

**MASTER OF BUSINESS
ADMINISTRATION TEST****Section I****Part B****Suggested Time—60 minutes****30 Questions**

Directions: This part contains questions based on case-based scenarios. Each of the questions or incomplete statements is followed by four suggested answers or completions. Select the one that is best in each case and then fill in the corresponding space on the answer sheet.

Questions 31-35 are based on the following.

Assume you are a product manager at a large, internationally known company that manufactures consumer products. As a result of a recent corporate reorganization, you have been given responsibility for a new, commercial-strength, general-purpose cleaning detergent for the consumer market. The product is priced at \$6.00 per unit at retail.

Research has shown that the sales projections for your product will reach \$10 million after the first six months of operation. Total sales are expected to reach \$30 million after two years. Sales are then expected to average \$2 million per month in the third year after introduction and \$1.5 million per month in the fourth year.

31. During which of the following time periods will you probably encounter the greatest numbers of competitors?
- (A) The first 6 months
 - (B) Year 2
 - (C) Year 3
 - (D) Year 4
32. If the contribution margin is estimated to be \$2.00 per unit and the fixed operating expenses are estimated to be \$3 million in year 1, what is the minimum level of sales revenue in year 1 necessary for the company to break-even during its first year of operation?
- (A) \$ 6 million
 - (B) \$ 9 million
 - (C) \$10 million
 - (D) \$12 million

33. After several months of increased promotional activity, sales are still far below top management's expectations. In the interim, you have learned that Company D, a small, struggling start-up, is about to enter the market with a very similar product. Company D has developed, and patented, a new manufacturing process that will dramatically reduce the cost of production. Which of the following actions would be most strategically appropriate to pursue at this time?
- (A) Introduce a new, improved version of your product before Company D can bring its product to market.
 - (B) Attempt to acquire Company D and its patented technology.
 - (C) Increase advertising in the geographical areas where Company D plans to market its product.
 - (D) Significantly reduce the price of your product to make entry into the market less attractive to Company D.



34. Short-term forecasts are nearly always more accurate than long-term sales forecasts. Since detergent is intensively distributed, forecast sales figures must be monitored closely to ensure distributional efficiency. Which of the following forecasting methods is most appropriate for the new detergent?
- (A) Simulation
 - (B) Qualitative
 - (C) Pattern extrapolation
 - (D) Time series
35. Given the forecast decrease in demand by the fourth year, which of the following should be the planning emphasis for that year?
- (A) Greater responsiveness to consumers
 - (B) Quality control
 - (C) Cost minimalization
 - (D) Price reduction

Questions 36-41 are based on the following.

Assume that you are a licensed plumber and the owner of a plumbing contracting business in a small city that has been growing at an annual rate of 5-10% over the last five years. In fifteen years, your firm has grown from 3 employees (you plus 2 others) into a business with 27 licensed plumbers (with an average wage of \$35/hour), fleet maintenance workers (with a wage of \$25/hour), and a cadre of support employees in the office covering a variety of functions (with an average wage of \$12.65/ hour).

Aside from yourself, there is one other management employee who manages the office staff and two mechanics who maintain the fleet of trucks. You supervise the licensed plumbers directly. After paying your salary, the firm recorded a profit of \$28,500 before taxes this year, on gross sales of \$2.85 million, and profits have ranged from 0.08% to 1.89% return on sales (ROS) over the past five years.

For marketing you rely on the local Yellow Pages telephone directory, word of mouth, and repeat business of satisfied customers. The fleet of fully equipped trucks is well maintained but showing its age; most were placed in service 4-6 years ago, and were depreciated over 5 years. You are operating at 81-86% of capacity, a rate that is fairly stable over time. Office employees and customers occasionally complain of mistakes and inefficiencies; you have heard some of these complaints for what seems like years. One day every week or two you tell the staff to give you some plumbing jobs, sign out a truck, and go out on repair calls. Plumbing is what you enjoy, management is not, and this helps you to "stay sane."

