

**CREDIT BASED FIFTH SEMESTER B.B.M. DEGREE EXAMINATION
OCTOBER 2012 COST
MANAGEMENT - II**

Time: 3 Hrs

Max. Marks: 120

SECTION - A

Answer any THREE questions:

3X20=60

1. A firm of contractors undertook the contract No.777 in 2011. The contract price was 6,00,000. The following particulars relate to contract No.777.

	(?)
Materials: Issued from stores	1,50,000
Purchased for the contract	30,000
Transferred from contract No. 750	10,000
Plant installed at cost	70,000
Wages paid	2,36,000
Architects fees	12,000
Establishment charges	10,000
Direct expenses paid	8,000
Wages accrued on 31 st December, 2011	4,000
Direct expenses due on 31 st December, 2011	5,000

Of the plant and materials charged to contract, plant costing ₹5,000 and materials costing ₹4,000 were lost by an accident.

Materials costing ₹2,500 were sold at a profit of ₹500. On 31st December 2011, plant which cost ₹3,000 was transferred to contract No.761.

On 31st December, 2011 the value of work certified was ₹4,80,000 and 80% of the same was received in cash. The cost of work done but not certified as on this date was ₹3,000. Charge depreciation on plant at 10%.

You are required to prepare contract No.777 for the year 2011. Also prepare contractee's A/c and show the relevant figures in the Balance Sheet of the firm.

2. In a factory, the output passes through three processes to completion, viz, crushing, refining and finishing. The following details are available for the month of September, 2012.

	?		
Wages Power	15,000	12,000	10,000
Steam Other	6,000	5,000	3,000
expenses	2,000	1,000	500 500
	3,000	2,000	

3,000 mounds of Copra was purchases at a cost of ₹3,00,000. Crude Oil produced 2,000 mounds, refined oil 1800 mounds, finished oil 1760 mounds.

Copra residue 300 mounds sold for ₹10,000 and sacks sold for ₹1,000. In refining process, wastage of 100 mounds sold for ₹800. Casks cost ₹3,000. Oil stored in casks sold for ₹200 per mound.

Prepare the necessary accounts and find out the profit.

3. Mr. Lucky Singh has been given a permit to run a bus in between two towns which are 25 kms apart. From the following information assuming 10% profit on takings for Mr. Singh work out the bus fare to be charged in between those two towns for each passenger.

Cost of the bus	12,00,000
Annual Tax	24,000
Diesel for 100 kms	720
Oil and stores per month	2,000
Garage rent for month	2,000
Repairs estimated per month	4,500
Insurance per annum	36,000
Tyres and tubes per month	3,000
Depreciation @25% per annum	
Salary of conductor per month	3,000
Salary of Driver per month	4,500
Salary of accountant per month	5,000
Permit fees per month	1,000
Miscellaneous expenses per month	8,000

Commission to driver and conductor @10% of the takings to be shared equally by them. The bus will make 3 round trips everyday and it carries 30 passengers on an average in each trip. The bus will operate for 25 days during the month.

4. Product 'A' passes through three processes before it is transferred to finished stock. The following details are obtained for the month of September.

	Process I	Process II	Process III	Finished Stock
Opening stock	5,000	8,000	10,000	20,000
Direct materials	40,000	12,000	15,000	—
Direct wages	35,000	40,000	35,000	—
Manufacturing overheads	20,000	24,000	20,000	—
Closing stock	10,000	4,000	15,000	30,000
Profit% on transfer price	25%	20%	10%	—
Inter process profit for opening stock	—	1,395	2,690	6,534

Stock in process is valued at prime cost and finished stock has been valued at the price at which it is received from Process III. Sales during the month were ₹4,00,000.

Prepare and compute:

1. Process cost A/c with profit element at each stage.
2. Actual realized profit.

SECTION - B

Answer any FIVE questions:

5X10=50

5. The information given below has been taken from the records of an engineering works in respect of Job No.712.

Materials	₹4,010
Wages - Dept A:	60 hours at ₹3 per hour
Dept B:	40 hours at ₹2 per hour
Dept C:	20 hours at ₹5 per hour
Variable Dept A:	₹5,000 for 5,000 labour hours
Dept B:	₹3,000 for 1,500 labour hours
Dept C:	₹2,000 for 500 labour hours
Fixed:	₹20,000 for 10,000 working hours.

Calculate the cost of Job No. 712 and price for the job to give a profit of 25% on sales.

6. The following information is furnished:

Total sales ₹3,60,000 Unit
 selling price ₹100 Unit variable
 cost ₹50 Fixed cost ₹1,00,000
 Find out: 1) P/V Ratio
 2) Break - even point
 3) Margin of safety
 4) If the selling price is reduced to ₹60, new margin of safety

7. The details given below relate to 60% activity, when the production was 600 units.

Materials	120 per unit
Labour	50 per unit
Expenses	15 per unit
Factory expenses	50,000 (40% fixed)
Administrative expenses	35,000 (60% fixed)

8. Prepare a flexible budget showing the total cost for 80% and 100% activity*
 Standard price and standard quantity of Raw - materials needed for one unit of output A are given below.

