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THE INSTITUTE OF CHARTERED ACCOUNTANTS OF SRI LANKA

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SCHOOL OF ACCOUNTING AND BUSINESS
BSc. (APPLIED ACCOUNTING) GENERAL / SPECIAL DEGREE PROGRAMME

YEAR I SEMESTER II – INTAKE VII (GROUP A)
END SEMESTER EXAMINATION – JULY 2017

AFM 10430 Intermediate Management Accounting

Date	:	24th July 2017
Time	:	9.00 a.m. - 12.00 p.m.
Duration	:	Three (03) Hours

Instructions to Candidates:

- This paper consists of three parts (A, B and C).
- Part A – Answer **ALL** questions in the separate sheet provided

  Part B – **Question No. 02** is **Compulsory**

  Part C – Answer <u>**Three (03)**</u> Questions only
- The total marks for the paper is 100.
- The marks for each question are shown in brackets.
- Use of scientific calculator is allowed.
- Answers should be written neatly and legibly

Question No. 01

1. The internal rate of return is the interest rate that equates the present value of expected future net cash flows to:
   a. The initial cost of the investment outlay
   b. The depreciation value of the investment
   c. The terminal (discounted) value of future cash receipts
   d. The firm's cost of capital

Following information must be used to answer question 2 and 3.

- The following information relates to an investment project which is being evaluated by the directors of Fence Company, a listed company. The initial investment, payable at the start of the first year of operation, is Rs. 3·9 million.

Year	1	2	3	4
Net operating cash flow (Rs.000)	1,200	1,500	1,600	1,580
Scrap value (Rs. 000)				100

The directors believe that this investment project will increase shareholder wealth if it achieves a return on capital employed greater than 15%. As a matter of policy, the directors require all investment projects to be evaluated using both the payback and return on capital employed methods. Shareholders have recently criticised the directors for using these investment appraisal methods, claiming that Fence Company ought to be using the academically-preferred net present value method. The directors have a remuneration package which includes a financial reward for achieving an annual return on capital employed greater than 15%. The remuneration package does not include a share option scheme.

2. What is the payback period of the investment project?
   a. 2·75 years
   b. 1·50 years
   c. 2·65 years
   d. 1·55 years

3. Based on the average investment method, what is the return on capital employed of the investment project?
   a. 13·3%
   b. 26·0%
   c. 52·0%
   d. 73·5%

4. Which of the following statements about investment appraisal methods is correct?
   a. The return on capital employed method considers the time value of money
   b. Return on capital employed must be greater than the cost of equity if a project is to be accepted
   c. Riskier projects should be evaluated with longer payback periods
   d. Payback period ignores the timing of cash flows within the payback period

5. Of the four costs shown below, which would not be included in the cash budget of an insurance firm?
   a. Office salaries
   b. Commission paid to agents
   c. Depreciation of non – current assets
   d. Capital cost of a new computer

6. A flexible budget is;
   a. A budget which by recognising different cost behaviour patterns is designed to change as the volume of activity changes.
   b. A budget for a defined period of time which includes planned revenues, expenses, assets, liabilities and cash flow.
   c. A budget which is prepared for a period of one year which is reviewed monthly, whereby each time actual results are reported, a further forecast period is added and the intermediate period forecasts are updated.
   d. A budget of semi-variable production costs only

7. The term “budget slack” refers to the
   a. Extended lead time between the preparation of the functional budgets and the master budget.
   b. Difference between the budgeted output and the breakeven output.
   c. Additional capacity available which can be budgeted for.
   d. Deliberate over-estimation of costs and under-estimation of revenues in a budget.

8. RS is currently preparing the production budget for Product A and the material purchase budget for material X for the forthcoming year. Each unit of Product A requires 5kgs of material X.

   The anticipated opening inventory for Product A is 5,000 units and the company wishes to increase the closing inventory by 30% by the end of the year.

   The anticipated opening inventory for material X is 50,000 kgs and in order to avoid stock outs the required closing inventory has been increased to 60,000 kgs.

   The Sales Director has confirmed a sales requirement of 70,000 units of Product A.

   What will be the purchases budget for material X?
   a. 347,500 kgs
   b. 350,000 kgs
   c. 357,500 kgs
   d. 367,500 kgs

9. The principal budget factor is the
   a. Factor which limits the activities of the organisation and is often the starting point in budget preparation.
   b. Budgeted revenue expected in a forthcoming period.
   c. Main budget into which all subsidiary budgets are consolidated.
   d. Overestimation of revenue budgets and underestimation of cost budgets, which operates as a safety factor against risk.

10. A standard cost is
    a. The budgeted production cost ascribed to the level of activity in a budget period.
    b. The budgeted cost ascribed to the level of activity achieved in a budget centre in a control period.
    c. The planned unit cost of a product, component or service in a period.
    d. The budgeted non-production cost for a product, component or service in a period

(Total 20 Marks)

PART B

Question No. 02 - Compulsory

a. Briefly explain the difference between capital and revenue expenditure.

(04 Marks)

b. “Capital budgeting is the process of identifying, analyzing and selecting investment projects whose returns are expected to extend beyond one year”. Briefly explain the four step M**odel for investment decision making.**

(08 Marks)

c. Arrow wants to buy a new item of equipment which will be used to provide a service to customers of the company. Two models of equipment are available, one with a slightly higher capacity and greater reliability than the other. The expected costs and profits of each item are as follows.

	Equipment item X	*Equipment item Y*
Capital cost	Rs.80, 000	Rs.150, 000
Life	5 years	5 years
Profits before depreciation	Rs.	Rs.
Year 1	50,000	50,000
Year 2	50,000	50,000
Year 3	30,000	60,000
Year 4	20,000	60,000
Year 5	10,000	60,000
Disposal value	0	0

ROCE is measured as the average annual profit after depreciation, divided by the average net book value of the asset.

