

**Eastern University, Sri Lanka**

**Faculty of Commerce & Management**

**Third Year First Semester Examination in BBA,**

**BBA Specialization in HRM and BBA Specialization in Marketing**

**2016/2017 (2018) (Proper/Repeat) Oct/Nov 2018**

**MGT 3013 - Managerial Accounting**

Calculator is permitted

Total number of Pages 16

Circle the answers for MCQ and write the answers and calculations within the given space.

Answer all questions

Time: 03 Hours

Q1 a) If beginning work in process equivalent units are 2500 units, work done in current period equivalent units are 3800 units and units completed in current period are 4000, then ending work in process equivalent units will be:

- |    |             |    |              |
|----|-------------|----|--------------|
| 1. | 1,800 units | 3. | 10,300 units |
| 2. | 2,300 units | 4. | 1,500 units  |

(03 Marks)

b) In costing of project, wages paid to workers for unproductive work at time of material shortage is termed as

- |    |                |    |                     |
|----|----------------|----|---------------------|
| 1. | indirect wages | 3. | idle time wages     |
| 2. | health wages   | 4. | shortage time wages |

(03 Marks)

c) Mr Pram's chocolate Wiggly bars pass through two processes. The data for the month just ended are:

Process I		Process II	
	Rs.	Kg	Rs.
Ingredients,	5,000	4,000	Packaging 10,000
Labour and overheads	6,000		Labour and overheads 9,000

Mr Pram allows the staff to eat 5% of the chocolate as they work on Process I.

There was no work in progress at the month end. There was a climate change and the staff had eaten less chocolate. At the end of process I, 3810 units are transferred to Process II. Prepare the two process accounts and calculate the cost per kg.

(04 Marks)

- d) A product is finally obtained after it passes through four distinct processes. The following information is available from the cost records.

	Process I	Process II	Process III	Process IV	Total
Materials	1,600	2,600	2,000	1,025	7,225
Direct wages	3,500	2,250	3,680	1,420	10,850
Production overheads					7,500

500 units at 4 per unit were introduced in process I. Production overheads are absorbed as a percentage of direct wages.

The actual output and normal loss of the respective processes are given below.

	Output (units)	Normal Loss as percentage of output	Value of (per unit)
Process I	500		
Process II	450	10%	2
Process III	340	20%	3
Process IV	270	25%	5

Output of process II introduced as primary material in process III 450 units at 15,875.

Rate of absorption of production overheads 70% of direct wages.

For the third process, Prepare the process account and other relevant accounts.

- Q2 a) Outstanding expenses and reserve for doubtful debts are shown in cash book
1. True
  2. False

b) The forecast sales for an organization are as follows:

	January (Rs)	February (Rs)	March (Rs)	April (Rs)
Sales	6000	8000	4000	5000

All sales are on credit and receivables tend to pay in the following pattern:

In month of sale	10%
In month after sale	40%
Two months of after sale	45%

The organization expects the rate of irrecoverable debts to be 5%

Calculate the forecast cash receipts from receivables in April.

c) Newton Ltd manufacturers' three products: the expected sales for each product are shown below.

	<b>Product 1</b>	<b>Product 2</b>	<b>Product</b>
Sales in units	3000	4500	3000

Opening inventory is expected to be:

Product 1	500 units
Product 1	700 units
Product 1	500 units

Management have stated their desire to reduce inventory levels and closing inventories are budgeted as:

Product 1	200 units
Product 1	300 units
Product 1	300 units

Three types of materials are used in varying amounts in the manufacture of the three products. Materials requirements per unit are shown below:

	<b>Product 1</b>	<b>Product 2</b>	<b>Product 3</b>
Material M1	2 kg	3 kg	4 kg
Material M2	3 kg	3 kg	4 kg
Material M3	6 kg	2 kg	4 kg

The opening inventory of material is expected to be:

Material M1	4300 kg
Material M2	3700 kg
Material M3	4400 kg

Management are keen to reduce inventory levels for materials as well and closing inventories are to be much lower. Expected levels are shown.

Material M1	2200 kg
Material M2	1300 kg
Material M3	2000 kg

Material prices are expected to be 10% higher than this year and current prices are Rs. 1.10/Kg for material M1, Rs. 3.00/kg for material M2 and Rs. 2.50/kg for material M3.

Two types of labour are used in producing the three products. Standard hours per unit are shown below:

	Product 1	Product 2	Product 3
Skilled labour	3	1	3
Semi-skilled labour	3	3	4

Skilled labours are to be paid at the rate of Rs.6/hour and Semi-skilled the rate of Rs.4/Hour.

Required:

Prepare budget for

1. Production (in quantity)
2. Material usage (in units)
3. Materials purchase (in quantity and value)
4. Labour (in hours and value)

**Q3 a)** Term which describes assigning of indirect cost, to any cost object is classified

- |    |                 |    |                  |
|----|-----------------|----|------------------|
| 1. | cost allocation | 3. | sales allocation |
| 2. | sales tracing   | 4. | cost tracing     |

(02 Marks)

**b)** Niluk is arranging for a party to be held in the students' union. The use of the hall will be free but security costs of Rs. 300 will have to be met. The cost of the band will be Rs. 2,500 and the supporting band will cost Rs. 450. Token T-shirts will be priced at Rs.15 each. On arrival, every ticket holder will be given a bottle of water, worth Rs. 1 per bottle. What is the break-even number of tickets for the event?

