## PART - II EXAMINATION IN BACHELOR OF COMMERCE/ BUSINESS ADM ANH\&RATION

$2002 / 2003$ (REPEAT)

## BBA 301 MANAGERIAL ACCOUNTING

## Answer all Questions

Time : 03 Hours

1. Sunflower Company with three productions and two service cost centers is in the process of preparing overheads budgets and the apportionment of these overheads to products.

Budgeted expenses and the related information for the different cost centers have been given as follows :

|  | Total | Machine shop A | Machine shop B | Assembly | Canteen | Mainter |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Indirect wages (Rs.) | 78,560 | 8,586 | 9,190 | 15,674 | 29,650 | 15 |
| Consumable materials (Rs.) | 16,900 | 6,400 | 8,700 | 1,200 | $600$ | 15 |
| Rent \& Rates (Rs.) | 16,700 |  |  |  |  |  |
| Building insurance (Rs.) | 2,400 |  |  |  |  |  |
| Power (Rs.) | 8,600 |  |  |  |  |  |
| Lighting (Rs.) | 3,400 |  |  |  |  |  |
| Depreciation of Machinery (Rs.) | 40,200 |  |  |  |  |  |
| Area (sq.m.) | 45,000 | 10,000 | 12,000 | 15,000 |  |  |
| Value of machinery (Rs.) | 402,000 | 201,000 | 179,000 | 22,000 | 6,000 | 2, |
| Power usages technical |  |  |  | 22,000 | -- |  |
| estimates (\%) | 100 | 55 | 40 | 03 |  |  |
| Direct labour (hours) | 35,000 | 8,000 | 6,200 | 20,800 | -- |  |
| Machine usage (hours) | 25,200 | 7,200 | 18,000 | 20,800 | -- |  |

a. You are requested to prepare an overhead analysis sheet showing

1. Apportionment of overheads among the cost centers.
(06 marks)
ii. Re Apportionment of the cost of service cost centers to production cost centers.
b. Calculate the overhead absorption rate for each of the production departments.
(04 marks)
c. On the assumption that the actual results are ;

|  | Machine shop A | Machine shop B | Assembly |
| :--- | :---: | :---: | :---: |
| Direct Labour hours | 8,200 | 6,500 | 21,900 |
| Machine usage hours | 7,300 | 18,700 | -- |

And the total production overhead expenditure as Rs. 176,533, calculate the under/ over absorption of overheads.
(06 marks)
:
(Total 20 marks)
02. $A B C$ Ltd, operates three processes.:- The following information is available for May. 10,000 units at Rs. 5 each were transferred from process $A$ to Process B.

## Process Costs

Materials
Direct Labour

> (Rs) Process B (Rs) Process C

| 10,000 | 11,400 |
| ---: | ---: |
| 15,000 | 10,000 |
| 3,000 | 3,800 |
| 25,000 | 20,000 |
| $10 \%$ | $20 \%$ |
| 8,500 | 7,000 |

Loss in each process are saleable ad scrap which realize Rs. 1.50 per unit at process $B$ and Rs. 4 per unit at process $C$.

There was no stock of material or work-in-progress at the beginning or end of the period.
Required :

Show all the relevant accounts regarding process B and C.
(20 marks)
03. a. Briefly discuss the limitation of break-even analysis.
(03 marks)
b. $X Y Z$ Ltd. has introduced a new product. It is estimated that the fixed costs will be Rs. 16,740 per year, and that the variable costs will be Rs. 18 per unit. The selling price will be Rs. 45/- per unit. Output is expected to be 900 units per year.
i. Calculate the contribution per unit.
ii. The breakeven output and income.
iii. Prepare the breakeveñ chart showing clearly the angle of incidence, the breakeven point, and the margin of safety at the expected level of output.
(05 marks)
c. A company, currently operating at full capacity, manufactures and sells a soft drink can at Rs. 20/- each. Current volume is 10,000 cans per annum. The following cost structure was extracted from the books.


An opportunity has arisen to sell an additional 3,000 cans per annum at Rs. 18 each. Acceptance of this order will incur an extra fixed cost of Rs. 8,000 per annum for the leasing of additional machinery and payment of overtime premium of $20 \%$ for extra direct labour required.

Should this order by accepted? Give reasons.
What are the other factors that should be considered in making the decision?
(07 marks)
(Total 20 marks)
The following balance were extracted from the books of a building contractor at $31^{\text {st }}$ December 2003.

Contract No. 123
Material issued to site
Wages paid
Wage accrued on $31^{\text {st }}$ December ${ }^{*}$
Rs.

Plant issued to site
62,720
73,455720

6,000

Direct charges period
Direct charges accrued at $31^{\text {st }}$ December

Establishment charges
5,650
Stock of materials at site at $31^{\text {st }}$ December
Value of work certificated at $31^{\text {st }}$ December 165,000
Cost of work not yet - certified 3,500
Cash received on account of architect's certificates after deduction of $5 \%$ by customer as retention money

The work commenced on $1^{\text {st }}$ January of the year and contract price agreed at Rs. 245,000 . Prepare contract accunt for the year, providing for depreciation of plant at $25 \%$. Calculate the profit or loss to date, making such provisions as you consider desirable. Set the balance sheet showing the contract items.
(20 marks)
05. a. The following information is provided concerning A particular Raw material of Oxford company.

| Áverage usage | - | $1,000 \mathrm{~kg}$. per day |
| :--- | ---: | ---: |
| Minimum usages | - | 800 kg. per day |
| Maximum usages | - | $1,350 \mathrm{~kg}$. per day |
| Economic Order quantity- | $9,000 \mathrm{~kg}$. |  |

The stock level is reviewed at the end of each day, and an order is placed the following day if the normal re-order level has been reached. Delivery is reliably expected at the beginning of the fourth day following the order.
From the above information calculate the three normal control levels used for stock control purposes.
(12 marks)
b. Green house forecasted demand of its selling product $X$ as 1,000 units per month. The ordering cost is Rs. 36 perr order and the unit cost of $X$ is Rs. 8/-. It is estimated that the carrying costs are $15 \%$ per annum.

Calculate the economic order quantity using the data given above.
(08 marks)
(Total 20 marks)