Material	Quantity kgs	Standard price
X	2	₹3 per kg
Y	4	₹2 per kg

X 1,800 kgs

Calculate the material cost, price and

The actual production data are as follows:
 output 500 units of product A

Material	Quantity for 500 unit of A kgs	Total cost ?

- usage variances.
9. Explain the concepts of decision making. Briefly explain the steps involved in decision making.
10. Product x required three distinct process P₁, P₂, P₃ and after the third process the product is transferred to finished stock. Prepare various process accounts from the following.

	Total (f)	PiK)	n.m	n.m
Direct Material	5,000	4,000	600	400
Direct Labour	4,000	1,500	1,600	900
Direct Expenses	800	500	300	

Production overhead f6,000 (to be allocated on the basis of direct labour). Production was 200 units. There was no opening or closing stock.

SECTION - C

Answer ALL the questions.

10X1-10

11. a) Mention any two differences between Job and Contract Costing.
 b) What do you mean by CVP Analysis?
 c) What is overhead variance? Mention any 2 kinds of overhead variances.
 d) Give the formula to find out the cost of Abnormal Loss in Process Costing.
 e) What are Relevant Costs?
 fj) What is a by product?
 g) What is zero base budgeting?
 h) What is retention money?
 i) What is key factor?
 jj) What is the cost unit for a hospital?

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BBM 501

Reg. No.

CREDIT BASED FIFTH SEMESTER B.B.M. DEGREE EXAMINATION OCTOBER 2013

BUSINESS MANAGEMENT

Cost Management - II

Time: 3 Hrs

Max. Marks: 120

SECTION - A

Answer any Three of the following:

3X20=60

1. A company of contractors started to trade on 1-1-2011. During 2011, the company was engaged in only one contract of which the contract price was `5,00,000. Of the plant and materials charged to the contract, plant costing `5,000 and materials costing `4,000 were lost. On 31.12.2011, plant costing `5,000 was returned to stores. Cost of work uncertified but finished `2,000 and materials costing `4,000 were in hand on site, charge 10% depreciation on plant. Compile Contract Account and Balance Sheet from the following.

	Debit (₹)	Credit (₹)
Share capital		1,20,000
Creditors		10,000
Cash received (80% of work certified)		2,00,000
Land and Buildings	43,000	
Bank Balance	25,000	
<u>Charged to contract:</u>		
Materials	90,000	
Plant	25,000	
Wages	1,40,000	
Expenses	7,000	
	<u>3,30,000</u>	<u>3,30,000</u>

2. The following information is available from the books of Rahul Ltd. Which processes a patent material used in building industries. The material is produced in three consecutive grades namely Soft, Medium and Hard.

Further details of expenses are as follows:

	Process I (₹)	Process II (₹)	Process III (₹)
Direct wages	60,000	20,000	6,000
Direct expenses	20,000	10,000	2,000
Manufacturing overhead	10,250	4,000	750
Raw materials used (500 tons at ₹200/ton)	1,00,000	---	---
Normal loss	5%	10%	20%
Scrap (sale price) ₹25 per ton	25 tons	20 tons	25 tons
Sale price of output per ton	550	700	1,200

$\frac{2}{3}$ of the output of Process I and $\frac{1}{2}$ of the output of Process II are passed on to next processes and the balances are sold. The entire output of Process III are sold. The management expenses were ₹17,500 and selling expenses were ₹10,000

You are required to prepare the three process accounts and finished Stock Account to reveal the profits.

3. Garhas Transport Ltd., owns and fleet of taxis and the following information is available from the records of the firm for December 2011.

Number of Taxis	10
Cost of each Taxi	₹2,00,000
Salary	
Manager	₹1,200
Accountant	1,000
Cleaner	400
Mechanic	800
Garage rent	1,200
Insurance Premium	2%
Road tax per Taxi	₹100
Driver's salary per Taxi	₹2,600
Repairs p.a. per Taxi	₹3,200
Sundry expenses per 100km	10
Diesel, Oil etc per litre	₹12
Km run per litre of diesel	10

Total life of taxi is about 2,00,000 kms. A taxi runs in all 3000 km in a month of which 30% it runs empty. Calculate the cost of running a taxi per km.

4. The following are taken from the costing records for the year 2012 of a manufacturer production is 1,000 units.

Cost of raw materials	20,000
Labour Cost	12,000
Office Overheads	4,000
Factory Overheads	8,000
Selling Overheads	1,000

Rate of profit is 25% on selling price.

The manufacturer decides to produce 1,500 units during the year 2013.

If it is estimated that

- The cost of the raw materials will increase by 20% and the labour cost will increase by 10%.
- 50% of overheads are fixed and other 50% are variable.
- The variable selling overhead per unit will be reduced by 20%.
- The rate of profit will remain the same.

Prepare a statement for 2013 showing the total profit and the selling price per unit.

