# *C.A. IPCC*

## *Subject: Cost Accounting and Financial Management*

*Instructions :*

*(i)* ***Question 1 is compulsory and attempt any four out of five***

*(ii)* ***Date of Examination :31-12-2011***

*(iii)* ***Total Number of Questions : 7***

*(iv)* ***Total marks : 100***

*(v)* ***Total duration : 3 Hours***

*(vi)* ***Use of two colour pens (black & blue or Black or Pink etc) is NOT allowed. Use only single colour pen.***

*(vii)* ***Begin answer of the next question in new page.***

*(viii)* ***Answer all the questions serially.***

*(ix)* ***All working notes should form part of your answers.***

**Question1.** Answer the following :

**(a)** The following information relating to a type of Raw material is available:

| | |
|---|---|
| Annual demand | 2000 units |
| Unit price | Rs. 20.00 |
| Ordering cost per order | Rs. 20.00 |
| Storage cost | 2% p. a. |
| Interest rate | 8% p.a. |
| Lead time | Half - month |

Calculate economic order quantity and total annual inventory cost of the raw material.

**(b)** 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. 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.

**(c)** A company offers a fixed deposit scheme whereby Rs. 10,000 matures to Rs. 12,625 after 2 years, on a half-yearly compounding basis. If the company wishes to amend the scheme by compounder interest every quarter, what will be the revised maturity value?

**(d)** What factors would be considered while determining the requirements of working capital?

***(4X5=20 Marks)***

**Question 2.**

**(a)** The following information is available from the cost records of Vatika & Co. For the month of August, 2009:

| | | |
|---|---|---|
| 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 2160 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 requirement is | 2.5 hours per unit. |

Calculate all material and labour variances for the month of August, 2009.

**(b)** What do you understand by the term Just in Time Purchases? Also enlist its advantages.

**(c)** Define escalation and descalation clause in Contract Costing.

***(10+3+3=16 Marks)***

**Question 3.**

**(a)** A company undertook a contract for construction of a large building complex. The construction work commenced on 1st April, 2007 and the following data are available for the year ended 31st March, 2008.

| | Rs.'000 |
|---|---|
| Contract Price | 35,000 |
| Work certified | 20,000 |
| Progress Payments Received | 15,000 |
| Material Issued to Site | 7,500 |
| Planning & Estimating Costs | 1,000 |
| Direct Wages Paid | 4,000 |
| Materials Retuned From Site | 250 |
| Plant Hire Charge | 1,750 |
| Wage Related Costs | 500 |
| Site Office Costs | 678 |
| Head Office Expenses apportioned | 375 |
| Direct Expenses Incurred | 902 |
| Work Not Certified | 149 |
| Fines and penalties | 10 |

The contractors own a plant which originally cost Rs.20 lacs has been continuously in use in this contract throughout the year. The residual value of the plant after 5 year of life is expected to be Rs.5 lacs. Straight line method of depreciation is in use. As on 31st March, 2008 the direct wages due and payable amounted to Rs. 2,70,000 and the materials at site were estimated at Rs.2,00,000.

Required:

(i) Prepare the contract account for the year ended 31st March, 2008.

(ii) Show the calculation of profit to be taken to the profit and loss account of the year.

**(b)** ABC Ltd. wishes to raise additional finance of Rs. 20 lakhs for meeting its investment plans. The company has Rs.4,00,000 in the form of retained earnings -available for investment purposes.. The following are the, further details:

- Debt equity ratio 25 : 75.
- Cost of debt at the rate of 10 percent (before tax) up to Rs.. 2,00,000 and 13% (before tax) beyond that.
- Earning per share, Rs. 12.
- Dividend payout 50% of earnings.
- Expected growth rate in dividend 10%.
- Current market price per share, Rs. 60.
- Company's tax rate is 30% and shareholder's personal tax rate is 20%.

You required to calculate the overall weighted average (after tax) cost of additional finance.

***(8+8=16 Marks)***

**Question 4.**

**(a)** JK Ltd. produces a product "AZE", which passes through two processes, viz., process I and process. II. The output of each process is treated as the raw material of the next process to which it is transferred and output of the second process is transferred to finished stock. The following data related to December, 2007:

| | Process I | Process, II |
|---|---|---|
| 25, 000 units introduced at a cost of | Rs. 2,00,000 | |
| Material consumed | Rs. 1,92,000 | 96,020 |
| Direct labour | Rs 2,24,000 | 1,28,000 |

| | | |
|---|---|---|
| Manufacturing expenses | Rs. 1,40,000 | 60,000 |
| Normal wastage of input | 10% | 10% |
| Scrap value of normal wastage (per unit) | Rs. 9.90 | 8.60 |
| Output in Units | 22,000 20,000 | |

Required:

(i) Prepare Process I and Process II account.

(ii) Prepare Abnormal effective/wastage account as the case may be each process.

