UNIVERSITY OF RUHUNA

FACULTY OF MANAGEMENT AND FINANCE

No. of Pages: 09
No. of Questions: 06
Total Marks :70

BACHELOR OF BUSINESS ADMINISTRATION HONOURS DEGREE

2000 LEVEL FIRST SEMESTER END EXAMINATION –AUGUST/SEPTEMBER 2025
(Old Syllabus)

Three Hours

BBA 21013 – Cost and Management Accounting Academic Year 2025/2026

Instructions

- **Answer five questions (05) only.**
- **Calculators are permitted.**
- **Make appropriate assumption where necessary.**

Question No.01

A. Briefly explain two differences between Cost & Management Accounting and Financial Accounting. *(02 Marks)*

B. A Company uses 50,000 units annually to produce a product, which are bought in at a cost of Rs. 200 each from the supplier. The order cost per order is Rs.2,500. The cost of holding a unit in inventory for a year is 5% of the purchase price. The supplier offers a 12% discount on the purchase price for order quantities of 12,500 units or more.

Required:

Calculated the total inventory cost for each level of order quantity and decide whether the discount should be accepted.

(02 Marks)

C. A Company pays its direct employees Rs.300 per hour based on time. For improving productivity, the Company is introducing the **Halsey** bonus scheme. The machine department has allowed a standard time of 50 minutes to complete one operation. An employee worked total of 240 hours and completed 432 operations in a month.

Required:

Calculate the total bonus of the employee. *(01 Mark)*

D. The following information relates to the manufacturing of a product in July2025.

Output (Units)	Total cost (Rs.)
1,600	320,000
2,400	380,000
3,200	392,000

For output volumes above 3,000 units, the variable cost per unit decreases by 20%.

Required:

Estimate the total cost of producing 2,500 units and 3,500 units in July 2025.

(03 Marks)

E. A Company produces a product using two production departments and two service departments and the budgeted overhead costs information related to the production of that product in September 2025 is as follows.

Cost	Rs.'000	Apportionment Basis
Rent	4,000	Dimension
Rates	2,000	Dimension
Electricity charges	6,000	Dimension
Insurance for machineries	2,000	Value of machineries
Depreciation for machineries	20,000	Value of machineries
Supervisors' salaries	14,000	Number of employees

The following additional information is available:

	Production Departments		Service Departments	
	Machines	Assembly	Store (S)	Cafeteria (C)
Dimension (square feet)	1,800	1,560	440	200
Value of machineries (Rs. Million)	100	78	12	10
Number of employees	700	450	150	100

It has been estimated that each service cost center undertakes work for the other cost centers in the following proportions.

	Machines	Assembly	Store	Cafeteria
Percentage of service cost center **S** to:	50%	30%	-	20%
Percentage of service cost center **C** to:	40%	50%	10%	-

Required:

Calculate the total overhead cost of production departments using mathematical method for reapportionment of service departments' costs to the production departments.

(06 Marks)

(Total Marks 14)

Question No.02

A. "Job costing is for tracking the costs when every project is different and the cost of each job varies". Briefly explain the statement using special features of the job costing.

(02 Marks)

B. A Company produces a product through the manufacturing processes 1 and 2. At the beginning of process 1, raw materials are introduced and in process 2 after completion of 70% additional raw materials are added to the process. After completion of process 1, processed units are transferred to

the process 2 and from them it is transferred to finished goods stock. The following are the details related to process 2 for the month of July 2025.

1. The opening work in progress (OWIP) stock consists of 2,000 units which are 80% completed.
2. The cost composition of opening work in progress stock is as follows.

Cost element	Value (Rs.)
Main input from process 1	100,000
Additional raw material	60,000
Labour cost	62,500
Overhead cost	72,500
Total cost	**295,000**

3. 18,000 units are transferred to process 2 from process 1 at Rs. 45 per unit.
4. The cost of additional raw materials added in process 2 is Rs. 300,000.
5. The total labour cost and total overhead cost added to process 2 are Rs. 300,000 and Rs. 435,000 respectively.
6. The normal loss is 20% on active units.
7. The actual loss of process 2 is 1,000 units.
8. The closing work in progress (CWIP) stock consists of 5,000 units which are 50% completed.
9. A unit of scrap can be sold for Rs. 20 each.

Required:

Prepare the process 2 account and other relevant accounts using weighted average cost (WAC) method.

(08 Marks)

C. A Company produces joint products X and Y, and by-product R is through a common production process. Information relevant to the month of July 2025 is given below.

Cost element	Value (Rs.)
Direct material cost (20,000 units)	300,000
Direct labour cost	175,000
Production overheads cost	80,000

The following additional information is also available.

1. Outputs for the month were X 10,000 units, Y 8,000 units and R 1,000 units.
2. The selling prices of X, Y and R, are Rs. 60. Rs. 50 and Rs.12, respectively. Joint cost is apportioned based on output ratio.
3. Packing cost of by-product is Rs. 2 per unit and scrap can be sold at Rs. 5 per unit.
4. Normal loss of the process is 5% from input and assume there was no abnormal gain or loss.