SECTION – B

Answer any Five of the following:

5X10=50

5. You are given the following information:

	Sales	Profit
2008	3,00,000	24,000
2009	3,50,000	32,500

Calculate

- P/V ratio
 - Profit when sales are `3,79,000
 - Sales required to earn a profit of `36,000
 - M/S for 2009
6. From the following particulars. Prepare a cost statement showing the components of the total cost and the profit for the year ended 31-12-2010

Stock-in-hand (1-1-2010):

Raw Materials	25,000
Furnished goods	17,360

Stock in hand (31-12-2010):

Raw Materials	26,250
Finished goods	15,750

Purchase of raw materials 21,900

Work-in-progress (1-1-2010) 8,220

Work-in-progress (31.12.2010) 9,100

Sale of finished goods 72,310

Direct wages 17,150

Non productive wages 830

Works expenses 8,340

Office expenses 3,160

Selling and distributions expenses 4,210

7. The Swan Chemicals Ltd., produces three joint products A, B and C. The joint cost for June 2010 was `64,000. It is estimated that profit on each of the joint products will be 30%, 25% and 20% respectively. The subsequent expenses were: A `3,600, B `2,500, C `1,000 and sales for June 2010 were A `48,000, B `32,000, C `20,000.

Prepare a statement showing apportionment of joint expenses.

8. Chumble Chemicals Ltd., provides the following information for June 2010.

Material	Standard (Output: 10kg)		Actual (Output: 1000kg)	
	Quantity (kg)	Rate per kg (₹)	Quantity (kg)	Rate per kg (₹)
A	8	6.00	750	7.00
B	4	4.00	500	5.00

Calculate material cost variance, price variance and usage variance.

9. For the production of 10,000 electric automatic irons, the following are the budgeted expenses:

	Per unit
Direct Material	60
Direct Labour	30
Variable overhead	25
Fixed Overhead (1,50,000)	15
Variable expenses (direct)	5
Selling expenses (10% fixed)	15
Administration expenses (50,000 rigid for all Levels of production)	5
Distribution expenses (20% fixed)	5
The total cost of sale per unit	160

Prepare a budget for the production of 6000, irons, showing distinctly the marginal cost and the total cost.

10. Differentiate between job and process costing.

SECTION - C

11. **Answer all the questions:**

10X1=10

- a) What is cost-plus contract?
- b) State the meaning of By-product.
- c) Which method of costing is suitable for Hotels? What is the cost unit?
- d) What is break even chart?
- e) Give the meaning of differential costs.
- f) State the meaning of zero base budgeting.
- g) What do you mean by variance?
- h) Give any two job costing adopting industries.
- i) What do you mean by abnormal gain?
- j) Mention any two methods of accounting for joint products.

BBM 501

Reg. No.

**CREDIT BASED FIFTH SEMESTER B.B.M. DEGREE EXAMINATION
OCTOBER 2014
BUSINESS MANAGEMENT
Cost Management - II**

Time: 3 Hrs

Max. Marks: 105

SECTION – A

Answer any Three of the following:**3×20=60**

1. A company of builders having an authorized capital of ₹1,00,000 divided into 1,000 ordinary shares of ₹100 each, commenced operations on 1st January 2013 and during the year was engaged in a contract, the contract price being ₹4,00,000. The Trial Balance extracted from their books on 31st December 2013 stood as follows:

Share capital being 80% paid up		80,000
Sundry creditors		8,000
Land and buildings at cost	34,000	
Cash at bank	9,000	
Materials	80,000	
Plant	15,000	
Wages	1,05,000	
Expenses	5,000	
Cash received being 80% of work certified		1,60,000
	<u>2,48,000</u>	<u>2,48,000</u>

Of the plant and materials charged to contract, plant costing ₹2,000 and material costing ₹2,000 were destroyed by an accident. On 31-12-2013, plant which cost ₹4,000 was returned to stores, value of materials on site was ₹4,000. Cost of work done but not certified was ₹2,000, charge depreciation at 10% on plant. Prepare contract account for the year 2013 and the balance sheet on 31-12-2013 and show you calculations of the amount to be transferred to profit and loss account.

2. A product passes through three processes A, B and C. The expenses and other particulars of three processes for the year 2013 is as under.

	Processes		
	A	B	C
Materials (₹)	10,000	15,000	5,000
Wages (₹)	30,000	80,000	65,000
Direct expenses (₹)	6,000	18,150	27,200
Selling price per unit of output (₹)	120	165	250
Normal loss (%)	5	15	20
Scrap value per unit (₹)	2	5	10
Actual output (units)	9,300	5,400	2,100

10,000 units of materials at ₹100 per unit was introduced at process A. Two thirds of the output A and one half of the output of B was passed on to the next process and the balance was sold. The entire output of process C was sold. Management expenses during the year were ₹80,000 and selling expenses were ₹50,000. Prepare process accounts abnormal loss and gain accounts.

3. Mr. Ganesh has been given a permit to run a bus between two towns which are 25 kms apart. From the following information assuming 15% profit on taking for Mr. Ganesh workout the bus fare to be charged to each passenger.

