B.Com. (Hons.) Delhi

Cost Accounting – 2016 (May)

(Regular Course under CBCS)

Time: 3 hours *Maximum marks: 75*

Attempt All Questions.

Q. 1. (*a*) "Cost Accounting is a tool of managerial planning and control" Explain.

(*b*) Saksham Ltd. manufactures a product from a raw material, which is purchased at ₹60 per kg. The company incurs a handling cost of ₹360 plus freight of ₹390 per order. The incremental carrying cost of inventory of raw materials is ₹0.50 per kg p.m. In addition, the cost of working capital finance on the investment in inventory of raw material is ₹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 materials.

Required:

(*i*) The economic order quantity of raw materials (EOQ).

(*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? 5,10

OR

(*c*) Briefly explain "ABC Analysis" as a technique of material control. 5

(*d*) Vaani Ltd. manufactures a special product 'Alpha'. The following particulars were collected for the year 2015: 10

Monthly demand of Alpha	1,000 units
Cost of placing an order	₹100
Annual carrying cost per unit	₹15
Normal usage	50 units per week
Minimum usage	25 units per week
Maximum usage	75 units per week
Re-order period	4 to 6 weeks

Required:

(*i*) Re-order quantity

(*ii*) Re-order level

(*iii*) Minimum level

(*iv*) Maximum level

(*v*) Average stock level

Q. 2. (*a*) Briefly explain the treatment of idle time in cost accounts with an example. 5

(*b*) A machine was purchased for ₹5 lakhs. The total cost of all machinery inclusive of the new machine was ₹75 lakhs. The following further particulars are available:

(*i*) Expected life of the machine 10 years.

(*ii*) Scrap value at the end of 10 years ₹5,000.

(*iii*) Repairs and maintenance for the machine during the year ₹2,000.

(*iv*) Expected number of working hours of the machine per year 4,000 hours.

(*v*) Insurance premium annually for all the machines ₹4,500.

(*vi*) Electricity consumption for the machine per hour (@ 75 paise per unit) 25 units.

(*vii*) Area occupied by the machine 100 sq. feet.

(*viii*) Area occupied by other machines 1,500 sq. feet.

(*ix*) Rent per month of the department ₹800.

(*x*) Lighting charges for 20 points for the whole department, out of which 3 points are for the machines ₹120 per month.

Compare the machine hour rate for the new machine on the basis of given data. 10

OR

(*a*) Distinguish between Actual and Pre-determined overhead absorption rates with an example. 5

(*b*) Abeer Ltd. manufactures a single product and absorbs the production overheads at a pre-determined rate of ₹10 per machine hour. At the end of financial year 2015-16, it has been found that actual overheads incurred were ₹6,00,000. It included ₹45,000 on account of 'written off' obsolete stores and ₹30,000 being the wages paid for the strike period under an award.

The production and sales data for the year 2015-16 is as under:

Production:

Finished goods 20,000 units

Work-in-progress (50% complete in all respects) 8,000 units

Sales: Finished goods 18,000 units

The actual machine hours worked during the period were 48,000. It has been found that one-third of the under-absorption of production overheads was due to lack of production planning and the rest was attributable to normal increase in costs.

Required:

(*i*) Calculate the amount of under or over absorption of production overheads during the year.

(*ii*) Show the accounting treatment of under or over absorption of production overheads. 10

Q. 3. The following details pertain to Process-I for March, 2016.

(*i*) Opening work-in-progress (1,500 units) ₹15,000

Degree of completion:

Materials	100%
Labour and Overheads	$33^1/_3$%

(*ii*) Input of materials (18,500 units) ₹52,000

(*iii*) Direct Labour ₹14,000

(*iv*) Overheads ₹28,000

(*v*) Closing work-in-progress (5,000 units)

Degree of completion:

Materials	90%
Labour and Overheads	30%

(*vi*) Normal process loss is 10% of total input (opening work-in-progress + units put in)

(*vii*) Scrap value ₹2 per unit

(*viii*) Units transferred to the next process 15,000 units

Assume—FIFO method is used by the company

Required:

(*a*) Statement of Equivalent production.

(*b*) Statement of Cost showing cost per equivalent unit for each cost element.

(*c*) Statement of Evaluation.

(*d*) Process I Account. 15

OR

(*a*) Briefly explain meaning and objectives of material control. 5

(*b*) M/s Ajit Ltd. undertook a contract for erecting a sewerage treatment plant for a municipality for a total value of ₹24 lakhs. It was expected that the contract would be completed by 31-3-16.