Required:

i. Calculate the joint cost for each joint product.
ii. Prepare the by-product account.
iii. Calculate the profit for each product and the total profit of the Company.

(04 Marks)
(Total Marks 14)

Question No.03

A. Briefly explain two limitations of standard costing.

(02 Marks)

B. A Company manufactures a product using standard costing system for the cost control. The information related to labour and fixed overhead cost for producing the product is as follows.

Standard/Budgeted data for a month		**Actual data for the month of July 2025**	
Normal working days	22 days	Working days	20
Labour hours per day	200 hours	Labour hours worked per day	230
Time required per unit	02 hours	Units Produced	2,500
Fixed overhead	Rs. 1,320,000	Fixed overheads	Rs. 1,250,000

Actual idle time for the month was 100 hours.

Required:

Calculate fixed overhead expenditure, capacity and efficiency variances for the month of July 2025.

(03 Marks)

C. The standard cost of manufacturing one unit of product "XY" of a company is as follows.

Direct material: P	02 units at Rs. 120 per unit
Direct material: Q	1.5 units at Rs. 60 per unit
Direct labour	05 hours at Rs. 60 per hour
Variable overhead cost for a month	Rs.750,000

The company has planned to produce 10,000 units of product "XY" per month and the standard selling price of one unit of product "XY" is Rs.1, 000. The following information relating to actual is available for the month of July 2025.

Number of units manufactured and sold	9,000 units
Selling price per unit	Rs. 1,200
Direct material : P	18,500 units at Rs.130 per unit
Direct material: Q	10,550 units at Rs.50 per unit
Direct labour	44,000 hours at Rs. 70 per hour
Variable overhead cost	Rs. 550,000

Required:

i. Calculate direct material price, mix and yield variances.
ii. Calculate labour rate and efficiency variances.
iii. Calculate variable overhead expenditure and efficiency variances.
iv. Calculate the sales price margin and volume margin variances.
v. Prepare an operating statement reconciling the budgeted contribution with the actual contribution using marginal costing for the month of July 2025.

(09 Marks)
(Total Marks 14)

Question No.04

A. Briefly explain two reasons for the development of Activity Based Costing (ABC) in modern manufacturing industries.

(02Marks)

B. A Company produces three products named A, B and C using the same type of raw material. Currently, the Company uses the traditional absorption costing (TAC) to allocate overheads to its products based on labour hours. The Company is now considering an activity based costing (ABC) system with the aim of profitability. Information for the three products for the month of July 2025 is as follows:

	A	B	C
Production and sales volume (units)	15,000	12,000	20,000
Selling price per unit (Rs.)	1,200	1,500	1,800
Raw material usage (kg) per unit	2	3	4
Direct labour hours per unit	2	2.5	2
Machine hours per unit	0.6	0.8	0.81
Number of production set up per annum	16	12	8
Number of purchase orders per annum	24	28	44
Number of deliveries to retailers per annum	48	30	62

The price of raw material was Rs. 200 per kg and the direct labour cost for the whole workforce was Rs.200 per hour. The annual overhead costs were as follows:

	Rs. '000
Machine set up costs	1,800
Machine running costs	3,480
Procurement costs	1,920
Delivery costs	2,800

Required:

Calculate the **total profit** for each product using TAC and ABC.

(07Marks)

C. A Company has received a special order for one of its manufactured product and if the order is accepted, the following raw materials are required.

Material	Quantity required and current cost per kg
A	2,000 kilograms at Rs. 100 per kg
B	1,000 kilograms at Rs. 150 per kg
C	50 liters at Rs. 120 per liter

The following additional information is also available.

1. **Material A:** 1,000 kilograms of this material is in stock at a cost of Rs. 50 per kg. The Cost Accountant has no alternative use for this material and intends selling it for Rs. 20 per kg. However, if the Company sold any it would have to pay a fixed sum of Rs. 3,000 to cover delivery costs (Disposal cost).

2. **Material B:** There is plenty of material B in stock and it cost Rs. 180 per kg. The material is continuously used by Company in its business.

3. **Material C:** There are 100 liters of this material in stock. It is hazardous and if not used in this contract, it will have to be disposed of at a cost of Rs. 500 per liter.

Required:

Calculate the relevant raw materials cost for the decision on accepting the special order.

(02 Marks)

D. A Company produces and sells two products named product "Y" and "K". The Company has forecasted the following information for the month of August 2025.

	Product Y (Rs.)	Product K (Rs.)
Selling price per unit	200	100
Contribution per unit	120	60

It is estimated that the total fixed cost and the profit for the month of August 2025 are expected to be Rs. 2.4 million and Rs. 1.8 million respectively. Further it is expected to sell one unit of product Y for every three units of product K.

Required:

i. Compute the weighted average profit volume ratio.
ii. Calculate the breakeven point (BEP) in units for each product.
iii. Determine the quantities of each product that must be sold to achieve the target profit.

