



HCM-010-001502

Seat No. \_\_\_\_\_

**B. B. A. (Sem. V) (CBCS) Examination**

October - 2017

**502 : Management Accounting - 01**

**Faculty Code : 010**

**Subject Code : 001502**

Time :  $2\frac{1}{2}$  Hours]

[Total Marks : 70

**Instructions :**

- (1) Figures to the **right** indicate full marks of the question.
- (2) Working note shall be treated as a part of the answer.
- (3) Calculation should be neat and clean.

1 What is Management Accountancy ? Discuss its scope. **14**

**OR**

1 “Management Accountancy” is the presentation of **14**  
accounting information in such a way as to assist management  
in the day to day operation of policy and in the day-to-day  
operation of an undertaking” – Discuss.

2 The variable cost structure of a product manufactured **14**  
by a company during the year 2017 is as under :

***Rs. per unit***

Material ..... 120

Labour ..... 30

Overheads..... 12

The Selling Price per unit is Rs. 270 and the fixed cost and sales during the current year are Rs. 14 lakh and Rs. 40.50 lakh respectively.

During the forthcoming year, the direct workers will be entitled to a wage increase of 10% from the beginning of the year and the material cost, variable overhead and fixed overhead are expected to increase by 7.5%, 5% and 3% respectively.

The following are required to be computed :

- (a) New Sale Price in the forthcoming year if the current P/V ratio is to be maintained.
- (b) Number of units that would require to be sold during the forthcoming year, so as to yield the same amount of profit in the current year, assuming that selling price per unit will not be increased.

**OR**

- 2** The Cost Accountant of a company running an orchard **14** with an adequate supply of labour, presents the following data and requests you to advise about the area to be allotted for the cultivation of various types of fruits, which would result in maximization of profits. The company contemplates growing apples, lemons, oranges and peaches :

	<i>Apples</i>	<i>Lemons</i>	<i>Oranges</i>	<i>Peaches</i>
Selling Price per box (Rs.)	15	15	30	45
Season's yield in boxes per acre	500	150	100	200
Cost :	Rs.	Rs.	Rs.	Rs.
Material per acre	270	105	90	150
Labour : Growing per acre	300	225	150	195
Picking and packing per box	1.50	1.50	3	4.50
Transport per box	3	3	1.50	4.50

The total fixed costs in each season would be Rs. 2,10,000.

The following limitations are also placed before you :

- (1) The area available is 450 acres, but out of this 300 acres are suitable for growing only oranges and lemons. The balance of 150 acres is suitable for growing any of the four fruits.
- (2) As the produce may be hypothecated to banks area allotted for any fruit should be demarcated in complete acres and not in fractions of an acre.
- (3) The marketing strategy of the company requires the compulsory production of all the four types of fruits in a season and the minimum quantity of anyone type to be 18000 boxes.

Calculate the total profit that would accrue if your advice is followed.

- 3 Pee Kay Ltd. is engaged in 3 distinct lines of production. 14  
Their production cost per unit and selling price are as under :

	<b>A</b>	<b>B</b>	<b>C</b>
- Production (Units)	3000	2000	5000
	<b>Rs.</b>	<b>Rs.</b>	<b>Rs.</b>
- Material Cost	18	26	30
- Wages	7	9	10
- Variable Overheads	2	3	3
- Fixed Overheads	5	8	9
Total Cost	32	46	52
Selling Price	40	60	61
Profit	8	14	9

The management wants to discontinue one line and gives you the assurance that production in two other lines shall rise by 50%. They intend to discontinue the line which produces Article A as it is less profitable.

- (a) Do you agree to the scheme in principle ? If so, do you think that the line which produces 'A' should be discontinued ?
- (b) Offer your comments and show the necessary statements to support your decision.

**OR**

- 3 SRF Ltd. manufactures auto parts. The following costs are 14  
incurred for processing 1,00,000 units of a component :

- Direct material cost ..... Rs. 5,00,000
- Direct Labour cost ..... Rs. 8,00,000
- Variable factory overhead ..... Rs. 6,00,000
- Fixed factory overhead ..... Rs. 5,00,000

The purchase price of the component is Rs. 22. The fixed overhead would continue to be incurred even when the component is bought from outside although there would be reduction to the extent of Rs. 2,00,000.

**Required :**

- (1) Should the part be made or bought, considering that the present facility when released following a buying decision would remain idle ?
- (2) In case the released capacity can be rented out to another company for Rs. 1,50,000, what would be the decision ?

