



CA INTERMEDIATE

Test Code – JKN_COS_11
(Date :01/09/2020)

(Marks - 100)

1. Question 1 is compulsory.
2. Answer any four questions out of remaining five questions.
3. In case any candidate answers any extra question(s)/sub-question(s) over and above the required number then only the requisite number of questions first answered in the answer book shall be valued and subsequent extra question(s) shall be ignored.
4. Working notes must form part of answer.

Q.1

(5 x 4 = 20 MARKS)

- a. Following details are related to a manufacturing concern:

Re-order Level	1,60,000 units
Economic Order Quality	90,000
Minimum Stock Level	1,00,000 units
Maximum Stock Level	1,90,000 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
- b. In a factory works overhead are absorbed at 60% of labour and office expenses at 20% of works cost.

The total expenditure incurred are as follows:

Particulars	Amount (Rs.)
Materials	2,00,552
Wages	1,49,448
Factory Expenses	98,000
Office Expenses (Related to Production)	85,000
Total	5,33,000

10% of the output is in stock and sales total is Rs. 5,10,000. Prepare Cost Sheet to calculate profit.

- c. A manufacturing company has added a new machine to its fleet of eleven existing machines. New machine is purchased for Rs. 12,70,000 with installation cost of Rs. 40,000. The machine has an estimated life of 10 years and is expected to realise Rs. 90,000 as scrap at the end of its useful life. Other relevant data are as follows:
- (i) Budgeted annual working hours are 2,400 based on 8 hours per day for 300 days. This includes 180 hours for plant maintenance and 120 hours of productive set-up time.
 - (ii) Electricity used by the new machine is 12 units per hour at a cost of Rs. 6.50 per unit. No current is drawn during maintenance and setup.
 - (iii) Three operators control the operations of all the twelve machines and average rate of wages per operator per day is Rs. 600 and production bonus is 10% of wages.
 - (iv) Annual insurance premium for the new machine is Rs. 12,600.
 - (v) Annual maintenance cost of new machine including consumable stores is Rs. 32,500.
 - (vi) Rent of the factory is Rs. 24,000 per month. Area occupied by new machine 200 sq ft. and area occupied by other machines is 2800 sq ft.

Required: Compute the comprehensive machine hour rate.

- d. Standard Time for a job is 90 hours. The hourly rate of guaranteed 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. Calculate time taken by A to complete the Job.

Q.2

(10 x 2 = 20 MARKS)

- a. After a fire in the factory premises, X Limited could gather following data for June.

Opening Stock	Amount [Rs.]
Raw Materials	2,00,000
Work-in-Progress	4,00,000
Finished Goods	3,77,500
Other Details	
Direct Materials purchased	25,00,000
Direct Labour	22,22,500
Prime Cost	39,77,500

Factory Overheads [i.e. Indirect Manufacturing Overheads] are 40% of conversion cost. Sales is Rs. 75,00,000. Company wants 30% gross margin based on revenue. Total cost of goods available for sale in current year is Rs. 55,57,750. Prepare Cost Sheet. Also, indicate value of closing inventory of Raw Materials, Work-in-Progress and Finished Goods.

- b. V Ltd. produces and markets a very popular product called 'X'. The company is interested in presenting its budget for the second quarter of 2019. The following information are made available for this purpose:

- (i) It expects to sell 50,000 bags of 'X' during the second quarter of 2019 at the selling price of Rs. 900 per bag.
- (ii) Each bag of 'X' requires 2.5 kgs. of a raw – material called 'Y' and 7.5 kgs. of raw – material called 'Z'.
- (iii) Stock levels are planned as follows:

Particulars	Beginning of Quarter	End of Quarter
Finished Bags of 'X' (Nos.)	15,000	11,000
Raw – Material 'Y' (Kgs.)	32,000	26,000
Raw – Material 'Z' (Kgs.)	57,000	47,000
Empty Bag (Nos.)	37,000	28,000

- (iv) 'Y' cost Rs.120 per Kg., 'Z' costs Rs.20 per Kg. and 'Empty Bag' costs Rs.80 each.
- (v) It requires 9 minutes of direct labour to produce and fill one bag of 'X'. Labour cost is Rs.50 per hour.
- (vi) Variable manufacturing costs are Rs.45 per bag. Fixed manufacturing costs Rs.30,00,000 per quarter.
- (vii) Variable selling and administration expenses are 5% of sales and fixed administration and selling expenses are Rs.20,50,000 per quarter.

Required

- (i) PREPARE a production budget for the said quarter.
- (ii) PREPARE a raw – material purchase budget for 'Y', 'Z' and 'Empty Bags' for the said quarter in quantity as well as in rupees.
- (iii) COMPUTE the budgeted variable cost to produce one bag of 'X'.
- (iv) PREPARE a statement of budgeted net income for the said quarter and show both per unit and total cost data.

Q.3

(10 x 2 = 20 MARKS)

- a. From the following data, prepare Process I A/C, Abnormal Loss A/C and Royalty Payable A/C.