Cost of the bus	10,00,000
Annual tax	36,000
Diesel for 100 kms	500
Other expenses per month	4,000
Garage rent per month	1,000
Repairs charges per month	2,000
Insurance per annum	12,000
Tyre and tubes per month	1,500
Depreciation at 12% per annum	
Salary of conductor per month	4,000

Salary of driver per month	5,000
Salary of accountant per month	2,700
Permit fees per month	1,800

Commission to driver and conductor at 5% of the takings to be shared equally by them. The bus will make 2 round trips every day.

The seating capacity of the bus is 40 passengers. On onward journey 80% of the seats are occupied and on return journey 75% of the seats are occupied. The bus will operate for 30 days during the month.

4. Following particulars for the production of 2000 sewing machines for the year 2013.

Cost of materials	1,60,000
Wages	2,40,000
Manufacturing expenses	1,00,000
Depreciation	1,20,000
Rent, rates and Insurance	20,000
Selling expenses	60,000
General expenses	40,000
Sales	8,00,000

The company plans to manufacture 3,000 sewing machines during 2014. You are required to submit a statement showing the price at which machines would be sold so as to earn profit of 10% on selling price. The following additional information is supplied.

- Price of materials is expected to rise by 20%.
- Wage rates are expected to show an increase of 5%.
- Manufacturing expenses will rise in proportion to the combined cost of materials and wages.
- Selling expenses per unit will remain the same.
- Other expenses will remain unaffected by the rise of output.

SECTION – B

Answer any FOUR of the following:

4×10=40

5. XYZ Co. furnishes the following information if its cost and profit for the year 2012 and 2013.

Year	Total Cost (₹)	Profit(₹)
2012	12,00,000	2,00,000
2013	15,00,000	3,00,000

Compute the following:

- P/V ratio b) Fixed Expenses c) Break-even-point d) Margin of safety for 2012 and 2013
6. Material cost of Job No.10 is `12,000
 Labour cost is `8,000
 Factory overheads 20% of Factory Cost
 Administrative overheads 16.67% of cost of production.
 Selling and distribution overhead at 25% of cost of sales. What prices should be quoted for the job to obtain 20% profit on sales price?
7. Prepare a production budget at 60% and 90% capacity. The following data is furnished at 80% capacity.
 Actual production 8,000 units
 Material cost per unit `75
 Labour cost per unit `45
 Direct expenses per unit `30
 Factory overhead per unit `30 (60% variable)

Administrative overhead per unit `45 (75% fixed)

8. Shri Krishna Ltd. manufactures three products, P, Q, R. The joint cost of manufacture during August 2014 is `8,40,000. It is estimated that the profit on each product as a percentage of sales will be 30, 25 and 15% respectively. Subsequent expenses are:

	P	Q	R
Material(`)	10,000	7,500	2,500
Direct wages	20,000	12,500	5,000
Overhead	15,000	12,500	7,500
Sales	6,00,000	4,00,000	2,50,000
Prepare a statement showing the apportionment of joint expenses.			

9. Explain the various cost concepts on the basis of decision making. Briefly explain the steps involved in decision making.

SECTION - C

10. Answer all the questions:

5×1=5

- What is 'Escalation Clause' in contract costing?
- Differentiate job and contract costing.
- What do you mean by CVP Analysis?
- Differentiate joint products and by products.
- What are Functional budgets?

BBM 501

Reg. No.

CREDIT BASED FIFTH SEMESTER B.B.M. DEGREE EXAMINATION OCTOBER 2015 BUSINESS MANAGEMENT Cost Management – II

Time: 3 Hrs.

Max. Marks: 120

SECTION – A

Answer any Three questions:

3×20=60

1. A product passes through three processes A, B and C. The normal wastage of each process is 3%, 5% and 8% respectively. The wastage of each process is sold for `0.25, `0.50 and `1.00 per unit respectively. 10,000 units were issued to process 'A' in the beginning of the month at `1 per unit. The other expenses were as follows:

Particulars	A (`)	B(`)	C(`)
Sundry Materials	1,000	3,000	500
Labour	8,000	13,000	5,300
Direct expenses	475	1,338	388
Actual output (units)	9500 unit	9,100 units	8,100 units

Prepare

- 1) Process Accounts 2) Abnormal Loss Account 3) Abnormal Gain Account

2. Sugama Transport Ltd owns a bus which runs between Delhi and Chandigarh and back for 10 days in a month. The distance from Delhi to Chandigarh is 240 kms. The bus completes the trip from Delhi to Chandigarh and back on the same day.

The bus goes another 10 days in a month towards Agra and the distance between Delhi and Agra is 190 kms. This is also completed in the same day. For the rest of 4 days of its operations in a month, it runs in the local city covering a distance of 70 kms. per day. Calculate the rate per passenger km when a profit of 33.33% on takings is maintained.

