## INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF PAKISTAN



# Spring (Summer) 2010 Examinations

Friday, the 21st May 2010

# 

#### Time Allowed - 2 Hours 45 Minutes

Maximum Marks - 90

- (i) Attempt all questions.
- (ii) Answers must be neat, relevant and brief.
- (iii) In marking question paper, the examiners take into account clarity of exposition, logic of arguments, effective presentation, language and use of clear diagram/ chart, where appropriate.
- (iv) Read the instructions printed inside the top cover of answer script CAREFULLY before attempting the paper.
- (v) Use of non-programmable scientific calculators of any model is allowed.
- (vi) DO NOT write your Name, Reg. No. or Roll No. anywhere inside the answer script.
- (vii) Question No.1 "Multiple Choice Question" printed separately, is an integral part of this question paper.

			Marks
Q. 2	(a)	What are three phases of cost accounting?	03
	(b)	What are four control accounts primarily concerned with cost determination?	02

- (c) XYZ company submits the following data on April 30, 2010:
  - Materials put into process Rs.211,500.
  - Direct labour is paid at the rate of Rs.39 and Rs.42 per hour in Departments 'A' and 'B' respectively.
  - Departments 'A' worked 6,125 hours and Departments 'B' reported 9,875 hours.
  - Factory overhead is applied on the basis of direct labour hours at the rate of Rs.25 per hour in Departments 'A' and Rs.21 per hour in Departments 'B' respectively.
  - Values of inventories (in rupees) are as under:

	April, 1	April, 30
Finished goods	56,500	47,000
Work-in-process	86,500	97,125
Materials	75,000	96,000

#### Required:

Workout the following (formal income statement is not required, but T accounts for each type of inventory are required):

(i)	Total manufacturing cost.	04
(ii)	Cost of goods manufactured.	05
(iii)	Cost of goods sold.	04

- Q. 3 (a) As the usage of FIFO and LIFO has controversy over a period of time and various merits and demerits have been developed for each method. You are required to indicate under each of the following features, which method, FIFO or LIFO is attributed:
  - (i) Matches actual physical flow of goods.
  - (ii) Matches old costs with new prices.
  - (iii) Costs inventory at approximate replacement cost.
  - (iv) Matches new costs with new prices.
  - (v) Emphasizes the balance sheet.
  - (vi) Emphasizes the income statement.
  - (vii) Opens door for profit manipulation.

PTO

Marks

- (viii) Understates the current ratio in a period of inflation.
- (ix) Overstates inventory turnover in a period of inflation.
- (x) Gives higher profits in a period of inflation.
- (xi) Matches current cost with current revenue.
- (xii) Reflects more accurately the profit available to owners.
- (xiii) Gives lower profits in a period of deflation.
- (xiv) Results in a procession of costs in the same order as incurred.

07

# **(b)** To control one of its inventory items, a company has developed the following data:

Economic order quantity	1,000	units
Average daily use	100	units
Minimum daily use	80	units
Maximum daily use	120	units
Working days per year	250	days
Safety stock	400	units
Cost of carrying inventory (per year)	Re. 1.00	per unit
Lead time	Seven (7)	working days

## Required:

Calculate the following:

(i)	Order point	01
(ii)	Average inventory	02
(iii)	Normal maximum inventory	02
(iv)	Absolute maximum inventory	02
(v)	Cost of placing one order	03

# **Q. 4 (a)** A summary of the data from employees' record of a company for the week ended September 30 is given below:

Employee	Clock No.	Job No.	Hours Worked	Production Pieces	Hourly Rate (Rs.)	Piece Rate (Rs.)
Α	90	641	40	960	-	1.50
В	91	-	46	-	35.00	-
С	92	638	40	-	29.00	-
D	93	-	40	-	36.00	-

The company operates on a 40-hour week and pays 50% in addition to normal rates for overtime. Additional information is given below:

- (i) 'B' works in the storeroom issuing materials, 'D' is the supervisor, and the others work directly on special orders as noted.
- (ii) Deduction @ 6.5% would be made for each employee on account of employees children education fund.
- (iii) An advance against salary of Rs.100 was made to 'A' on September 26.
- (iv) A 2% deduction is to be made from each employee's wage for the company's employee health and hospital benefit plan.
- (v) Income tax @ 10% is deducted at source.