Required:

Decide which item of equipment should be selected, if any, if the company's target ROCE is 30%.

(08 Marks)

(Total 20 Marks)

PART C

Answer **Three (03)** Questions only

Question No. 03

The management of Sine Star are reviewing the company's capital investment options for the coming year, and are considering five projects.

Project 1

Project 1 will cost Rs.35, 000 initially (purchase capital equipment) and would earn the following cash flows throughout the project life of five years.

Year 1	Year 2	Year 3	Year 4	Year 5
Rs.10,000	(Rs.5, 000)	Rs.12000	Rs.12,000	Rs.16,000

Capital equipment purchased at the commencement of the project will be sold at the end of the 5th year for Rs.5, 000.

Project 2

Project 2 would involve a current outlay of Rs.50, 000 on equipment and Rs.15, 000 on working capital. Annual cash profits would be Rs.18, 000 for five years, at the end of which the investment in working capital would be recovered.

Project 3

Project 3 would involve a current outlay of Rs.44, 000 on capital equipment and Rs.20, 000 on working capital.

Year	Sales Revenue Rs.	Direct material Rs.	Direct labour Rs.	Variable production Overhead Rs.	Fixed cost Rs.	Profits Rs.
1	60,000	12,000	10,000	8,000	10,000	20,000
2	40,000	10,000	8,000	5,000	10,000	7,000
3	50,000	12,000	8,500	6,000	10,000	13,500
4	30,000	8,000	7,500	4,500	10,000	0
5	20,000	7,500	7,000	4,000	10,000	(8,500)

Fixed costs include an annual charge of Rs.4, 000 for depreciation. At the end of the third year the working capital investment would be recovered whereas at the end of 5^{th} year the equipment would be sold for Rs. 5,000.

Project 4

This is a long-term project, involving an immediate outlay of Rs.32, 000 and annual cash profits of Rs. 4,500 in perpetuity

Project 5

This is another long-term project, involving an immediate outlay of Rs.20, 000 and annual cash profits as follows.

1st to 5th years	Rs.5, 000
6th to 10th years	Rs.4, 000
11th year onwards for ever	Rs.3, 000

The company discounts all projects of ten years duration or less at a cost of capital of 12%, and all other projects at a cost of 15%.

Ignore taxation.

Required:

Calculate the NPV of each project, and determine which project should be undertaken by the company on financial grounds.

(Total 20 Marks)

Question No. 03

a. Budget is a quantitative expression of a plan for a defined period of time. Briefly explain **four** objectives of **Budgeting.**

(04 Marks)

b. Traditional budgeting is inherently flawed (Hope.J, Fraser, R. 2003). Explain any criticisms against traditional budgeting systems.

(06 Marks)

c. "Budget process itself isn't the root cause of the counterproductive actions; rather, it's the use of budget targets to determine compensation" (Michael C. Jensen). Critically evaluate.

(10 Marks)

(Total 20 Marks)

Question No. 04

The following information is related to Broke Limited.

Month	**Sales Rs.**	**Materials purchased Rs.**	**Wages incurred Rs.**	**Overhead Rs.**
February	20,000	5,000	2,000	5,000
March	30,000	10,000	4,000	6,000
April	35,000	12,000	6,000	7,000
May	45,000	18,000	8,000	8,000
June	50,000	20,000	9,000	9,000
July	40,000	15,000	6,500	10,000
August	55,000	22,000	10,000	11,000

1. It is expected that the cash balance on 31^{st} April will be Rs. 20,000
2. Wages will be paid within the month they are incurred.
3. It is the company policy to pay suppliers of materials two months after the receipt.
4. Debtors will pay in full after two months after the delivery (delivery will take place on the month of the sale)

5. In the overhead figure it includes the depreciation charge of Rs. 2,000 per month for the delivery vehicle.
6. Overheads are paid one month after the month in which it was incurred.
7. 85% of the monthly sales are on credit basis and 15% are sold on cash.
8. It is intended to pay a loan of Rs.20, 000 on 25th July.
9. Company intends to purchase a machine in May month for Rs. 50,000. Payment will be as follows
    - May Rs. 15,000
    - June Rs. 15,000
    - August Rs. 20,000
10. Assume that overdraft facilities are available when ever required.

Required:

Prepare the cash budget for May, June, July and August months.

(Total 20 Marks)

Question No. 05

Ryerson Ltd produces and sells one product only. The standard cots and price for one unit being as follows:

	Rs.
Direct material X – 12 Kilograms at Rs. 100 per Kg	1200
Direct material Y – 04 Kilograms at Rs. 80 per Kg	320
Direct wages – 3 hours at Rs. 250	750
Fixed production overhead	150
Total standard cost	2420
Standard gross profit	230
Standard selling price	2650

The fixed production overhead included in the standard cost is based on an expected monthly output of 1000 units. Company uses absorption costing system.

During July month the following **actual results** were as follows:

	Rs. '000'
Sales 900 units at Rs. 2800	2,520
Direct materials	
- X: 10,200 Kg	969
- Y: 4,300 Kg	348.3
Direct wages 2500 hours	575
Fixed production overhead	130
Gross profit	497.7

Required:

i. Calculate the following variances:
   - Sales price variance
   - Sales volume variance
   - Material price variance
   - Material usage variance
   - Labour rate variance
   - Labour efficiency variance
   - Fixed overhead expenditure variance
   - Fixed overhead volume variance

(08 Marks)

ii. Prepare a operating statement under absorption costing to reconcile budgeted profit with actual profit for the period using the variances calculated above.

(12 Marks)

(Total 20 Marks)