**(b)** A company currently has an annual turnover of Rs. 10 lakhs and an average collection period of 45 days. The company wants to experiment with a more liberal credit policy on the ground that increase in collection period will generate additional sales. From the following information, kindly indicate which of the policies you would like the company to adopt:

| *Credit Policy* | *Increase in Collection period* | *Increase in Sales (Rs.)* | *Percentage of Default* |
|---|---|---|---|
| 1 | 15 days | 50,000 | 2% |
| 2 | 30 days | 80,000 | 3% |
| 3 | 40 days | 1,00,000 | 4% |
| 4 | 60 days | 1,25,000 | 6% |

The selling price of the product is Rs. 5, average costs per unit at current level is Rs 4 and the variable costs per unit is Rs. 3

The current bad debt loss is 1% and the required rate of return on investment is 20%. A year can be taken to comprise of 360 days.

***(10+6=16 Marks)***

**Question 5.**

**(a)** Nine-o-Nine Limited is into retail business. The following information is given for your consideration:

(i) Purchases are 75 percent of sales or Purchases are sold at cost plus 33 1/3 percent

(ii)

| | Budgeted Sales Rs. | Labour Cost Rs. | Expenses Incurred Rs. |
|---|---|---|---|
| January | 40,000 | 3,000 | 4,000 |
| February | 60,000 | 3,000 | 6,000 |
| March | 160,000 | 5,000 | 7,000 |
| April | 120,000 | 4,000 | 7,000 |

(iii) The policy of the management is to have sufficient stock in hand at the end of each month to meet sales demand in the next half month.

(iv) Creditors for materials and expenses are paid in the month after the purchases are made or the expenses incurred. Labour is paid in full by the end of each month.

(v) Expenses include a monthly depreciation charge of Rs. 2,000

(vi)

(a) 75 percent sales are for cash.

(b) 25 percent of sales are on one month's interest-free credit.

(vii) The company will buy equipment costing Rs. 18,000 on cash in February and will pay a dividend of Rs. 20,000 in the month of March. The opening cash balance on 1st February is Rs.1,000.

You are required to prepare:
(i) A profit and loss account for the months of February and March; and
(ii) A cash budget for the months of February and March.

**(b)** An article passes through five hand operations as follows:

| Operation No. | Time per article | Grade of worker | Wage rate per hour |
|---|---|---|---|
| 1 | 15 minutes | A | Re. 0:65 |
| 2 | 25 minutes | B | Re. 0.50 |
| 3 | 10 minutes | C | Re. 0.40 |
| 4 | 30 minutes | D | Re. 0.35 |
| 5 | 20 minutes | E | Re. 0.30 |

The factory works 40 hours a week and the production target is 600 dozens per week. Prepare SI3C 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.

***(10+6=16 Marks)***

**Question 6.**

**(a)** The experience of a firm being out of stock is summarized below:

| Stock-out (number of units) | Number of times |
|---|---|
| 500 | 1 (1) |
| 400 | 2 (2) |
| 250 | 3 (3) |
| 100 | 4 (4) |
| 50 | 10 (10) |
| 0 | 80 (80) |
| Total | 100 (100) |

Carrying Cost per unit Rs.10 and stock out cost per unit Rs.100 Figures in brackets represents percentage of time the firm has been out of stock. Determine the optimum safety stock level.

**(b)** Foods Ltd. is presently operating at 60 per cent level, producing 36,000 packets of snack foods and proposes to increase its capacity utilization in the coming year by 33.33 per cent over the existing level of production. The following data has been supplied:

(i) Unit cost structure of the product at current level:

| | |
|---|---|
| Raw material | Rs. 4 |
| Wages (variable) | 2 |
| Overheads (variable) | 2 |
| Fixed overhead | 1 |
| Profit | 3 |
| Selling price | 12 |

(ii) Raw materials will remain in stores for 1 month before being issued for production. Material will remain in process for further 1 month. Suppliers grant 3 months credit to the company.
(iii)Finished goods remain in godown for 1 month.
(iv)Debtors are allowed credit for 2 months

(v) Average time-lag in wages and overhead payments is 1 month and these expenses accrue evenly throughout the production cycle.
(vi) No increase either in cost of inputs or selling price is envisaged.

Prepare a projected profitability statement and a statement showing working capital requirement at the new level, assuming cash balance of Rs. 19,500 has to be maintained.

***(6+10=16 Marks)***

**Question 7.** Answer any four from the following:
**(a)** Discuss the treatment of by-product Cost in Cost Accounting.

**(b)** Enumerate the various forms of bank credit in financing working capital of a business organization.

**(c)** Write down the differences between periodic & continuous stock verification.

**(d)** Write a short note on factoring.

**(e)** Describe briefly, how wages may be calculated under the following systems:
(i) Gantt task and bonus system
(ii) Rowan system

***(4X4=16 Marks)***