Other information is as follows:-

- Salary of conductor `2,100 per month

2. Taken tax `3,600 per month
3. Cost of the bus `4,00,000
4. Repairs, maintenance `3,000 per month
5. Drivers salary per month `2,100
6. The life of the bus is 10 years
7. Insurance `1,080 per annum
8. Lubricant oil `40 per 100 kms
9. Permit fees `1,000 per month
10. Diesel consumption 9 kms per litre at `9 per litre
11. Scrap value of the bus after 10 years `40,000
12. Accountants salary `960 per month
13. Normal capacity of the bus 50 passengers

The bus generally is occupied 90% of the capacity between Delhi and Chandigarh, 80% between Delhi and Agra and it is always full when it runs within the city.

3. A company of builders, having an authorized capital of `1,00,000 divided into 1,000 equity shares of `100 each, commenced operation on 1st January, 2011, and during the year it was engaged in a contract, the contract price of which was `4,00,000. The Trial Balance extracted from books on 31st December 2011 stood as follows:

Share capital 80 paid up		80,000
Sundry creditors		8,000
Land and buildings at cost	34,000	
Cash at bank	9,000	
Materials	80,000	
Plant	16,000	
Wages	1,05,000	
Expenses	4,000	
Cash received, being 80% of the work certified		1,60,000
	2,48,000	2,48,000

Of the plant and materials charged to the contract, plant costing `2,000 and materials costing `2,000 were destroyed by an accident. On 31st December, 2011, plant which cost `4,000 were received to stores, value of materials on site was `4,000. Cost of work done but not certified was `2,000. Charge 10% depreciation on plant.

Prepare the contract account for the year and balance sheet on 31st December, 2011, and show your calculation of the amount to be credited to profit and loss account.

4. A certain product passes through three process before it is transferred to finished stock. The following information is obtained for the month of December.

	Process I	Process II	Process III	Finished stock (₹)
Opening stock	2,000	12,000	10,000	25,000
Direct material	13,000	20,000	40,000	---
Direct wages	10,000	10,500	50,000	---
Production overhead	10,000	25,000	25,000	---
Closing stock	5,000	6,000	32,000	33,000
Profit % on transfer price to the next process	20%	25%	10%	---
Inter-process profits for opening stock	---	2,000	2,800	10,000

Stocks in process are valued at prime cost and finished stock has been valued at the price at which it was received from Process III. Sales during the period were `3,00,000.

Prepare process accounts showing profit element at each state.

SECTION – B

Answer any Five questions:

5×10=50

5. The following information is obtained from the books of Mr. Prakash Ltd. concerning Job No. 42413. Materials used `500 Direct Wages Dept A 10 hrs at `2.5 per hour. Department B – 8 hours at `3.00 per hour. Department C – 5 hours at `4.0 per hour. The estimated variable overheads for three departments are as follows:
 Department A `7,000 for 7,000 labour hours
 Department B `6,000 for 3,000 labour hours
 Department C `4,000 for 1,000 labour hours
 The estimated fixed overheads are `30,000 for 7,500 normal working hours. Draw up a job cost sheet providing

for profit at 25% on selling price.

6. The following figures are available from the records of Venus Enterprises as at 31st March.

	2009 (₹) (lakhs)	2010 (₹) (lakhs)
Sales	150	200
Profit	30	50

Calculate:

- The p/v ratio and total fixed expenses
 - The break-even level of sales
 - Sales required to earn a profit of ₹90 lakhs
 - Profit or loss that would arise if the sales were ₹280 lakhs
7. Prepare a production budget at 60% and 90% capacity. The following data is furnished at 80% capacity.
Actual production 8,000 units
Material cost per unit ₹75
Labour cost per unit ₹45
Direct expenses per unit ₹30
Factory overhead per unit ₹30 (60% variable)
Administrative overhead per unit ₹45 (75% fixed)
8. The following information is given pertaining to material 'P' in a factory
Standard quantity 1,000 units
Actual quantity 1,060 units
Standard price ₹20 per unit
Actual price ₹24 per unit
Calculate:
a) Material cost variance
b) Material price variance
c) Material usage variance
9. Explain the various cost concepts on the basis of decision making.
10. From the following information, calculate the amount of profit that the contractor can credit to profit and loss account for the year ended 2011.
i) Cost of contract as on 31.12.2011 ₹4,00,000
ii) The contract would be completed in a further period of 6 months
iii) Plant and tools as on 31.12.2011 was ₹40,000 and the estimated plant and tools would have a residual value of ₹10,000 upon the completion of the contract
iv) Cost of machinery and stores as on 31.12.2011 was ₹30,000 and additional cost of machinery and stores would be ₹1,00,000 and that sundry expenses ₹20,000 would be incurred
v) Wages for the six months would be ₹80,000
vi) Establishment charges as on 31.12.2011 was ₹40,000 and it would remain the same per month
vii) 2.5% of the total cost of the contract should be provided for contingencies.

SECTION - C

11. **Answer all the questions:**

10×1=10

- Mention any two overhead variances.
- What are functional budgets?
- What is Break-Even-Analysis?
- Differentiate Joint Products and By Products.
- What is abnormal gain?
- What is escalation clause?
- What is the cost unit for an electricity supply undertaking?
- What is cost plus contract?
- What is marginal costing?
- What is an adverse variance?

