## I D NO.

# PRESIDENCY UNIVERSITY, BENGALURU SCHOOL OF MANAGEMENT 

Weightage: 40 \%

Max Marks: 100 Max Time: 3 hrs. 11 May 2018, Friday

## ENDTERM FINAL EXAMINATION MAY 2018

## Even Semester 2017-18 Course:FIN202 Managerial and Cost Accounting <br> II Sem. MBA

## Instructions:

(i) Read the question properly and answer accordingly.
(ii) Question paper consists of 3 parts.
(iii) Scientific and Non-programmable calculators are permitted

## Part A

(10 Q x $2 M=20$ Marks)

1. What is meant by standard costing? Name two advantages.
2. State marginal cost equation.
3. What is P/V ratio?
4. What are operating budgets? Give any two.
5. What is a master budget and its components?
6. State the equation for Material price variance.
7. How is margin of safety calculated?
8. Graphically show Break Even Point.
9. Name the categories of variances.
10. Why are cash budgets important for any firm?
11. Star Track Ltd is the manufacturer of a single product, a computer games machine, with an estimated turnover of Rs.7,000,000 per annum.
( 20 marks)
The following information is available:
Selling Price per unit: Rs. 100
Materials per unit: Rs. 21
Labour per unit: 1 hr @ Rs. 5 per hr (skilled) 3 hrs @ Rs. 3 per hr (unskilled)
Variable overhead: Rs. 20 per unit
Fixed overhead: Rs.1,800,000
After several years of successful trading, Star Track appears to be losing sales to its main competitor Ittendo Ltd. In an attempt to increase its market share, the management of Star Track has been considering three new marketing ideas for the year 2005:
a. To reduce the current selling price by $30 \%$, which is expected to generate $40 \%$ more sales volume
b. To reduce the current selling price by $30 \%$, but to accompany this with an aggressive advertising campaign which should increase sales by $70 \%$. Advertising will increase the variable overhead by $100 \%$.
c. To offer a free game, "Silver Eye" with every machine sold. Each game would cost the company Rs. 15 but is expected to boost sales by $60 \%$.

## Required

1. Taking the current position, calculate:
i) the break even point (in units)
ii) the margin of safety (in units)
iii) the profit that is currently expected
iv) how many games machines need to be sold to achieve a target profit of Rs.1,500,000?
2. Consider the new marketing ideas and calculate the expected profit for each alternative.
3. Evaluate the alternatives and recommend a course of action for Star Track Ltd..
4. A) The standard material required for production is $10,500 \mathrm{kgs}$. A price of Rs. $2 / \mathrm{kg}$ has been fixed for materials. The actual quantity of materials used for the product is $11,000 \mathrm{~kg}$. A sum of Rs. 24750 has been paid for the materials.

Calculate

- Material Cost Variance
- Material rate variance
- Material Usage variance B) From the following information given below.
(B) Calculate labor variances for two the departments (5 marks)

| Particulars | Dept A | Dept B |
| :--- | :--- | :--- |
| Actual gross wages | $₹ 2000$ | 1800 |
| Standard hours produced | 10000 | 8000 |
| Standard rate per hour | 30 paise | 25 paise |
| Actual hours worked | 8000 | 6000 |

13. The expenses for the production of 5000 units in a factory are given as follows.
(10 marks)

|  | Per Unit Rs |
| :--- | :--- |
| Materials | 60 |
| Labour | 30 |
| Variable overheads | 20 |
| Fixed overheads(Rs.50000) | 10 |
| Administrative expenses(5\% variable) | 10 |
| Selling expenses(20\% fixed) | 6 |
| Distribution expenses(10\% fixed) | 5 |
| Total cost /unit | 116 |
|  |  |

You are required to prepare a budget for the production of 7000 units

## Part C

(2 Q x $20 \mathrm{M}=40$ Marks)
14. Primrose Limited is preparing monthly Budgets for the 3 months ending $30^{\text {th }}$ September 2018.

Forecasts have been drawn up as follows:

| Month(2016) | Sales (Rs.) | Purchases (Rs.) Overheads (Rs.) |  |
| :--- | ---: | ---: | :---: |
|  |  |  |  |
| MAY | 130,000 | 75,000 | 12,000 |
| JUNE | 150,000 | 65,000 | 12,000 |
| JULY | 140,000 | 50,000 | 10,000 |
| AUGUST | 90,000 | 90,000 | 7,000 |
| SEPTEMBER | 160,000 | 100,000 | 11,000 |
| OCTOBER | 170,000 | 120,000 | 14,000 |

Additional Information:

1. Bank Balance on 1st July 2016 is estimated at Rs. 5,000 .
2. $50 \%$ of sales are credit sales. Payments from Receivables received two months after transaction takes place. Remaining sales are cash sales.
3. All purchases are on credit. Payments to suppliers made one month after transaction takes place.
4. Overheads forecasts refer to cash payments, to be paid as due.
5. Wages bill per month: Rs.35,000, paid the same month itself.
6. Rent is Rs. 72,000 p.a. and is paid quarterly in advance on 1 st January, 1st April, 1st July and 1st October.
7. Depreciation is estimated at Rs. 2,500 per month.
8. Corporation tax of Rs. 10,000 is due in August.
9. A new computer system was purchased in July for Rs.50,000. Payment is due in August.
10. The company expects to receive a business development grant in September of Rs. 15,000 .
11. Interest on bank overdraft, calculated at 2\% per month, is payable quarterly on 30th September.

