

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086.

COURSE CODE: 19AF/MC/TD34

B.COM A & F DEGREE EXAMINATION – NOVEMBER 2021

COMMERCE – SHIFT II

COURSE : MAJOR – CORE

PAPER : TOOLS FOR MANAGERIAL DECISION MAKING

TIME : 3 HOURS

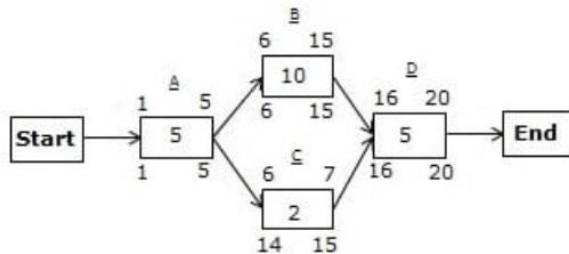
MAX. MARKS: 100

SECTION – A

Answer all the questions:

(3 x 4 = 12)

1. State the need for preparing Value Added Statements.
2. Differentiate between Financial Accounting and Management Accounting based on Purpose and Flexibility.
3. Calculate Float from the given Network Diagram:



SECTION – B

Answer any THREE questions:

(3 x 16 = 48)

4. Martin Company has fixed costs of Rs. 5700 and variable costs per unit of Rs. 6.50.
 - (i) If the selling price is Rs. 8.00 per unit at all levels, what is the breakeven point (in units)?
 - (ii) What is the P/V ratio?
 - (iii) If budgeted sales are 5,000 units, what is the margin of safety in units?
 - (iv) What is the sales volume (in units) required to make a profit of Rs.10,000?
5. The sales director of Stan Ltd. reports that next year he expects to sell 54,000 units of a certain product. The production manager consults his store keeper and provides the following information:

Two types of raw materials X and Y are required for manufacturing the product. Each unit of the product requires 2 units of X and 3 units of Y. The estimated opening balances at the commencement of the next year are:

Finished Product – 10,000 units; X – 12,000 units; Y – 15,000 units

The expected closing balances at the end of the next year are:

Finished Product – 14,000 units; X – 13,000 units; Y – 16,000 units

- (i) Draw up a material budget showing the material requirements and quantity of material to be purchased in the next year

(ii) If material X costs Rs. 5 and Y costs Rs. 6 at present and the price is expected to increase by 10% each in the next year, estimate the amount required to purchase the materials.

6. The standard overhead rate of a product is as follows:

Variable Rs. 4 per unit

Fixed (Budgeted production 10,000 units) Rs. 6 per unit

Standard time allowed for production of one unit of product is 5 hours. The following actual data are available for a month:

Production 9,600 units

Time taken 47,900 hours

Overhead:

Variable Rs. 38,500

Fixed Rs. 60,500

Calculate overhead variances.

7. The information regarding the Production process of X Co. are given below:

Task ID	Task Description	Task Predecessors	Task Duration (hours)
A	Project Start	-	0
B	Buy materials for A	A	10
C	Buy materials for B	A	20
D	Build A	B,C	30
E	Build B	B,C	20
F	Polish and Finish B	E	40
G	Join A and B	D,F	20
H	Project Finish	G	0

The Manager's goal is to complete the production process as quickly as possible. Help him to determine the critical path and the float in order to ensure quick completion of the project and better distribution of resources during the process.

SECTION – C

Answer any ONE question:

(1 x 40 = 40)

8. (a) Choose the correct answer and justify your option:

(i) Estimated production for the month of May, when

budgeted sales - 30,000 units, opening stock – 7,000 and closing stock – 10,000 units

a. 32,000 units b. 27,000 units c. 33,000 units d. none of the above

- (ii) At 50% level of activity, the variable cost is Rs. 25,000 and the fixed cost is Rs. 25,000. What would be the costs at 80% level?
- a. V - Rs. 25,000; F - Rs. 25,000 b. V - Rs. 40,000; F - Rs. 40,000
 c. V - Rs. 25,000; F - Rs. 40,000 d. V - Rs. 40,000; F - Rs. 25,000
- (iii) Estimated sales for the month of June when the present sales is 5,000 units, the selling price is Rs. 15 per unit, the expected increase in the quantity being 20% and in price is 10%
- a. Rs. 90,000 b. Rs. 99,000 c. Rs. 82,500 d. Rs. 90,750
- (iv) Calculate the overhead cost for 50,000 units, if the overhead cost for 30,000 units is Rs. 15000 (40% Fixed)
- a. Rs. 17000 b. 20000 c. Rs. 21000 d. Rs. 22000
- (v) The budgeted cost of production for 10,000 units when material cost per unit is Rs. 6, labour cost per unit is Rs. 8 and fixed cost Rs. 4,000 is
- a. Rs. 1,40,000 b. Rs. 1,44,000 c. Rs. 1,80,000 d. Rs. 1,60,000

(b) Explain briefly the features and purpose of Zero Based Budgeting.

(c) Prepare a cash budget for the first four months from the following estimated revenue and expenses:

Months	Sales Rs.	Purchases Rs.	Wages Rs.	Overheads	
				Administrative Rs.	Distribution Rs.
April	60,000	60,000	12,000	2,000	1,200
May	66,000	42,000	14,000	2,200	1,400
June	72,000	40,000	16,000	2,200	1,400
July	78,000	36,000	18,000	2,400	1,600
August	84,000	34,000	20,000	2,600	1,600

Additional information

- Cash balances on 1st April was Rs. 35,000
- 50% of sales are on credit basis which are realized in the subsequent month
- Suppliers are paid in the month following the month of supply
- Delay in payment of wages and overheads is 30 days
- Dividends on investments amounting to Rs. 10,000 may be received in April and July
- The Company plans to purchase a machine for Rs. 60,000 for which it has to pay the consideration in three equal installments in the month of April, June and July.

9. (a) Choose the correct answer and justify your option:

- (i) How many units should be sold to Break even if the selling price is Rs. 25 per unit, variable cost Rs. 10 per unit and Fixed cost Rs. 60,000
- a. 3000 units b. 4000 units c. 5000 units d. 6000 units

- (ii) Margin of safety when Fixed cost is Rs. 3,00,000, Sales Rs. 15,00,000 and P/V ratio 40% is
 a. Rs. 7,50,000 b. Rs. 10,05,000 c. Rs. 5,00,000 d. Rs. 12,00,000
- (iii) Fixed cost when Sales Rs. 2,00,000, Variable cost Rs. 1,00,000 and BEP - Rs.1,20,000
 a. Rs. 50,000 b. Rs. 1,00,000 c. Rs. 60,000 d. Rs. 80,000
- (iv) What is the break even point when P/V Ratio is 30% and Fixed cost is Rs. 6,00,000?
 a. Rs. 20,00,000 b. Rs. 18,00,000 c. Rs. 24,00,000 d. Rs. 30,00,000
- (v) Ascertain contribution when Profit is Rs. 3,00,000 and Fixed cost Rs. 6,00,000
 a. Rs. 3,00,000 b. Rs. 9,00,000 c. Rs. 2,00,000 d. Rs. 6,00,000
- (b) Explain the steps to be taken in case of plant merger decision.
- (c) The following particulars are taken from the records of a company engaged in manufacturing two products X and Y from a certain raw material:

	Product X (Rs. Per unit)	Product Y (Rs. Per unit)
Sales	125	250
Material cost (Rs. 2.5 per kg)	25	62.50
Wages (Rs. 15 per hour)	37.50	75
Variable overhead	12.50	25
Total Fixed overheads Rs. 50,000		

Comment on the profitability of each product when:

- Total availability of raw material is 20,000 kgs and maximum sales potential of each product is 1,000 units. Find the product mix to yield maximum profit. Determine the maximum profit.
- Total sales in value is limited
- Labour time is limited
- Production capacity in units is a key factor
