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Your Roll No.....

**G**

**7263**

**M.Com./Semester I (NC)**

**Paper 4103 : MANAGERIAL ACCOUNTING**

*Time : 3 Hours*

*Maximum Marks : 100*

*(Write your Roll No. on the top immediately on receipt of this question paper.)*

**Attempt All questions.**

**All questions carry equal marks.**

1. (a) What are the steps involved in the managerial decision making process ? What role does management accounting play in that process ? 10
- (b) Discuss the various costs used in decision-making and explain their characteristics. 10

*Or*

- (c) Explain why a costing system that uses either a plant wide or a departmental overhead rate is likely to produce distorted product costs. 10

**P.T.O.**

- (d) Explain the concept of variable costing. Describe its characteristics and limitations. 10
2. (a) What is operating leverage ? How is it useful to business enterprises ? 10
- (b) Define insourcing and outsourcing. Explain how relevant cost analysis is used in insourcing/outsourcing decision. 10
- Or*
- (c) Discuss full cost plus and marginal cost plus methods of pricing. Which pricing method can be useful to a firm under what situations ? 10
- (d) Discuss the differences between fixed and flexible budgeting. Why are flexible budgets considered superior to fixed budgets ? 10
3. (a) What is a profit centre ? Discuss the benefits of creating profit centres in a business firm. 10
- (b) What are the measurement issues to consider when using return on investment ? 10

*Or*

The following is the income statement of a company which is producing shampoo for January 31, 2016. The controller of the company has been asked for advice on whether to continue production during February or to suspend the manufacture of shampoo.

**Income Statement for the month ended January, 2016**

	Rs.
Sales (2,45,000 units)	1,07,80,000
Cost of goods sold	<u>1,00,62,000</u>
Gross profit	7,18,000
Selling & administrative expenses	<u>15, 22,000</u>
Loss from operations	(8,04,000)

The production costs, selling and administrative expenses based on production of 2,45,000 units in January, are as follows :

	Per Unit Rs.
Direct Materials	8.00
Direct Labour	10.00
Variable manufacturing cost	19.60
Variable selling & administrative expenses	5.60

P.T.O.

For January fixed manufacturing costs incurred was Rs. 8,50,000. Sales for February are expected to drop by 30% below those of the preceding month. No changes are anticipated in the fixed costs or variable costs per unit. The inventory of shampoo at the beginning or end of February is expected to be nil.

**Required :**

- (i) Prepare an estimated income statement under absorption costing and variable costing for February.
- (ii) What would be the estimated loss in income from operations if the shampoo production is suspended for February ?

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4. Jet Airways has leased a single jet aircraft that it operates between Delhi and Bangalore. Only economy class seats are available on this plane. An analyst has collected the following information :

Seating capacity per plane	360 passengers
Average No. of passengers per flight	200 passengers
Average oneway fare	Rs. 5,000
Variable fuel costs	Rs. 4,40,000 per flight
Food and beverage service costs (no charge to passenger)	Rs. 200 per passenger
Commission to travel agents	8% of fare
Paid by Jet Airways (all tickets are booked by travel agents)	
Fixed annual lease costs allocated to each flight	Rs. 5,30,000 per flight
Fixed ground services (maintenance, check-in, baggage handling)	70,000 per flight
Fixed flight crew salaries allocated to such flight	Rs. 40,000 per flight
For simplicity, assume that fuel costs are unaffected by the actual number of passengers on a flight.	

**Required :**

- (a) Calculate total contribution margin, from passenger that Jet Airways earns on each oneway flight between Delhi and Bangalore.
- (b) The market research department of Jet Airways indicates that lowering the average oneway fare to Rs. 4,000 will increase the number passenger per flight to 212. On the basis of financial consideration alone, should Jet Airways lower its fare ? Show your calculations.
- (c) Travel International, a tour approaches Jet Airways on the possibility of chartering its aircraft on the following terms :
  - (i) For each oneway flight, Travel International, will pay Jet Airways Rs. 7,45,000 to charter the plane and to use its flight crew and ground service staff.