36. Your accountant has been telling you that your ROS should be higher; normal for your type of business is in the range of 3-6%. Which of the following actions would be the best first step to improve this profitability measure in the short term?
- (A) Spend more money on advertising in other media, such as television or radio.
 - (B) Lay off some of the plumbers to bring the capacity into the 90-95% range.
 - (C) Lay off some of the office staff, seeking ways to work "smarter" with the remaining staff.
 - (D) Outsource the vehicle fleet maintenance, laying off the mechanics.
37. Assume that the company has set increasing sales through increased advertising as one of its goals for the coming year. Which of the following analyses is the best one to undertake first, given that you have no advertising experience outside of the Yellow Pages?
- (A) Talk to groups of consumers to determine sources of information that they use.
 - (B) Ask your competition how they advertise.
 - (C) Conduct a mail survey of current customers to determine their satisfaction levels.
 - (D) Conduct trend-line forecasting of the industry's growth potential in your area.
38. For the year just concluded, assume that the company had no debt outstanding and that depreciation expense was \$75,000. Assume also that your effective tax rate was 28% and that there were no new capital expenditures or changes in working capital. What was the free cash flow to the company for the year?
- (A) \$20,520
 - (B) \$28,500
 - (C) \$46,500
 - (D) \$95,520



You are considering replacing several of the trucks in use or purchasing new trucks. You have computed the net present value (NPV) and the payback period for the purchase, assuming that the trucks now in use have a zero disposal value. If you subsequently discover that the trucks now in use could be sold for \$1,000 each, how would your computed NPV and payback period be revised?

<u>NPV</u>	<u>Payback Period</u>
A) Increase	Increase
B) <i>Increase</i>	<i>Decrease</i>
C) Decrease	Increase
D) Decrease	Decrease

Your business associates tell you that before you make any further action or invest any additional money in your business, you need to conduct a thorough SWOT analysis. Which of the following questions would a SWOT analysis be LEAST helpful in answering?

- A) Who are the company's best customers?
- B) Are the company's prices competitive?
- C) What is the company's competitive strength?
- D) How well do the company's current capabilities match the demands of the external environment?

41. You are now faced with the decision of purchasing new vehicles or leasing them. The lease arrangement includes periodic maintenance and servicing as part of the lease cost. All other costs such as taxes, licensing, fuel, tires, wipers, and other normal wear items would be paid by the plumbing business. For tax purposes, the company would classify the lease as a capital lease. You want to determine the alternative that is the least costly. Which of the following considerations is the LEAST relevant to that decision?

- (A) The salary paid to the two-person fleet maintenance crew
- (B) The periodic lease payments
- (C) Replacement costs for normal wear items
- (D) The cost of purchasing new vehicles

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Questions 42-46 are based on the following.

The newly independent states of Eastern Europe represent an enigma for household-products firms. It is generally believed that inadequate and insufficient access to consumer goods was one source of discontent with the old economic system. Nevertheless, low incomes, high unemployment, and unfavorable exchange rates have depressed demand for those consumer goods as economic restructuring proceeds.

Francesca Bellini, European manager for the household cleaning products division of XYZ, a United States-owned firm, has been charged with developing a plan for sales expansion into Eastern Europe. Upper management has noted that its distributor in Poland has been making increasing sales in Ukraine and Belarus. Now Ms. Bellini must collect and assess available information in order to determine how to proceed with expansion plans into Eastern Europe.

Currently, Ms. Bellini has no direct contacts with distributors or retailers in either country. There is little reliable public information on market potential, market segments, or market share in the retail sector. The availability of storage and transportation facilities is also unknown.

Furthermore, Ms. Bellini wants to preserve the productive relationship developed with the Polish firm, a source of increasing profit and market share in Central Europe. The distributor, who has been cooperative in providing information on product modifications, warned Ms. Bellini that market conditions vary significantly in Ukraine and Belarus, making a single expansion plan unrealistic.

Ms. Bellini has also just received a report on market surveys conducted in Poland, Hungary, and the Czech Republic, all neighboring countries to the projected expansion. Although reaction to XYZ products has been extremely good in Poland and Hungary, the products have encountered considerable difficulties in the Czech Republic. The research indicates that a significant number of consumers there are reluctant to purchase imported products, responding to nationalist appeals for internal economic development and suspicion of foreign economic domination. She wonders whether some of the same attitudes may affect sales expansion into Eastern Europe.