4 Following figures of Nayan Ltd. are available for the year ending on 31.3.2017 : 14

A	<b>Fixed Expenses</b>	<b>Rs.</b>
	Rent and taxes .....	75,000
	Depreciation .....	1,00,000
	Administrative Expenses .....	1,80,000
	Other fixed expenses .....	45,000
B	<b>Semi Variable Expenses</b> (at 50% production capacity)	
	Indirect Material .....	1,20,000
	Indirect Labour .....	80,000
	Maintenance and Repairs .....	60,000
	Selling and distribution expenses .....	40,000
C	<b>Variable expenses</b> (at 50% production capacity)	
	Direct Material .....	4,00,000
	Direct Labour .....	2,40,000
	Direct Expenses .....	1,20,000
	Packing charges .....	40,000

**Additional Information :**

- (1) Fixed expenses will remain fixed upto 100% level. There will be an increase in fixed expenses by 30% if production capacity exceeds 100%.
- (2) At 50% production capacity 8000 units are manufactured.
- (3) Semi-variable expenses remain constant between 40% to 60% production capacity. It is increased by 10% if production capacity is between 60% to 80% and increase by 20% if production capacity is 80% to 100%.

Semi-variable expenses increase by 25% if production level is more than 100%.

- (4) Variable expenses vary as under :
- (a) Upto 80% level, direct material per unit will remain constant, but if production level exceeds 80% then there will be decrease by 10% per unit.
  - (b) Upto 80% level, direct labour per unit will remain unchanged, but will decrease by 5% if production exceeds 80% capacity.
  - (c) Other variable expenses will remain unchanged per unit.

Find out Profit/Loss at each level if selling price per unit can be obtained Rs. 200 upto 80% level and Rs. 180 for more than 80% capacity.

From above particulars, prepare flexible budget for 50%; 75%; 100% and 125% production level.

**OR**

- 4 Tata Ltd. has seasonal sales. It sells at Rs. 50 per unit. 14  
Sales are 25% for cash and the remainder at  $1\frac{1}{2}$  month's credit.

The cost of the goods in terms of % of the selling price is as follows :

Material .....	20%
Wages .....	25%
Factory expenses .....	20%
Depreciation .....	10%
	75%

In addition, each month a sum of Rs. 2,00,000 has to be paid in respect of fixed administrative expenses, income tax is Rs. 50,000 is payable in July 2017. Interest income is to be received in August 2017 at 5% on Rs. 1,00,000 subject to tax at 22%.

The company purchases materials a month before the one in which it is required. Suppliers are paid either on a "prompt" or 30 days basis. It is estimated that 10% of suppliers are in the "prompt" category. Payment is made in respect of other expenses fortnightly.

The sales in units for various months are as follows :

<b>Month</b>	<b>Sales (Units)</b>
April, 2017 .....	6,000
May .....	10,000
June .....	12,000
July .....	16,000
August .....	16,000
September .....	20,000
October .....	20,000

Sales in each month is spread uniformly over the month.  
The company has B.O.D. of Rs. 50,000 as at 1<sup>st</sup> July 2017.

You are required to prepare cash budget for the  
3 months ending on 30<sup>th</sup> September 2017.

- 5 One Kilogram of product 'J' requires two chemicals A & B. The following were the details of product 'J' for the month of July 2017 : 14

- (a) Standard mix chemical 'A' 50% and chemical 'B' 50%.
- (b) Standard price per kilogram of chemical 'A' Rs. 12 and chemical 'B' Rs. 15.
- (c) Actual input of chemical 'B' 70 kilograms.
- (d) Actual price per kilogram of chemical 'A' Rs. 15.
- (e) Standard normal loss 10% of total input.
- (f) Materials cost variance total Rs. 650 adverse.
- (g) Materials yield variance total Rs. 135 adverse.

You are required to calculate :

- (1) Material mix variance (total)
- (2) Material usage variance (total)
- (3) Material Price Variance (total)
- (4) Actual loss of actual input
- (5) Actual input of chemical 'A'
- (6) Actual price per kilogram of Chemical 'B'.

**OR**

- 5 The details regarding the composition and the weekly wage rates of labour force engaged on a job scheduled to be completed in 30 weeks are as follows : 14

<i>Category of Workers</i>	<i>Std.</i>		<i>Actual</i>	
	<i>No. of labours</i>	<i>Weekly wage rate per labour</i>	<i>No. of labours</i>	<i>Weekly wage rate per labour</i>
Skilled	75	60	70	70
Semi-skilled	45	40	30	50
Unskilled	60	30	80	20

The work is actually completed in 32 weeks.

**Calculate :**

- (a) Labour cost variance
- (b) Labour rate variance
- (c) Labour efficiency variance
- (d) Labour mix variance
- (e) Labour yield variance