- (ii) Travel International will pay for fuel costs.
- (iii) Travel International will pay for all food costs.

On the basis of financial considerations alone, should Jet Airways accept Travel International offer ? Show your calculations. 20

Or

The standard cost card of producing one unit of item 'Q' is as under :

**Direct Material**

A, 12 kg @ Rs. 10	120
B, 5 kg @ Rs. 6	30
Direct wages 5 hrs @ Rs. 3	15
Fixed production overheads	35
Total standard cost	200

Fixed production overhead is absorbed on expected annual output of 13,200 units.

Actual results for the month of September, 2016 are as under :

Actual production 1000 units Direct material

A, 11000 kg. Rs. 1,21,000

B, 5,200 kg, Rs. 28,600

Direct wages. 5,500 hrs. Rs.17,500

Fixed production overheads. Rs. 39,000

Calculate the following variances :

- (i) Material variances (cost, prices, usage, mix, yield)
- (ii) Labour variances (cost, rate, efficiency)
- (iii) Fixed overhead (cost, expenditure volume, capacity, efficiency)

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5. Reliance Industries has several divisions that operate as decentralized profit centres. The system division manufactures scientific instruments and uses the products of two other divisions. The Board Division produces printed circuit boards (PCB). One PCB model is made exclusively for the systems Division and the other models are sold in outside markets. The products of the Transistor Division are sold in a well



developed competitive market. However, one transistor model is also used by the system Division. The cost per unit of the products used by the system Division follow :

	<b>PCB</b>	<b>Transistor</b>
	Rs.	Rs.
Direct Material	2,500	800
Direct Labour	4,500	1,000
Variable overhead	2,000	500
Fixed overhead	800	750
Total Cost	9,800	3,050

The Board Division sells its commercial product at full cost plus a 25% markup and believes the board made for the system Division would sale for Rs. 12,250 per unit on the open market. The market price of the transistor used by the system Division is Rs. 3,700 per unit.

**Required :**

- (i) What is the minimum transfer price for the Transistor Division ? What is the maximum transfer price of the transistor for the system Division ?

- (ii) Assume the system division is able to purchase a large quantity source transistors from an outside source at Rs. 2,900 per unit. Further assume that the Transistor Division has excess capacity. Can the Transistor Division meet this price ?
- (iii) The Board Division and systems Division have negotiated a transfer price of Rs. 11,000 per PCB. Discuss the impact this transfer price will have on each division.

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*Or*

The management accountant of a company is gathering data to prepare the cash budget for July, 2016. He plans to develop the budget from the following information :

- (a) of all sales, 30% are cash sales.
- (b) of credit sales, 60% are collected within the month of sale.

Half of the credit sales, collected within the month receive a 2% cash discount (for accounts paid within 10 days). Twenty percent of credit sales are collected in the following month. Remaining credit sales are collected the month thereafter. There are virtually no bad debts.

- (c) Sales for the second two quarters of the year follow.  
(The first three months are actual sales, and the last three months are estimated sales) :

Sales	Rs.
April	4,60,000
May	6,00,000
June	10,00,000
July	11,40,000
August	12,00,000
September	11,34,000

- (d) The company sells all that it produces each month. The cost of raw materials equals 24 percent of each sales. The company requires a monthly ending inventory equal to the coming month's production requirements. Of raw material purchases, 50% are paid for in the month of purchase. The remaining 50% are paid for in the following month.
- (e) Wages total Rs. 1,10,000 each month and are paid in the month incurred.

- (f) Budgeted monthly operating expenses total Rs. 3,36,000 of which Rs. 50,000 is depreciation and Rs. 6,000 is expiration of prepaid insurance. (The annual premium of Rs. 72,000 is paid on January, 1)
- (g) Dividends of Rs.1,40,000 declared on June 30, will be paid on July 15.
- (h) Old equipment will be sold for Rs. 25,200 on July 4.
- (i) On July 13 new equipment will be purchased for Rs. 1,68,000
- (j) The company maintains a minimum cash balance of Rs. 20,000
- (k) The cash Balance on July 1 is Rs. 27,000. 20