42. Which of the following is NOT a productive interpretation of the caution shown by the distributor in Poland?
- (A) The distributor wants XYZ's sales volume to increase.
 - (B) The distributor is trying to protect his sales and market area.
 - (C) The distributor is suggesting that careful market research is necessary.
 - (D) The distributor knows the market from experience.
43. In order to gather additional information critical to forming an expansion plan, Ms. Bellini decides to commission primary research. Which of the following is the most logical first step?
- (A) Organizing focus groups to address attitudes toward household brands
 - (B) Arranging in-store interviews with customers about their shopping attitudes
 - (C) Conducting a phone survey of distributors to inquire about distribution channels
 - (D) Studying the retail structure in both countries
44. Which of the following is the LEAST important variable in conducting a United States dollar-based analysis of XYZ's new investments in Eastern Europe?
- (A) The cost of borrowing in Eastern European countries
 - (B) The United States weighted average cost of capital
 - (C) The exchange rate between the United States dollar and the various Eastern Europe currencies
 - (D) The tax rate in the various Eastern European countries



45. Due to the different environmental laws, XYZ has discovered that certain minor modifications must be made in the production of cleaning products to be sold in the various countries. In order to best track the production cost of products bound for each country, XYZ should employ which of the following?

- (A) Standard costing
- (B) Process costing
- (C) Activity-based costing
- (D) Job-order costing

46. Assume that XYZ proceeds with the decision to expand. Consider the following financial information that could be obtained.

- I. An estimate of the net cash flows over the foreseeable future
- II. The cost of the primary research commissioned by Ms. Bellini
- III. A projection of the accounting profits that the project is expected to generate for the foreseeable future
- IV. An estimate of XYZ's cost of capital

Which two pieces of information would be most critical to know?

- (A) I and II
- (B) I and IV
- (C) II and III
- (D) III and IV



Questions 47-51 are based on the following.

ePalmares is an Internet store that has so far survived and prospered, unlike many other such ventures. This Web store features home decor items, jewelry, and accessories commissioned directly from artisans around the world. Some of the products are traditional craft items; others are modern designs using traditional techniques. Founded by a former museum store director, the Web site design feels very similar to a museum shop. In addition to clean-lined photographs of the merchandise, there are stories about particular artisans, features on village production sites, and links to articles about art, design, and traditional motifs.

The E-store has actively advertised in several upscale magazines. A major selling point, besides the trendy "sophisticated primitive" motif is the guarantee of higher-than-average payments directly to the producers and the diversion of a portion of the profits to a foundation that invests in the villages of producers.

The targeted market segment is primarily female, fashion-conscious, urban, and interested in socially responsible consumption. Positioned as a developmentally responsible vendor, the strategy allows for higher-than-average pricing. These prices are also supported by the uniqueness factor—comparison shopping is difficult.

After a successful first year, defined as meeting targets for hits, sales, and margins, the owners must craft a long-term strategy that includes profitability. This is important both to stay in business and to meet the guarantees of social investing.

47. Which of the following should be the highest tactical priority for ePalmares?
- (A) Maintaining high profit margins
 - (B) Maintaining merchandise originality
 - (C) Maintaining the advertising campaign
 - (D) Creating publicity opportunities for news stories
48. Which of the following is the most likely source of long-term financing for ePalmares?
- (A) Equity
 - (B) Long-term debt
 - (C) Vendor financing
 - (D) Accounts-receivable financing
49. The cash conversion cycle (CCC) is a measure of ePalmares working capital management efficiency. The company's current CCC is 42 days. It is important to the company's profitability and value that it improve its working capital efficiency. Which of the following actions would accomplish that?
- (A) Reduce the time that the company takes to pay the artists supplying the work.
 - (B) Change the day sales outstanding ratio from 30 to 25 days.
 - (C) Add an option in the Web site for customers to pay COD.
 - (D) Double the current inventory levels.

50. During the past year, ePalmares has been very successful in getting stories about the company into the news. Based on this success, management is considering doing no other form of marketing communication in the upcoming year. The major problem with this strategy would be that

- (A) consumers pay little attention to news stories about companies or products
- (B) the firm has no control over if, when, where, and in what form the stories will appear
- (C) public relations has been proven to be less cost-effective than any other form of marketing communication
- (D) the news industry is consolidating and so there are not enough outlets for these stories to reach an adequate number of consumers

51. To forecast future profits, ePalmares wants to develop pro forma financial statements. Which of the following steps must be completed first before preparing a pro forma financial statement?

