B150/3 - DIP. IN MOTOR IND. MANMAGMENT - QUESTION PACK:

1. Budgeted Manufacturing Costs.

The Bridget Company had budgeted sales for 100,000 units of its products for 19-1. Expected unit costs based on past experience, should be £60 for three materials. £40 for direct labour and £30 for manufacturing overhead. Assume no beginning or ending inventory in process. Bridget begins the year with 40,000 finished units on hand but budgets the ending finished goods inventory at only 10,000 units. Compare the budgeted costs of production for 19-1.

2. Atwood Products Ltd. has budgeted sales for the next four months as follows:

	Sales in Units
April	50,000
May	75,000
June	90,000
July	80,000

The company is now in the process of preparing a production budget for the second quarter. Past experience has shown that end of month inventory levels must equal 15 percent of the following month's sales. The inventory at the end of March was 7,500 units.

Required:

How many units must be produced during each month of the second quarter, and the quarter in total?

3. Three ounces of musk oil are required for each bottle of "Allure", a very popular perfume. The cost of the musk oil is £5 per ounce. Budgeted production of "Allure" is given below by quarters for 19 X 5, and for the first quarter of 19 X 6:

	19 X 5				19 X 6
	First	Second	Third	Fourth	First
Budgeted production, in bottles	7,500	10,000	18,000	9,000	8,000

Musk oil has become so popular as a perfume base that it has become necessary to carry large inventories as a precaution against stockouts. For this reason, the inventory of musk oil at the end of a quarter must not be less than 25 percent of the following quarter's production needs. Some 5,625 ounces of musk oil will be on hand to start the first quarter, 19 X 5.

Required:

Compute the budgeted purchases of musk oil for 19 X 5 by quarter and for the year in total. Show your budget in both ounces and pounds.

4. (A) Prepare a Production Budget from the following information for June, July and August:

Sales Budget

June 18000 Units
July 19000 Units
Aug 28000 Units
Sept 26000 Units

Stock on 1st June of finished units expected to be 7800 units. Policy to have in stock at the end of any month, 40% of the expected unit sales of the following month.

(B) Raw Material cost per unit produced is £3. Using your production budget at (a) above and assuming further production in

September of 25000 units, prepare a Material Purchases Budget. It should be noted that:

(i) The company's policy is to have 25% of the materials required for the following month's production, in stock at the end of each month.

(ii) Expected to have £8,000 of Raw Material in stock on 1/6/91.

5. The AB Company will begin operations in January. 19A, to produce a single product which has a material cost of £2.00 per unit. Sales and production for the first four months of the year have been scheduled as follows:

	Units Sold	Units Produced
January	6,000	10,000
February	6,000	10,000
March	9,000	12,000
April	15,000	12,000

The inventory of materials at the end of each month will be an amount sufficient for one-half of the next month's production requirements. It is expected that three-fourths of each month's purchases wiil be paid for in the month of purchase and that the remainder will be paid for in the following month. A 2 per cent cash discount will be taken on all purchases of material.

(a) Prepare a schedule showing the materials requirements for January, February and March. (b) Prepare a schedule showing anticipated cash disbursments on accounts payable for materials for January, February, and March.

6. In addition to the information given in Question 4 it is known that the AB Company sells its product for £5.00 per unit and that collections are scheduled as follows: 80 per cent in the month of sale; 10 per cent in the month following sale; 9 per cent in the second month following sale; 1 per cent uncollectible.
Prepare a schedule of cash receipts from customers for January, February and March.

7. Cash Budget.

Using the information below, prepare a cash budget showing expected cash receipts and disbursements for the month of May, and balance expected at May 31, 19-1.

Planned cash balance May 1, 19-1: £60,000.
Sales for May: £800.000, half collected in month of sale, 40 percent in next month, 10 percent in third month.
Customer receivables as of May 1: £70,000 from March Sales; £450.000 from April sales.
Merchandise purchases for May: £500,000, 40 per cent paid in month of purchase, 60 percent paid in next month.
Payrolls due in May, £88,000.
Three-year insurance policy due in may for renewal: £2000, to be paid in cash.
Other expenes for May, payable in May: £41,000.
Depreciation for month of May: £2000.
Accrued taxes for May, payable in December: £6000.
Bank note due May 15: £175,000 plus £10,000 interest.
Accounts payable (from merchandise purchases), May 1: £240,000.