8. The standard material cost to produce 100 kilograms of a chemical mixture is as follows:

Material A 30kg at ₹100 per kilogram

Material B 40kg at ₹50 per kilogram

Material C 50kg at ₹60 per kilogram

Actual production of the chemical mixture for the month is 1000 kilograms.

Material consumed is: Material A 350 kg at ₹90 per kilograms

Material B 420 kg at ₹60 per kilograms

Material C 530 kg at ₹70 per kilograms

Calculate: a) Material cost variance

b) Material price variance

c) Material usage variance.

9. The following figures relate to the cost of manufacturing electric fans for a period of 3 months ending 31st Dec 2010.

	1 October 2010 (₹)	31 December 2010 (₹)
Completed Stock	NIL	20,250
Stock of raw materials	5000	3500
Factory wages	-	75,000
Indirect charges	-	12,500
Material purchased	-	32,500
Sale	-	1,12,500

The number of fans manufactured during the three months was 3000. Prepare a statement showing the cost per fan and the price to be quoted for 750 fans to realize the same percentage of profit as was realized during the three months referred to above, assuming the same conditions.

10. Bring out the differences between job costing and process costing.

SECTION – C

11. Answer all the questions

10x1=10

- What is work certified?
- What are joint products?
- Name any two undertakings where operating costing is applied.
- What is meant by cost-volume-profit analysis?
- What is differential cost?
- What is contract price?
- What is work uncertified?
- What is process costing?
- What is adverse variance?
- What is job costing?

BBM 501

Reg. No.

CREDIT BASED FIFTH SEMESTER B.B.M. DEGREE EXAMINATION

APRIL 2016

BUSINESS MANAGEMENT

COST MANAGEMENT II

Time: 3 Hrs

Max. Marks: 120

SECTION – A

I. Answer the following:

3x20=60

1. The following particulars are extracted from the books of a building contractor on 31st December 2007.

	₹
Wages	8,75,000
Inspection Expenses	35,000
Materials purchased	80,000
Transferred from other contracts	2,00,000
Issued from central stores	5,50,000
Inspection fees	15,000
General stores	40,000
Establishment charges	66,000
Scrap (materials) sold	6,000

A cement mixing plant was purchased on 01-01-2007 for ₹80,000, installation charges amounted to ₹20,000 of the plant and materials charged to the contract plant which cost ₹3000 and materials which cost ₹2500 were lost. On 30th June plant was transferred to another contract. An additional plant was purchased on 01-10-2007 for ₹2,00,000.

The contract price was ₹50,00,000. Cash received on account to 31st December 2007. Amounted to ₹20,00,000, being 80% of work certified. The cost of work done but not certified was ₹75,000. The value of materials on hand was ₹20,000. Charge depreciation on plant at 10% per annum.

Prepare contract account. Show how the work in progress account will appear in the balance sheet on 31-12-2007.

2. In an oil refinery the product passes through three different processes. The following information is available for the month of January 2009.

Particulars	Crushing	Refining	Finishing
	₹	₹	₹
Raw materials (500 tons of copra)	2,25,000	-	-
Wages	8000	5900	5875
Power	1200	1000	1500

Sundry materials	500	1900	-
Factory expenses	600	1000	950

Cost of drums for storing finished oil ₹21,025. 200 tons of oil cake was sold for ₹15,000. 275 tons of crude oil was obtained.

Sundry by-products of crushing process fetched ₹900. By-product after refining the oil was sold for ₹900 (20 tons) and 250 tons of refined oil obtained. 240 tons of finished oil was stored in drums and 10 tons were sold for ₹1200.

The establishment expenses were ₹3500 which are to be charged to the three processes in proportion of 3.2.2.

Prepare the process accounts.

3. Product A process through three processes to completion, namely X, Y and Z. The output of each process is charged to next process at a price calculated to give a profit of 20% on the transfer price. The output of process Z is charged to the finished stock on a similar basis.

There was no partly finished work in any process on 31st December. On this date, the following information was obtained for the month of December.

	Process X	Process Y	Process Z
	₹	₹	₹
Materials consumed	10,000	15,000	5,000
Labour	15,000	10,000	20,000
Stock on 31 st December	5,000	10,000	15,000

Stock in each process is valued at prime cost of production.

There was no stock in hand on 1st December. Of the goods passed into finished stock, ₹10,000 remained in hand on 31st December, the balance has been sold for ₹90,000.

