors plans to introduce more mechanization into the department at a capital cost of ₹ 8,00,000. The effect of this will be to reduce the number of employees to 100, 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 ₹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 5%.

***Calculate*** the extra weekly contribution resulting from the proposed change and evaluate for the Board's information, the desirability of introducing the change. [7]

**SPACE FOR ROUGH WORK**