8. Greenup, Inc, produces a product which has peak sales in March of each year. The company's budgeted sales for the first quarter of 19 X 6 are given below:

	January	February	March	Total
Budgeted sales	£50,000	£65,000	£75,000	£190,000

In order to have data available for preparing a cash budget, the company is anxious to determine the budgeted cash collections from sales. To this end, the following information has been assembled:

Collections on Sales :
60% in month of sale
30% in month following sale
8% in second month following sale
2% uncollectible

The company gives a 2 percent cash discount for payments made by customers during the month of sale. The accounts receivable balance to start the year is £22,000, of which £4,000 represents uncollected November sales and £18,000 represents uncollected December sales.

Required:

1. What were the total sales for November? For December?
2. Prepare a schedule showing the budgeted cash collections from sales, by month and in total, for the three-month period.

9. Screws and Fasteners Ltd. is an established company selling standard bolts, nuts, and fasteners to most trades. When business is slack, goods are produced for stock and to improve storage facilities, an additional area is being fitted out with bins and shelving at a total cost of £21,250. Payment for this is payable on completion on May 15th, 1981. On the basis of the information and estimates given, you are required:

(a) To prepare a cash budget for the months ending 31st March, 30th April and 31st May, 1981.

(b) To comment on the position revealed by the cash budget and propose what action, if any, should be taken.

Month	January	February	March	April	May
Estimated cost of materials	31,800	34,600	36,400	33,700	37,000
Estimated cost of Wages	12,700	13,300	14,100	14,900	15,100
Estimated cost of overheads	5,100	5,400	5,600	5,700	6,000
Estimated Sales	51,000	48,000	50,100	45,000	44,100

Cash at Bank 1st March 1981 (estimated) £8,100.

(i) Assume that materials and overheads are paid for, on average, in the month after that in which the cost was incurred.

(ii) Wages should be persumed to be paid in the period in which they are earned.

(iii) Some sales are for cash. Credit terms require payments in one month. Experience shows that about one-third of sales are paid for in the month of sale, one third in the following month and one-third in the month after that.

(IMI 1982) (23 Marks)

10. Valcor Inc. needs a cash budget for the month of September 19x4. The following information is available:

1. The cash balance on September 1 is £7,500.
2. Actual sales for July and August, and expected sales for September are:

	July	August	September
Cash sales	£ 5,000	£ 5,250	£ 6,500
Credit sales	25,000	30.000	35,000
Total Sales	£30,000	£35,250	£41,500

Credit sales are collected over a three-month period in the ratio 60 percent, 30 percent, 9 percent, with 1 percent uncollectible.

3. Purchases of inventory will total £18,000 for September. Seventy percent of a month's purchases are paid during the month of purchase. Accounts payable for August purchases total £6,150, which will be paid in September.

4. Selling and administrative expenses are budgeted at £14,000 for September. Of this amount, £5,000 is for depreciation.

5. Dividends of £5,000 will be paid during September, and equipment costing £12,000 will be purchased.

6. The company must maintain a minimum cash balance of £5,000. An open line of credit is available from the company's bank to bolster the cash position as needed.

Required:

Prepare a cash budget for the month of September. Indicate in the financing section any borrowing that will be necessary during the month.

11. Your company, Loud Horns Ltd. has made the following forecasts.

1. Production of horns:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
500	540	600	650	700	600	450	400

2. Direct materials cost £6.00 per horn, paid the month after manufacture.

3. Labour costs are £4.00 per horn, paid in the same month as the horns are made.

4. Variable overhead is £3.00 per horn, paid half in the month of production and half in the following month.

5. Fixed overhead costs are £4,000 per month.

6. Sales revenue is £30.00 per horn. All production is sold but revenue is not received until the second month after manufacture.

7. New machinery costing £30,000 will be paid for in May.

8. On 1st March, Cash Balance is estimated to be £4,000.

(a) Produce a cash flow forecast for the business for the months March, April, May, June, July, August.

(13 Marks)

(b) Suggest FOUR possible courses of action that you might recommend in the light of what is revealed by your figures.

(12 Marks)
(IMI 1984)

12. From the following information of a Trader's projected annual receipts and expenditure.

Month	Receipts	Wages	Purchases	Overheads
	£	£	£	£
December	51,200	5,600	41,200	4,800
January	53,600	5,700	39,000	4,900
February	52,600	5,700	42,000	5,000
March	55,500	5,800	41,400	5,100
April	58,500	5,900	38,000	4,900

Cash balance 1st January £2,100

(i) Wages are paid the month they are earned.

(ii) Purchases and overheads are paid during the month following supply.

(iii) 50% of receipts are cash payments and 50% are credit sales paid during the month following the sale.

(iv) Equipment at the cost of £12,000 needs to be purchased and paid for in February.

(a) Produce a cash flow budget for the four months January, February, March and April.

(20 Marks)

(b) From the figures revealed give THREE alternative actions that could be taken be Management.

(5 Marks)
(IMI 1986)