(03 Marks)

(Total Marks 14)

Question No.05

A. A Company produces three products named as A, B and C. The information related to products is as follows.

	A (Rs.)	B (Rs.)	C (Rs.)
Selling price per unit	600	1,200	1,600
Less: Variable cost per unit			
Direct material cost (Rs.50 per unit)	200	350	700
Direct labour cost	100	200	500
Variable overhead cost	160	300	330
Contribution per unit	140	350	70
Expected sales for the month (Units)	300	450	300

The directors of the Company carry out of producing at least 150 units of every product even though this incurs a loss, which enables them to supply to the market and meet the competition.

Required:

i. Determine the optimum product mix if the monthly raw material supply is limited to 7,150 units.

ii. If monthly fixed overhead cost is Rs. 100,000, calculate the monthly profit of the company.

iii. If additional raw materials are available to complete the full capacity of the Company, determine the maximum cost of material payable per unit.

(06 Marks)

B. A Company produces three products named R, S and T by using the same type of machines. It is expected to produce 4,000 units of each product and sell in the month of the September 2025. The information related to a unit for each product is as follows.

	R	S	T
Machine hours	3	2	4
Variable cost (Rs.)	20	36	24
Purchase price from outside supplier (Rs.)	29	40	34
Selling price (Rs.)	35	45	40

The number of machine hours during the month of September 2025 is restricted to 20,000 hours. Therefor another company has agreed to supply each product in accordance with the above purchase prices.

Required:

i. Determine the production plan which maximizes the profit of the company.

ii. If the fixed cost of the month is Rs. 50,000, compute the maximum profit for the month

(05Marks)

C. A Company manufactures a product and sells it for Rs. 100 each. Some information related to th product for the last two months of the year 2025 is as follows.

Month	Sales (Units)	Total Profit (Rs.)
June	25,000	200,000
July	35,000	600,000

Required:

i. Calculate the profit volume ratio.
ii. Calculate the fixed cost for the month.
iii. Calculate the Break Even Point (BEP) in units and values.
iv. If current sales volume is 35,000 units, calculate the margin of safety in units and value.
v. If expected sales value in the month of August 2025 is Rs. 05 million, calculate the total profit for the month of August.

(03 Marks)
(Total Marks 14)

Question No. 06

A. A Company forecasted the following information for the next six months starting from August 2025.

1. 40% of the sales are on cash basis and the balance 60% of the sales are on credit cards. The Company has to pay 10% commission on credit card sales to the banks holding the credit cards. Cash is collected for the credit card sales in the following month. The sales values for the next six months are given below.

Month	August 2025	September 2025	October 2025	November 2025	December 2025	January 2026
Rs. Million	220	250	300	250	300	200

2. Rs.35 million monthly fixed overhead is paid with one-month arrears and, it includes monthly depreciation of Rs. 10 million.

3. Salaries include Rs. 10 million monthly fixed salaries and variable salaries 10% on total sales are paid in the month in which they are incurred.

4. The cost of sales is 40% on sales. A period of one month is given for the settlements of creditors and 50% of the next month's sales will be maintained in the closing stocks.

5. The following is the capital budget plan.
   a) Acquisition of property, plant and equipment are Rs. 20 million in October and Rs. 100 million in December.
   b) Disposal of property, plant and equipment is Rs. 200 million in November.

6. The Company should be paid Rs.12 million income taxes in November.

7. 18% of the sales should be paid to the Inland Revenue Department as the value added tax (VAT). VAT liability of each month should be paid on or before 25th of the following month.

8. Opening cash balance as at 01st October 2025 is Rs. 60 million.

Required:

Prepare the cash budget for the period of October to December 2025 on monthly basis (Total column is not necessary).

(08 Marks)

B. A Company produces a product. The budgeted sales value and the profit margin of the product for the next year are Rs. 4,200,000 and 25% on the total cost respectively. Further the budgeted opening and closing finished goods stocks are 4,000 units and 5,000 units respectively.

The budgeted raw material cost information per unit and stocks are as follows.

Raw material	Price per unit (Rs.)	Required raw materials for producing a unit	Opening stock (Units)	Closing stock (Units)
M 1	07.50	10 units	12,000	10,000
M 2	10.00	12 units	15,000	12,000
M 3	13.00	05 units	16,000	15,000

The budgeted labour cost information per unit is as follows.

Labour	Rate per hour (Rs.)	Required labour hours for producing a unit
Skilled	50.00	03 hours
Semi-skilled	40.00	02 hours

The budgeted production overhead costs of the Company for the next year are Rs.2.4 million and the budgeted number of labour hours is 80,000. The production overhead is absorbed based on the direct labour hours. The administration overhead cost is absorbed by 50% of the production cost and distribution overhead cost is absorbed by 25% of the production cost.

Required:

Prepare the Production, Material Purchase, Labour Cost and Production Cost budgets for the next year.

(06 Marks)
(Total Marks 14)