Show- i) The Process Accounts
ii) Actual Profit

4. A transport company maintains a fleet of buses as follows.

No. of buses	Carrying capacity
10	60 passengers each
5	40 passengers each

Each bus makes four (both upward and downward journeys in one trip) in a day covering a distance of 5 miles in each trip. On an average, 75% of the seats are occupied in each trip. Assuming that the company operated its fleet 25 days in a month, ascertain the operating cost per passenger-kilometer, taking into account the following further information:

Wages of 15 drivers at	₹250 each per month
Petrol, oil, grease, etc.	₹300 per month
Repairs	₹1500 per month
Tyre, tube, etc.	₹375 per month
Depreciation	₹90,000 per annum
Garage rent	₹9000 per annum

Interest on capital	₹12,000 per annum
General supervision charges	₹ 3000 per annum

SECTION – B

Answer any FIVE of the following:

5x10=50

5. The information given below has been taken from the cost records of a factory in respect of job no. 707.

Direct material ₹4010

Wages details:

Department-A : 60 hours @ ₹3 per hour

Department-B : 40 hours @ ₹2 per hour

Department-C : 20 hours @ ₹5 per hour

The variable overheads are as follows:

Department-A : ₹5000 for 5000 hours

Department-B : ₹3000 for 1500 hours

Department-C : ₹2000 for 500 hours

Fixed expenses estimated at Rs.20,000 for 10,000 working hours. Calculate the cost of the job no. 707 and the price for the job to give a profit of 25% on the selling price.

6. Assuming that the cost structure and selling prices remain the same in periods I and II find out:

- Profit Volume Ratio
- Fixed cost
- Breakeven point for sales
- Profit when sales are of ₹1,00,000
- Sales Required to earn a profit of ₹20,000
- Margin of safety at a profit of ₹15,000

Period	Sales	Profit
	₹	₹
I	1,20,000	9,000
II	1,40,000	13,000

7. The expenses budgeted for production of 10,000 units in a factory is furnished below.

Particulars	Per Unit
	₹
Materials	70
Labour	25
Variable factory overheads	20
Fixed factory overheads (₹1,00,000)	10
Variable expenses (Direct)	5
Selling expenses (10% Fixed)	13
Distribution expenses (20% fixed)	7
Administrative expenses (Fixed ₹50,000)	5
Total cost of sales per unit	155

You are required to prepare a budget for the production of 6000 units and 8000 units.

Re-order quantity : A – 9,600 units, B – 14,400 units
 Re-order period : A – 4 to 6 weeks, B – 2 to 4 weeks
 Calculate for each component.

a) Re-order level b) Minimum level

9. The following is the information regarding receipts and issues of pigments and stores record of a paint manufacturing factory:

- Jan. 2015 –
- 1 Opening Stock Pigments – 25,000kgs
 - 2 Issued on requisition No.101 – 13,000kgs
 - 4 Issued on requisition No.102 - 2,000kgs
 - 5 Received from a supplier – 30,000kgs
 - 6 Issued on requisition No.103 – 10,000kgs
 - 7 Issued on requisition No.104 – 5,000kgs
 - 8 Received back from Job No.420 – 1,000kgs
 - 9 Received from supplier by Challan No.48 – 10,000kgs
 - 12 Transfer from Job No. 401 to Job No.408 – 500kgs
 - 15 Issued on requisition No. 105 – 4,500kgs

Examination by the stock on 7th morning revealed a shortage of 500kgs
 Maximum level – 50,000kgs, Minimum level – 10,000kgs, Ordering level – 25,000kgs
 You are required to prepare Bin Card No.555 for the item ‘Pigment’ for which the symbol allotted is X – 40.

10. Calculate the machine hour rate from the following information:

Particulars	₹
Cost of the machine	2,00,000
Cost of installation of machine	60,000
Scrap value after ten	20,000
Rent & Rates per month	2,000
(The machine occupies ¼ of the total area of the factory.)	
Supervisors salary per month	9,000
Insurance premium for the machine(per annum)	4,800
Repairs and maintenance (per annum)	3,000
Factory lighting per month	2,000
(The machine occupies ¼ of the total area of the factory.)	
Power bill for the month	12,000
(10 units per hour at the rate of 6 per unit)	
Wages of operator per month	4,000
Cotton waste, oil etc per month	400

The supervisor spends ¼ of his time on this machine.

SECTION - C

11. Answer all the questions:

10×1=10

- a) What is idle time?
- b) What is meant by machine hour rate?
- c) What is meant by factory overheads?
- d) Who are casual workers?
- e) Define cost accounting.
- f) If profit is 25% on sales and sales is ₹2,00,000. What is cost of sales?
- g) What is appropriate cost unit for a) Transport b) Cement industry
- h) What are the items of prime cost?
- i) What is danger level?
- j) What is ABC analysis?

BBM 501.1

Reg. No.

CREDIT BASED FIFTH SEMESTER B.B.M. DEGREE EXAMINATION OCTOBER 2016

BUSINESS MANAGEMENT

COST MANAGEMENT – I

Time: 3 Hrs.

Max. Marks: 120

SECTION – A

Answer any Three of the following:

3×20=60

1. The following particulars are obtained from the financial accounts of Ishmitha Exports Pvt. Ltd. For the year ended 31st December. 2015.

