****

Register Number:

DATE:

**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BANGALORE-27**

**B.Com IFA – IV SEMESTER**

**SEMESTER EXAMINATION: APRIL 2022**

**(Exam conducted in July-August 2022)**

**BC IFA 4519: Performance Management II**

Time- 2 ½ hrs Max Marks-70

**This paper contains 3 printed pages and four parts**

**Section A**

I Answer ***any five*** of the following (**2 x 5 = 10 marks)**

1. State the purposes of budget.
2. What is zero based budgeting? State its importance.
3. Mention the limitations of planning and operational variances.
4. What is residual income?
5. Write the meaning of transaction processing system.
6. State the four types of management information system.

**Section B**

II Answer ***any three*** of the following (**5 x 3 = 15 marks)**

1. What is high/low analysis? Briefly explain its merits and demerits.
2. A company manufactures a chemical using two components, A and B. The standard information for one unit of the chemical are as follows:

$

Material A 10 kg at $4 per kg 40

Material B 20 kg at $6 per kg 120

–––

160

–––

In a particular period, 160 units of the chemical were produced, using 1,000 kgs of material A and 1,460 kgs of material B.

Required: Calculate the material usage, mix and yield variances for each material.

1. Calculate the liquidity and working capital ratios for P for the year ended 31 December 20X9.

$m

Sales revenue 1,867.5

Gross profit 489.3

Inventory 147.9

Trade receivables 393.4

Trade payables 275.1

Cash 53.8

Short-term investments 6.2

Other current liabilities 284.3

**BCIFA4519-A-22**

1. An investment centre has reported a profit of $28,000. It has the following assets and liabilities:

$ $

Non-current assets (at carrying value) 100,000

Inventory 20,000

Trade receivables 30,000

50,000

Trade payables 8,000

42,000

142,000

**Required:**

Calculate the ROI for the division. State any additional information that would be useful when calculating the ROI.

**Section C**

III Answer ***any two*** of the following (**15 x 2 = 30 marks)**

1. Frankie co has two divisions, A and B. Division A makes a component at a marginal cost of $30, which it can only sell to Division B. Division A has no other outlet for sales. Division B takes A’s component and turns it into a finished good, incurring its own cost of $55 per unit and selling it externally at $120.

**Which ONE of the following statements is true?**

* 1. A The minimum TP that Division A will accept from Division B is $ 30, the maximum TP that Division B will pay is $60 and the company makes a negative contribution.
  2. B The minimum TP that Division A will accept from B is $ 30, the maximum TP that B will pay is $65 and the company makes a negative contribution.
  3. C The minimum TP that Division A will accept from B is $ 30, the maximum TP that B will pay is $65 and the company makes a positive contribution.
  4. D The minimum TP that Division A will accept from B is $ 30, the maximum TP that B will pay is $55 and the company makes a positive contribution.

1. Assam and Co manufactures smartphones and has developed a new handset, the ‘H’. The maximum production capacity of Assam Co is 150,000 units of the new handset. The company’s management accountant is currently preparing an annual flexible budget and has collected the following information so far for the ‘H’

|  |  |  |  |
| --- | --- | --- | --- |
| **Production units of 'H'** | **100,000 units** | **120,000 units** | **150,000 units** |
| Material costs | $700,000 | $840,000 | $1,050,000 |
| Labour costs | $750,000 | $900,000 | 1,125,000 |
| Incremental fixed costs | $60,000 | $60,000 | $60,000 |

In addition to the above costs, the management accountant estimates that for each increment of 15,000 units produced, one supervisor will need to be employed. A supervisor’s annual salary is $42,000.

You are required to find the following:

1. Assuming the budgeted figures are correct, what would the flexed total production cost be if production is 90% of maximum capacity? (6 marks)
2. The management accountant has said that the factory’s smartphone quality control system carries a cost that was not included in the flexible budget, but should be. He estimates that every 1,000 smartphones will take 5 hours to control; every quality control hour has a variable cost of $120 and fixed quality control costs amount to $250,000. What is the estimated quality cost if production of the smartphones is 90% of maximum capacity? (5 marks)

c) Which TWO of the following statements relating to the preparation of a flexible budget for the ‘H’ are true? Choose the correct option with giving suitable reasons

(1) The budget will encourage all activities and their value to the organisation to be reviewed and assessed.

(2) The flexible budget will give managers more opportunity to include budgetary slack than a fixed budget.

(3) The budget could be time-consuming to produce as splitting out semi-variable costs may not be straightforward.

(4) The range of output over which assumptions about how costs will behave could be difficult to determine. (4 marks)

1. Explain the building block model in detail.

**Section D**

**IV. Answer the following (15 marks)**

1. CABCo operates an absorption costing system and sells three products B, R and K which are substitutes for each other. The following standard selling price and cost data relate to these three products:

|  |  |  |  |
| --- | --- | --- | --- |
| **Product** | Unit Selling price | Direct material/unit | Direct labour/unit |
| **B** | $14.00 | 3 kgs @ $1.80/kg | 0.5 hours@ $6.50/hour |
| **R** | $15.00 | 1.25 kgs @ $3.28/kg | 0.8 hours@ $6.50/hour |
| **K** | $18.00 | 1.94 kgs @ $2.50/kg | 0.7 hours@ $6.50/hour |

Budgeted fixed production overhead for the last period was $81,000.

This was absorbed on a machine hour basis. The standard machine hours for each product and the budgeted levels of production and sales for each product for the last period are as follows:

**Product B R K**

Standard machine hours per unit 0.3 hours 0.6 hours 0.8 hours

Budgeted production & sales (units) 10,000 13,000 9,000

Actual volumes and selling prices for the three products in the last period were as follows:

**Product B R K**

Actual selling price per unit $14.50 $15.50 $19.00

Actual production and sales (units) 9,500 13,500 8,500

**Required:**

Calculate the following variances for overall sales for the last period:

(i) Sales price variance

(ii) Sales volume profit variance

(iii) Sales mix profit variance

(iv) Sales quantity profit variance.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*