## G.V.M'S G.G.P.R. College of Commerce \& Economics, Ponda Goa

 M.Com Semester-III End Examination-November 2022COO336-Cost Management \& Control
Duration-03 Hours
Max. Marks: 60
Instructions:1. This paper consists of nine (9) questions carrying equal marks.
2. Question No. 1 is compulsory.
3. Answer any five (5) questions from 2,3,4,5,6,7,8 and 9 .
4. Each question carries 10 marks. Figures to the right indicate full marks.
Q.1. Answer the following questions:-
(5x2=10 marks)
a) Explain the concept of cost reduction.
b) Explain the four components of balanced scorecard.
c) State and explain any two strategies of competitive advantage.
d) What is Transfer pricing?
e) Explain the factors affecting the learning curve.
Q.2. The following details have been recorded for 2 batches made in a period. Find out the cost of two batches by using ABC system. The total production overhead for the period has been analyzed as follows:-
(10 marks)

| Particulars | Amount(Rs.) |
| :--- | :--- |
| Machine related costs | 45,000 |
| Materials handling \& dispatch | 20,000 |
| Stores | 30,000 |
| Inspection/Quality Control | 40,000 |
| Setup | 10,000 |


| Machine related costs | Machine hours |
| :--- | :--- |
| Materials handling \& dispatch | Materials movements |
| Stores | Requisitions raised |
| Inspection/Quality Control | No. of inspections |
| Setup | No. of setups |

The following cost driver volumes were recorded for the batches:

| Batch | A | B |
| :--- | :--- | :--- |
| Machine hours per batch | 200 | 750 |
| Material movement | 2000 | 3000 |
| Requisitions | 100 | 200 |
| Inspections | 200 | 800 |
| Setups | 500 | 700 |

Q.3. A project has the following characteristics. Construct a PERT network. And also find out the E.S (Early Start), L.F (Latest Finish) \& E.F. (Early Finish) for each activity. (10 marks)

| Activity | Time(in months) |
| :--- | :--- |
| $1-2$ | 4 |
| $1-3$ | 6 |
| $2-4$ | 5 |
| $3-4$ | 2 |
| $3-5$ | 9 |
| $2-6$ | 3 |
| $4-6$ | 8 |
| $5-6$ | 2 |

Q.4. A factory manufactures two products A and B . To manufacture one unit of $\mathrm{A}, 1.5$ machine hours and 2.5 labour hours are required. To manufacture product $\mathrm{B}, 2.5$ machine hours and 1.5 labour hours are required. In a month, 300 machine hours and 240 labour hours are available. Profit per unit for A is Rs. 50 and for B is Rs. 40. There will be two constraints. One for machine hours availability and for labour hours availability. Find out the most optimal solution by using the Linear programming technique.
(10 marks)
Q.5. a) A Company has received an order of 80 units \& 140 units of a standard product which involves labour operations. The first 5 units were made in 10 hours. It is understood that this type of operations is subject to $80 \%$ learning effect. The workers are getting a wage rate of Rs. 12 per hour. What is the labour cost required to execute above orders?
( 5 marks)
b) The learning curve as a management accounting has now become or going to become an accepted tool in industry, for its applications are almost unlimited. Illustrate the use of learning curves for calculating the expected average unit cost of making 4 machines. Use the data given below:-
(5 marks)

- Direct labour needed to make the first machine is 1000 hours.
- Learning curve $=90 \%$
- Direct labour cost $=$ Rs. $15 /$ - per hour
- Direct material cost= Rs.1,50,000
- Fixed cost for either size orders= Rs. 60,000
Q.6. Answer the following questions:-
a) State and explain any four methods of Transfer Pricing.
b) State and explain the various phases of Learning Curve.
Q.7. a) Draw the network diagram for the following activities and find out the critical path and the total duration of the project:-
(8 marks)

| Activity | Duration (months) | Activity | Duration (months) |
| :---: | :---: | :---: | :---: |
| $1-2$ | 4 | $5-7$ | 8 |
| $1-3$ | 1 | $6-8$ | 1 |
| $2-4$ | 1 | $7-8$ | 2 |
| $3-4$ | 1 | $8-9$ | 1 |
| $3-5$ | 6 | $8-10$ | 8 |
| $4-9$ | 5 | $9-10$ | 7 |
| $5-6$ | 4 |  |  |

b) Explain the concept of Cost Control.
(2 marks)
Q.8. Determine the most optimum assignment. The cost associated in performing this job with different combination of machines are as follows:-
(10 marks)

| Jobs | M1 | M2 | M3 | M4 |
| :---: | :---: | :---: | :---: | :---: |
| J1 | 18 | 24 | 28 | 32 |
| $\mathbf{J 2}$ | 8 | 13 | 17 | 19 |
| $\mathbf{J 3}$ | 10 | 15 | 19 | 22 |

Q.9. The following information is provided by XYZ company. There are three warehouses namely Ponda, Margao \& Panjim from where the goods are to be transported to four different markets-A,B,C \& D. The cost of transporting goods from warehouse to market are as follows:
(10 marks)

| Markets | A | B | C | D | Supply |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Warehouses |  |  |  |  |  |
| Ponda | 3 | 1 | 7 | 4 | 300 |
| Margao | 2 | 6 | 5 | 9 | 400 |
| Panjim | 8 | 3 | 3 | 2 | 500 |
| Demand | 250 | 350 | 400 | 200 | 1200 |

You are required to compute the transportation cost by using:-
a) North-West Corner Method
b) Least Cost Method