- Input to Process I: 16,000 kgs at Rs. 1.20/kg
- Indirect Material: Rs. 336
- Wages: Rs. 720
- Overheads: 240% of wages
- Royalty to be paid for using the process: Rs. 0.15/kg of output
- Normal Loss: 8% of Input, sold at Rs. 0.50/kg
- Output of process [transferred to next process]: 14,000 kgs

b. A company manufacturing two products furnishes the following data for a year.

Product	Annual output (Units)	Total Machine hours	Total number of purchase orders	Total number of set-ups
A	5,000	20,000	160	20
B	60,000	1,20,000	384	44

The annual overheads are as under:

	Rs.
Volume related activity costs	5,50,000
Set up related costs	8,20,000
Purchase related costs	6,18,000

You are required to calculate the cost per unit of each Product A and B based on :

- (i) Traditional method of charging overheads
- (ii) Activity based costing method.

Q.4

(10 x 2 = 20 MARKS)

a. Following are the information given by owner of M/s Moonlight Co. running a hotel at Manali. **You are requested to advise him regarding the rent to be charged from his customer per day so that he is able to earn 20% profit on cost other than interest.**

- (i) Staff salaries Rs. 4,00,000.
- (ii) The Room Attendant's salary is Rs. 10 per day. The salary is paid on daily basis and the services of room attendant are needed only when the room is occupied. There is one room attendant for one room.
- (iii) Lighting, Heating and Power:
 - (a) The normal lighting expenses for a room if it is occupied for the whole month is Rs. 250.
 - (b) Power is used only in winter and normal charge per month if occupied for a room is Rs. 100.
- (iv) Repairs to Building Rs. 50,000 per annum.
- (v) Linen etc. Rs. 24,000 per annum.
- (vi) Sundries Rs. 70,770 per annum.
- (vii) Interior decoration and furnishing Rs. 50,000 per annum.
- (viii) Cost of Building Rs. 20,00,000, rate of depreciation 5%
- (ix) Other Equipment Rs. 5,00,000, rate of depreciation 10%
- (x) Interest @ 5% may be charged on its investment of Rs. 25,00,000 in the building

and equipment.

- (xi) There are 200 rooms in the hotel and 90% of the rooms are normally occupied in summer and 40% of the rooms are occupied in winter. You may assume that period of summer and winter is six months each. Normal days in a month may be assumed to be 30.

- b. X Constructions provides you following data for one of its ongoing contracts at the end of the year:

Transactions related to Material

Materials purchased 40,00,000

Materials issued from Stores 15,00,000

Materials returned to:

Stores 2,50,000

Supplier 1,50,000

Other Transactions

Wages paid during the year 60,00,000

Supervisor's Fees 5,10,000

Hire charges of plant 5,00,000

Other expenses [related to contract] 1,00,000

Total general overheads of X Constructions 18,00,000

[1/10th chargeable to contract]

Sub-contracting Charges 1,20,000

Additional Data:

	At the beginning of the year	At the end of the year
Work Certified	94,00,000	3,00,00,000
Work Uncertified	1,12,000	3,20,000
Materials at site on hand	80,000	2,00,000
Wages accrued	50,000	30,000

Related information:

1. Material costing ` 10,000 was sold at ` 12,000.
2. Apart from the plant which was hired, X Constructions purchased an additional plant worth ` 10,00,000 at the beginning of the year. After using plant for 6 months, company sold half of the plant, while it continued to use the remaining plant. It is a policy to provide depreciation at the rate of 10% p.a.
3. Contractee pays 80% of Work Certified in cash.

Prepare the following:

1. Contract Account for the current year
2. Contractee's Account for the current year

Q.5**(10 x 2 = 20 MARKS)**

- a. The following information is available from the cost records of Vatika & Co. For the month of August, 2020:

Material purchased 24,000 kg Rs. 1,05,600

Material consumed 22,800 kg

Actual wages paid for 5,940 hours Rs. 29,700

Unit produced 2,160 units.

Standard rates and prices are:

Direct material rate is Rs. 4.00 per unit

Direct labour rate is Rs. 4.00 per hour

Standard input is 10 kg. for one unit

Standard labour requirement is 2.5 hours per unit.

Calculate all material and labour variances for the month of August, 2020.

- b. SK Lit. is engaged in the manufacture of tyres. Analysis of income statement indicated a profit of Rs. 150 lakhs on a sales volume of 50,000 units. The fixed costs are Rs. 850 lakhs which appears to be high. Existing selling price is Rs. 3,400 per unit. The company is considering to revise the profit target to Rs. 350 lakhs. **You are required to compute** –
- Break- even point at existing levels in units and in rupees.
 - The number of units required to be sold to earn the target profit.
 - Profit with 15% increase in selling price and drop in sales volume by 10%.
 - Volume to be achieved to earn target profit at the revised selling price as calculated in (ii) above, if a reduction of 8% in the variable costs and Rs. 85 lakhs in the fixed cost is envisaged.

Answer Any Four**Q.6****(5 x 4 = 20 MARKS)**

- List down the steps involved in installing a costing system in a manufacturing unit.
- List down the steps involved in budgetary control technique
- DISTINGUISH between Bill of Materials and Material Requisition Note.
- DISCUSS the remedial steps to be taken to minimize the labour turnover.
- Explain the concept of Flexible Budget.