#### Required:

Prepare the payroll sheet for the week showing each employee's gross pay, deductions, and net pay.

(b) The Mak company has four production departments and three service departments. The following information for the month of June has been collected from the record of the company:

DEPARTMENT	Actual Expenses (Rs.)	Area Square Feet	No. of Employees	Investment in Equipment (Rs.)
Grinding	60,000	3,000	30	120,000
Forming	84,000	1,500	20	60,000
Machining	24,000	2,500	30	72,000
Finishing	48,000	1,000	10	24,000
Building Service	36,000	500	15	3,600
Health and recreation	30,000	2,000	5	9,600
Repairs and maintenance	18,000	2,000	10	14,400
Total	300,000	12,500	120	303,600

The order and bases for distributing expenses of the service departments are: Building Service—'area', Health and Recreation—'number of employees', Repair and maintenance—'investment in equipment'. The company assigns service departments' expenses to other service departments, however, after a department's expenses have been allocated, no expenses are assigned back to it.

## Required:

Prepare a statement showing distribution of service departments' overheads.

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Q. 5 (a) During March 20,000 units were transferred-in from Department-A at a cost of Rs.78,000. Materials cost of Rs.13,000 and conversion cost of Rs.18,000 were added in Department-B. On March 30, Department-B had 5,000 units of work-in-process 60% complete as to conversion costs. Materials are added in the beginning of the process in Department-B.

# Required:

(i) Compute equivalent production.

05

(ii) Workout the cost per equivalent unit for conversion costs.

01

**(b)** A firm employing standard marginal costing has the following actual results of producing 7,200 units for a period:

Descriptions	Rupees	
Material used	16,900	(420 Kgs)
Labour cost	70,560	(9100 hours)
Variable overhead	68,400	
Fixed cost	57,000	
Direct material price variance	740	(Favourable)
Direct material usage variance	504	(Favourable)
Direct labour rate variance	2,240	(Favourable)
Direct labour efficiency variance	2,080	(Favourable)
Variable overhead expenditure variance	4,700	(Adverse)
Variable overhead efficiency variance	1,820	(Favourable)
Fixed overhead variance	1,000	(Adverse)

Unfortunately the standard cost card has been lost together with the budget for the period but the accountant recalls that the budgeted output was 7000 units.

## Required:

Derive the standard cost card for the product and the total cost for 7,000 units.

11

Marks

Q. 6 (a) A furniture company uses 12 meters of aluminium pipe at Rs.16 per meter as standard for the production of lawn chair. During one month's operations, 100,000 meters of the pipe were purchased at Rs.15.60 per meter, and 7,200 chairs were produced using 87,300 meters of pipe. The materials price variance is recognized when materials are purchased.

## Required:

Calculate the material price and quantity variances.

04

(b) The processing of a product requires a standard of 0.8 direct labour hour per unit at a standard wage rate of Rs.67.50 per hour. The 2,000 units actually required 1,580 direct labour hours at a cost of Rs.69 per hour.

# Required:

Calculate labour rate and efficiency variances.

04

(c) Dulux corporation produced 24,000 units (normal capacity) of a product during the first quarter of the year; 20,000 units were sold at Rs.110 per unit. The costs of the product were as under:

	Rupees
Materials	300,000
Direct labour	300,000
Factory overhead:	
Variable	600,000
Fixed	480,000

Marketing and administrative expenses for the quarter total Rs.350,000, all are fixed expenses.

### Required:

Prepare income statement using:

(i) absorption costing.(ii) direct costing.05

THE END