Please read the following guidelines carefully.

GROUP:

The maximum number of people in a group is 5.

SCORES:

Each group member will receive the same score for the project, but the presentation scores will be assigned individually. ***(Report = 15 marks; Product = 5 marks; Total Project = 15+5 = 20 marks; Presentation =10 marks)***

PROJECT:

The purpose of this project is to help you apply your knowledge of managerial accounting concepts to product costing. Select a product which you can produce. The product can be anything other than food or paper-made products. Make sure the product has a simple production process and for which materials are easily available. Product can only be selected after you get my approval. So, discuss your idea with me before you start working on it.

REPORT:

The project report should follow a standard format. There should be a cover page with the name and a picture of your product, followed by the name, ID and section of the group members on the second page. You must then include a letter of transmittal, a table of contents and an abstract of not more than 250 words. The length of the report should be limited to 25 pages (including tables and excluding the letter of transmittal, table of contents and abstract). The report must be written in Calibri font with 12 pt font size and 1.5 line spacing. Do not forget to discuss the manufacturing process of your product in the report!

ESTIMATIONS:

- Consider that the number of your group members is the only labors you have (5 members = 5 labors). Determine the maximum production possible in a given month.
- Estimate all costs related to your product (i.e. materials; labor; manufacturing overhead like utility, rent, etc; support costs like computers, maintenance, etc; selling costs). For estimations, you must take help from a real world competitor or the market. So, for each cost that you estimate, you must cite the source of your estimations.
- Analyze each cost that you estimate above and mention the type (i.e. direct/indirect; fixed/variable). Consider your product as your cost object.
- Assume a simple costing system. Select an appropriate allocation base and determine the unit product cost of your product. Show a break-down of the direct material cost,

direct labor cost, MOH and support costs. Discuss the cost strategy of allocating your support costs (direct; step-down; reciprocal).

- Determine the prime cost, conversion cost and full cost of your product.
- Assume an activity-based costing system. For each of your indirect costs (MOH & Support), select different cost drivers as deemed appropriate and determine the unit product cost of your product. You must state reasons behind the selection of your cost drivers.
- Prepare and compare the product-line profitability report under simple costing and ABC.

FORECASTS:

- Forecast the demand and sales for your product and prepare a revenue budget for the next month. Next, prepare a production budget assuming that there is no beginning inventory. Consider 10% of your budgeted sales units as the target ending finished goods inventory.
- Prepare a direct material usage budget, direct material purchase budget, direct labor cost budget, manufacturing overhead cost budget, ending inventory budget and cost of goods sold budget (assume there is no beginning inventory of material and 15% of the total material used in production will be the target ending inventory of material).
- Prepare a budgeted income statement in the traditional format and then in the contribution format on both per unit and total basis.
- Discuss your pricing strategy and determine the price of your product. State a reason behind the selection of your pricing strategy. Compare your price to the price of your competitor and comment on the appropriateness of your pricing strategy.

EVALUATIONS:

- Determine the break-even point, break-even revenue, margin of safety based on your calculations. Comment on the riskiness of your product.
- Conduct a sensitivity analysis, given the following scenarios:
  1. a 12% increase in the prices of all your direct materials
  2. a 10% decrease in the demand of your product (i.e. budgeted sales units)
  3. a 15% increase in the demand of your product (i.e. budgeted sales units)

GOOD LUCK!