## Required

Prepare a Cash Budget for Primrose Limited for the 3 months ending 30th September 2018.
15. Anna designs, makes and sells silk shirts. The selling price is Rs. 25 each.

Variable cost per silk shirt:
Material Rs. 6
Trimmings Rs. 2
Wages Rs. 3
Packaging Rs. 1
Fixed overheads (rent \& rates) are Rs.2,000 per month.

## Required

a. Calculate the contribution made by each shirt sold to fixed overheads.
b. How many shirts must Anna sell every month to break even?
c. If Anna's fixed costs rise by $25 \%$ and her selling price falls by $20 \%$, how many shirts will she have to sell to make a monthly profit of Rs.3,000?
d. Anna has had an offer from a retail outlet offering to purchase 100 shirts from Anna at a selling price of Rs. 15 per shirt. Acceptance of this offer would entail renting additional premises for a minimum period of 3 months at Rs. 200 per month. The order would be completed in one month. Should Anna accept the offer?
e. Next season, Anna plans to make 3 new designs. Costings for the new styles are as follows:

Style 1 Style 2 Style 3

Material
Trimmings
Wages
Packaging

Selling Price
Machine hours per shirt
Demand in units per month

Rs. 4 Rs. 3 Rs. 5
Rs. 2 Rs. 1 Rs. 2
Rs. 3 Rs. 3 Rs. 3
Rs. 1 Rs. 1 Rs. 1

Rs. 24 Rs. 18 Rs. 23
$5 \quad 3 \quad 4$
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Fixed overheads are expected to remain at Rs.2,000 per month.
As Anna has only one machine, machine hours are limited to 2000 hours per month.
What is the most profitable combination of styles for Anna to make?

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## MID TERM EXAMINATION

Course: FIN 202 Managerial and Cost Accounting

## SET B

II Sem. MBA

## Instruction:

(i) Read the question properly and answer accordingly.
(ii) Question paper consists of 3 parts.

## Part A

(3 Q x $4 \mathrm{M}=12$ Marks)

1. Classify the following items of cost into:
(a) Prime cost
(b) Factory overhead
(c) Selling and Administrative Overhead

| 1. | Factory rent | 2. | Works expenses |
| :--- | :--- | :--- | :--- |
| 3. | Raw materials | 4. | Productive wages |
| 5. | Unproductive wages | 6. | Plant depreciation |
| 7. | Salary of foreman | 8. | Price lists and catalogues |
| 9. | Travelling expenses of salesman | 10. | Depreciation of delivery van |

2. State and explain the main differences between cost accounting and financial accounting.
3. Distinguish between variable, semi-variable and fixed costs.

## Part B

4. The following data is given:

Selling price
Variable manufacturing costs
Variable selling costs
Fixed factory overheads
Fixed selling costs
₹ 20 per unit
₹ 11 per unit
₹ 3 per unit
₹ $5,40,000$ per year
₹ 2,52,000 per year

You are required to compute:
a) Number of units that must be sold to earn a profit of ₹ 60,000 per year.
b) How many units must be sold to earn a net income of $10 \%$ of sales?
5. Western Radio Company sold 10,000 radios last year at a price of $₹ 500$ each. The cost structure per radio is as follows:

Materials
$\frac{\text { ₹ Per unit }}{100}$

Labour 50
Variable Overhead 25
Fixed overhead
$\underline{200}$
Total Cost per unit $\underline{\underline{375}}$

Due to competition, the price has to be reduced to ₹ 425 for the coming year. Assuming that there will be no change in costs, find out how many radios have to be sold to ensure the same amount of total profit as last year.

## Part C

(1Q x $8 \mathrm{M}=8$ Marks)
6. Zen Ltd. supplies you with the following data for the year ending 31 December 2017:

| Production | 1,100 units |
| :--- | :---: |
| Sales | 1,000 units |
| Variable Manufacturing cost per unit | $₹ 7$ |
| Total Fixed Manufacturing Overheads | $₹ 2,200$ |
| Variable Selling and Administrative overheads | $₹ 0.50$ per unit |
| Total Fixed and Administrative Overheads | $₹ 400$ |
| Selling Price per unit | $₹ 15$ |

Required:
a) Prepare an Income Statement under Absorption Costing.
b) Prepare an Income Statement under Variable Costing.
c) Explain the difference in profit, if any, under absorption and variable costing.