	₹
Purchase of Raw Materials	85,000
Productive Wages	65,000
Unproductive Wages	6,000
Motive Power	4,000
Loose tools written off	500
Chargeable Expenses	5,000
Duty on purchase	500
Reserve for Bad Debt	1,600
Bad debt	500
Telephone Charges	400
Works Stationery	1,500
Carriage Inward	800
Carriage Outward	200
Debt collection charges	460
Loss on sale of delivery van	680
Subsidy received on exports	7,000
Office expenses	9,600
Warehouse rent	890
Showroom rent	800
Welfare services	2,000
Haulage	650
Water Supply	250
Estimating expenses	1,250
Rectification cost of defectives	150
Material transferred to subsidiary firm	2,000
Material sold	500
Scrap sold – Material	200
Factory	300
Loss by fire – Building	10,000
Material	1,600
Furniture	750
Samples and free gift	1,100
Cash discount	320
Upkeep of delivery vans	800
Commission on Sales	250
Sales tax	920

6,000 units are sold @ ₹50 per unit

Stock:

Stock:	1-1-2015	31-12-2015
Materials (₹)	11,000	₹3,000
Work in progress (₹)	15,000	₹11,000
Finished Goods (units)	1,500	500
Finished goods (₹)	54,000	----

Prepare cost sheet for the year ending 31st December 2015.

2. The following is an extract of the records of the receipts and issues of a chemical during a month.

February

- 1 Opening Balance 500 tonnes at ₹200 per ton
- 3 Issued 70 tonnes
- 4 Issued 100 tonnes
- 8 Issued 80 tonnes
- 13 Received 200 tonnes at ₹190 per ton
- 14 Return from department 15 tonnes
- 16 Issued 180 tonnes
- 20 Received 240 tonnes at ₹190 per ton
- 24 Issued 300 tonnes
- 25 Received 320 tonnes at ₹190 per ton
- 26 Issued 115 tonnes
- 27 Return from department 35 tonnes
- 28 Received 100 tonnes at ₹180 per ton

Issues are to be priced on the principle of FIFO. The Stock Verification reveals a shortage of 10 tonnes on 22nd.

Prepare stores ledger for the chemical showing the above transaction.

3. a) Calculate the normal and overtime wages payable to the workman from the following data:

Days	Hours worked
Monday	8
Tuesday	10
Wednesday	9
Thursday	11
Friday	9
Saturday	4

Normal working hours per day is 8 hours. Normal time rate is ₹50 per hour. Over time rate is upto 8 hours in a day at single rate and over 8 hours in a day at double rate. **(10 marks)**

- b) Using the information given below calculate the amounts earned by each employee under each of the following remuneration methods: **(10 marks)**

- i) Piece work with guaranteed hourly rate
- ii) Hourly rate of payment
- iii) Bonus system as per Rowan
- iv) Bonus system as per Halsey

Particulars	Employee		
	P	Q	R
Time allowed (hours per 100 units)	23 hours	32 hours	38 hours
Piece rate per unit (₹)	1.25	2.00	1.50
Guaranteed hourly rate (₹)	6.00	7.50	5.00
Actual time taken (hours)	40 hours	42 hours	39 hours
Actual units produced	200	125	150

4. Moonlight Ltd., has three production departments A, B and C and two service departments X and Y. The following particulars are available for the month of March 2003 concerning the organization.

	₹
Rent	15,000
Municipal Taxes	5,000
Electricity	2,400
Indirect Wages	6,000
Power	6,000
Depreciation on Machinery	40,000
Canteen Expenses	30,000
Other labour related costs	10,000

Following further details are also available:

Particulars	Total	A	B	C	X	Y
Space (Sq. mtrs.)	5,000	1,000	1,200	1,500	1,000	300
Light Points (Nos.)	240	40	50	80	40	30
Direct Wages (₹)	40,000	12,000	8,000	12,000	6,000	2,000
Horse Power of Machines (Nos.)	150	60	30	50	10	--
Cost of Machines (₹)	2,00,000	48,000	65,000	80,000	7,000	--
Working Hours		2,335	1,510	1,525	--	--

The expenses of service departments are to be allocated in the following manner:

	A	B	C	X	Y
X	20%	30%	40%	---	10%
Y	40%	20%	30%	10%	---

You are required to prepare:

- 1) Primary Distribution Summary
- 2) Secondary Distribution Summary

SECTION – B

Answer any Five of the following: **5×10=50**

5. Explain the methods and techniques of costing.
6. What is meant by Labour Turnover? What are the causes for labour turnover and how is it measured?
7. The following details are available in respect of a consignment of 1,250kg of material X.
 - a) Invoice price ₹20 per kg
 - b) Excise duty 25% on invoice price
 - c) Sales tax 8% of invoice price (including excise duty).
 - d) Trade discount 10% on invoice price
 - e) Insurance 1% of aggregate net price
 - f) Delivery charges ₹250
 - g) Cost of containers @₹60 per container for 50kg of material. Rebate is allowed at ₹40 per container if returned within six weeks. You are required to find out the purchased cost of material X per kg from the above details.
8. Two components A and B are used as follows:
 Normal Usage : 1,200 units per week
 Maximum Usage : 1,800 units per week each