一、Multiple Choice (3% each)

1. When 10,000 units are produced, fixed costs are $14 per unit. Therefore, when 20,000 units are produced fixed costs
   (A) will increase to $28 per unit.  (B) will remain at $14 per unit.
   (C) will decrease to $7 per unit.  (D) will total $280,000.

2. At the breakeven point of 200 units, variable costs total $400 and fixed costs total $600. The 201st unit sold will contribute to profits:
   (A) $1.  (B) $2.  (C) $3.  (D) $5.

3. One reason indirect costs may be overapplied is because
   (A) the actual allocation base quantity exceeds the budgeted quantity.
   (B) budgeted indirect costs exceed actual indirect costs.
   (C) requisitioned direct materials exceed budgeted material costs.
   (D) of both (A) and (B).

4. An unfavorable flexible-budget variance for variable costs may be the result of
   (A) using more input quantities than were budgeted.
   (B) paying higher prices for inputs than were budgeted.
   (C) both (A) and (B).
   (D) selling output at a higher selling price than budgeted.

5. For make-or-buy decisions, relevant costs include
   (A) direct material costs plus direct labor costs.
   (B) incremental costs plus opportunity costs.
   (C) differential costs plus fixed costs.
   (D) incremental costs plus differential costs.

6. To reduce distribution-channel costs, a company could
   (A) improve the efficiency of the ordering process.
   (B) make fewer customer visits.
   (C) eliminate distribution to retailers and only service wholesalers.
   (D) do any if the above.

7. The amount of time from when an order is ready to start on the production line to when it becomes a finished good is referred to as
   (A) manufacturing lead time.
   (B) bottleneck.
   (C) customer-response time.
   (D) time driver.
8. Quality costs include
   (A) purchasing costs.
   (B) ordering costs.
   (C) stockout costs.
   (D) prevention costs.

9. The capital budgeting method which calculates the expected monetary gain or loss from a project by discounting all expected future cash inflows and outflows to the present point in time using the required rate of return is the
   (A) payback method.
   (B) accrual accounting rate-of-return method.
   (C) sensitivity method.
   (D) net present value method.

10. The Alpha Corporation had the following information for 20x3: revenue $900,000, operating expenses $670,000, and total assets $1,150,000. What is the return on investment?
    (A) 10%.  (B) 20%.  (C) 25%.  (D) 78%.

二、The Rest-a-Lot chair company manufactures a standard recliner. During February, the firm’s Assembly Department started production of 75,000 chairs. During the month, the firm completed 80,000 chairs, and transferred them to the Finishing Department. The firm ended the month with 10,000 chairs in ending inventory. There were 15,000 chairs in beginning inventory. All direct materials costs are added at the beginning of the production cycle and conversion costs are added uniformly throughout the production process. The FIFO method of process costing is used by Rest-a-Lot. Beginning work in process was 30% complete as to conversion costs, while ending work in process was 80% complete as to conversion costs.

   **Beginning inventory:**
   - Direct materials
   - Conversion costs

   **Manufacturing costs added during the accounting period:**
   - Direct materials
   - Conversion costs

   **Required:** (20%)
   1. How many of the units that were started during February were completed during February?
   2. What were the equivalent units for conversion costs during February?
   3. What is the amount of direct materials cost assigned to ending work-in-process inventory at the end of February?
   4. What is the cost of the goods transferred out during February?
三、Lee is the manager of a mobile shop. He uses an EOQ model for each of his mobile parts. He predicts the annual demand for tires to be 9,375. Each tire has a purchase price of $100. The ordering costs per purchase order are $50. The carrying costs per year are $5 per tire plus 10% of the supplier’s purchase per tire. Suppose he is correct in all his predictions except the purchase price. If he had been a faultless predictor, he would have foreseen that the purchase price would drop to $80. What is the cost of the prediction error? (10%) 

四、Blue Corporation adopts standard costing system. The following information is for 2004:

| Static-budget machine-hours | 31,000 |
| Fixed overhead budget costs | $4,650,000 |
| Fixed overhead actual costs | $4,680,000 |
| Variable overhead actual costs | $9,300,000 |
| Variable overhead rate per machine-hour | $300 |
| Actual machine-hours used | 30,000 |
| Budgeted machine-hours allowed for actual output | 31,000 |

**Required:**

1. (1) Calculate variable overhead spending variance and efficiency variance. (2) Calculate fixed overhead spending variance and production-volume variance. (8%)
2. Calculate overhead flexible-budget variance and idle capacity variance. (7%)
3. If you can find the fixed overhead efficiency variance, observe the relationship between production-volume variance and idle capacity variance. (5%)

五、BBB Company manufactures medals. Its capacity is 11,000 medals per month. Current production and sales are 7,500 medals per month. The price of per medal is $145. Cost information for the current activity level is as follows:

| Variable costs that vary with number of units produced | $250,000 |
| Direct materials | 312,500 |
| Direct manufacturing labor | |
| Variable costs (ex. setup, material handling) that vary with number of batches (150 batches × $500 per batch) | 75,000 |
| Fixed manufacturing costs | 280,000 |
| Fixed marketing costs | 170,000 |
BBB Company has received a special one-time only order for 3,000 medals at $100 per medal. Accepting the special order would not affect the company’s regular business. BBB Company makes medals for its existing customers in batch sizes of 50 medals. The special order requires BBB Company to make the medals in 30 batches of 100 each.

**Required:**
1. Should BBB Company accept this special order? Show your calculations? (10%)
2. Suppose plant capacity were only 9,500 medals instead of 11,000 medals each month. And the special order must either be taken in full or rejected completely. Should BBB Company accept the special order? Show your calculations? (10%)