Other information:

(*i*) Wages	₹6,00,000
(*ii*) Special plant	₹2,00,000
(*iii*) Materials	₹3,00,000
(*iv*) Overheads	₹1,20,000
(*v*) Materials lying at the site on 31-3-2015	₹40,000

(*vi*) Depreciation @10% to be provided on plant.

(*vii*) Work certified was to the extent of ₹16,00,000 and 80% of the same was received in cash.

(*viii*) 5% of the value of materials issued and 6% of wages may be taken to have been incurred for the portion of work completed but not yet certified. Overheads are charged as a percentage of direct wages.

(*ix*) Ignore depreciation on plant for use on uncertified portion of the work.

Prepare a Contract Account for the year ending 31st March, 2015 and ascertain the amount to be transferred to profit and loss account on the basis of realized profit. 10

Q. 4. (*a*) Briefly explain the concept and treatment of 'Labour turnover' in cost accounts. 5

(*b*) The following particulars have been extracted in respect of a factory for the year 2015:

Cost of materials	₹6,00,000
Wages	₹5,00,000
Factory overheads	₹3,00,000
Administration overheads	₹3,36,000
Selling overheads	₹2,24,000
Distribution overheads	₹1,40,000
Profit	₹4,20,000

A work order has to be executed in 2016 and the estimated costs are:

Materials	₹8,000
Wages	₹5,000

Assuming that in 2016:

(*i*) The rate of factory overheads has gone up by 20%.

(*ii*) Distribution overheads have gone down by 10%.

(*iii*) Selling and administration overheads have each gone up by 15%.

(*iv*) Factory overheads are based on wages.

(*v*) Administration, selling and distribution overheads are based on factory cost.

Calculate the cost of work order and the price at which the product should be sold so as to earn the same rate of profit on the selling price as in 2015. 10

OR

(*c*) Give arguments in favour and against for inclusion of interest on capital in cost accounts. 5

(*d*) A transport company has been given a 40 kilometre long route to run 5 buses. The cost of each bus is ₹6,50,000. The buses will make 3 round trips per day carrying on an average 80% passengers of their seating capacity. The seating capacity of each bus is 40 passengers. The buses will run on average 25 days in a month. The other information for the year 2015-16 is given below:

Garage Rent	₹4,000 per month
Annual repairs and maintenance	₹22,500 per bus
Salary of 5 drivers	₹3,000 each per month
Wages of 5 conductors	₹1,200 each per month
Manager's salary	₹7,500 per month
Road tax, permit fee etc.	₹1,000 per bus per quarter
Office expenses	₹2,000 per month
Cost of diesel per litre	₹33
Kilometres run per litre for each bus	6 km
Annual Depreciation	15% of cost
Annual Insurance	3% of cost

Required:

(*i*) Operating Cost sheet.

(*ii*) Calculate the bus fare to be charged from each passenger per km, if the company wants to earn profits of $33^{1}/_{3}$% on takings (total receipts from passengers). 10

Q. 5. The financial books of a company reveal the following data for the year ended 31st March, 2016.

	₹
Opening Stock:	
Finished goods (875 units)	74,375
Work-in-progress	32,000
1.4.2015 to 31.3.2016	
Raw material consumed	7,80,000
Direct labour	4,50,000
Factory Overheads	3,00,000
Goodwill	1,00,000
Administration overheads	2,95,000
Dividend paid	85,000
Bad debts	12,000
Selling & distribution overheads	61,000
Interest received	45,000
Rent received	18,000
Sales (14,500 units)	20,80,000
Closing stock:	
Finished goods (375 units)	41,250
Work-in-progress	38,667

The cost records provide as under:

(*i*) Factory overheads are absorbed at 60% of direct wages.

(*ii*) Administration overheads are recovered at 20% of factory cost.

(*iii*) Selling & distribution overheads are charged at ₹4 per unit sold.

(*iv*) Opening stock of finished goods is valued at ₹104 per unit.

The company values work-in-progress at factory cost for both financial & cost profit reporting.

Required:

(*a*) Profit and Loss Account for the year ended 31-3-2016.

(*b*) A statement of cost and profit for the year ended 31-3-2016.

(*c*) A statement reconciling the profit as per costing records with the profit as per financial records. 15

OR

Distinguish between:

(*i*) Integral and Non-integral systems of accounting. 5

(*ii*) LIFO and FIFO methods of pricing of issue of materials. 5

(*iii*) Cost accounting and Financial accounting. 5