- |   |             |   |             |
|---|-------------|---|-------------|
| 1 | 179 tickets | 3 | 217 tickets |
| 2 | 167 tickets | 4 | 233 tickets |

(03 Marks)

**c)** A truck starts with a load of 10 tons of goods from station P. It unloads 4 tons at station Q and rest of the goods at station R. It reaches back directly to station P after getting reloaded with 8 tons of goods at station R. The distance between P to Q, Q to R and then from R to P are 40 kms, 60 kms and 80 kms respectively.

Compute 'absolute ton' km and 'commercial ton' km.

(05 Marks)

- d) A contractor has to supply 10,000 paper cones per day to a textile mill. He finds that when he starts a production run, he can produce 25,000 paper cones per day. The cost of holding a paper cone in stock for one year is Rs 0.02 and the setting up cost of a production run is Rs.18. How frequently should production runs be made?

(05 Marks)

- e) A factory making furnishings has spare capacity and is considering taking on a special order to make 200 cushions. It usually charges £2.30 to recover its overheads. If its variable costs are £8.20 and it will incur packaging costs of £400, what is the minimum price it should charge?

1. Rs. 10.50

3. 12.50

2. Rs. 10.20

4. Rs. 8.20

(05 Marks)

(Total 20 Marks)

- 04) a) A clothing company produces wool jumpers. If wool is limited in what should these jumpers be produced to maximize the company's profit?

	Women	Man	Child
Sales price	45.00	50.00	28.00
Material Cost	24.25	30.00	14.40
Labour Cost	5.00	5.00	4.00
Fixed Cost per jumper	4.00	4.00	4.00
Wool	15 balls	20 balls	12 balls

- |    |                   |    |                   |
|----|-------------------|----|-------------------|
| 1. | Man, Women, Child | 3. | Child, Women, Man |
| 2. | Women, Child, Man | 4. | Women, Man, Child |

(03M)

- b) In absorption costing, an effect on cost volume profit relationship is driven by

- |    |                          |    |                    |
|----|--------------------------|----|--------------------|
| 1. | unit level of production | 3. | chosen denominator |
| 2. | unit level of sales      | 4. | all of above       |

(2.5)

- c) Product design is an example of which activity-level group?

- |    |                         |    |                      |
|----|-------------------------|----|----------------------|
| 1. | Product-level activity  | 3. | Batch-level activity |
| 2. | Facility-level activity | 4. | Unit-level activity  |

(2.5)



- d) A company produces three products, and is reviewing the production and sales budgets for the next accounting period. The following information is available for the three products.

	Product P		Product Q		Product R	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Selling Price		600		300		100
Labour (Rs 20 per hour)	300		160		40	
other variable cost	90		68		14	
		(390)		(228)		(54)
Contribution/unit		210		72		46
Maximum Demand		200		600		1000

Labour hours are strictly limited to 7800 hours in total.

Required:

- Calculate the optimum product mix and the maximum contribution.
- A special contract requires 3,000labour hours. What is the relevant cost of obtaining these hours.

(12 Marks)

05) a) The cash inflows and (outflows) associated with a project are as follows:

	Rs.
At start	(120,000)
Year 1	40,000
Year 2	50,000
Year 3	60,000
Residual Value of project at the end of 3 years	20,000

The payback period for this project would be:

1. 2 years and 3 months
2. 2 years and 6 months
3. 3 years.
4. 2 years.

(2.5 Marks)

b) Which of the following statements concerning the NPV is not true?

1. The NPV technique takes account of the time value of money.
2. The NPV of a project is the sum of all the discounted cash flows associated with a project.
3. The NPV technique takes account of all the cash flows associated with a project
4. If two competing projects are being considered, the one expected to yield the lowest NPV should be selected.

(2.5 Marks)

c) Given standard time per unit is 80 hours, standard time per hour @ Rs 1 per hour, actual time per unit is 90 hours and actual rate per hour @ Rs 1.10 per hour. Determine labor cost variance, labor rate variance and labor efficiency variance.

1. Rs 11, Rs 22 and Rs 10 all unfavorable
2. Rs 19, Rs 9 and Rs 10 all favorable
3. Rs 19, Rs 9 and Rs 10 all unfavorable
4. Rs 11, Rs 22 and Rs 10 all favorable

(2.5 Marks)

d) When actual price is higher or lower than the standard price, then it is

1. Sales price variance
2. Sales volume variance
3. Sales mix variance
4. Sales quantity variance.

(2.5 Marks)

e) The standard direct material and labor costs for a product are :

Direct material A	2 kg x 4 per kg	Rs. 8
Direct material B	0.5 liter x 6 per liter	Rs 3
Direct labor	0.75 hour x 12 per hour	Rs 9
		Rs 20

During November , the company made 3 ,200 units and sold 2,900 units. The actual production costs were :

Direct material A	6,100 kgs	Rs 25,000
Direct material B	1,750 liters	Rs 11,600
Direct labor	2,200 hours paid (only 2,000 hours worked)	Rs 28,000

Required:

Calculate the following variances:

1. Direct materials price
2. Direct materials usage
3. Direct labor rate
4. Direct labor idle time