- (A) Preparation of operating budgets
- (B) Preparation of an aging of accounts receivable schedule
- (C) Development of a cash flow statement for the same period of time as the pro forma statement
- (D) Development of a forecast of interest rates



Questions 52-55 are based on the following.

Max, a middle-aged city employee, had a recipe for homemade chili handed down from his grandmother. He was convinced this was the best recipe for chili that was possible. He devised a way to produce it as a frozen entree that could be prepared in the microwave. He incorporated with his wife, a partner, and the partner's wife, listing them as majority owners of the firm. In cooperation with a container company, he packaged the chili in two sizes; 11 ounce and 15 ounce. Max has been reasonably successful at getting local grocery stores to carry the product but requires the assistance of a major distributor to assure acceptance in a broader geographic area.

The product costs \$1.30 per pound to produce, including packaging and labeling; he estimates another \$0.30 per pound for labor charges if he assumes the distribution responsibility. The contribution margin on each package of the 11-ounce chili is \$0.22 and the contribution margin on each package of the 15-ounce chili is \$0.35. The fees of the distributor with whom he has spoken would raise the cost to \$1.90 per pound, including production costs, labor, and distribution. Max and his partners have been relatively successful in using in-store sampling to promote the product, but he considers the costs of doing that excessive. If the financing for which he has applied is approved, his production capacity would be approximately 2,500 pounds per month. The partnership has plans for several other frozen foods (chicken casserole, cheese dip, etc.) that could take advantage of the same packaging materials. These products are not yet in production.

52. Included in the \$1.30 per pound production cost is the standard cost of the raw meat at \$0.50 per pound. It takes 1.2 pounds of raw meat to produce one pound of chili. Due to problems with the current supplier, Max temporarily used another supplier for the raw meat. The supplier delivered raw meat at a lower price, but the yield from the raw meat declined. Which of the following effects would the substitution have on the company's material price variance (MPV) and the material quantity variance (MQV) ?

	<u>MPV</u>	<u>MQV</u>
(A)	Favorable	Favorable
(B)	Favorable	Unfavorable
(C)	Unfavorable	Favorable
(D)	Unfavorable	Unfavorable

53. If production capacity is limited to 2,500 pounds of chili per month, as indicated, how should production time be utilized in order to maximize profits?
- (A) All available production time should be dedicated to the production of 11-oz. packages.
- (B) All available production time should be dedicated to the production of 15-oz. packages.
- (C) Production time should be dedicated to the production of 11-oz. packages until market demand is exhausted, and the remaining hours should be dedicated to the production of the 15-oz. packages.
- (D) Production time should be dedicated to the production of 15-oz. packages until market demand is exhausted, and remaining hours should be dedicated to the production of 11-oz. packages.



54. As Max seeks financing to expand beyond the hometown market, research is needed to complete an adequate business plan. As part of the situation assessment, Max should concentrate primarily on which of the following?
- (A) Geographic dispersion of potential customers
 - (B) Direct competition
 - (C) Buyers' characteristics
 - (D) Market size and potential
55. In deciding whether to pay \$0.30/lb to the distributor, which of the following is the most significant consideration?
- (A) Effect on contribution margin
 - (B) Shared promotional expenditures
 - (C) The inclusion of "slotting allowance" payments
 - (D) The benefits versus the costs of the outside distributor



58. To continue expansion, John needs to create a product-planning process. Product planning for office furniture differs most significantly from that for PDA software in which of the following respects?
- (A) Customer involvement
 - (B) Rapidity of competitive response
 - (C) Speed of market evolution
 - (D) Number of employees required for new product development
59. The stockholders of NPI have just been notified that their stock will split 2 for 1 this year. How will this affect the relative amounts of debt and equity in the firm?
- (A) Both debt and equity will increase.
 - (B) Only equity will increase.
 - (C) The amount of debt will decrease.
 - (D) No change in the amounts of debt and equity will occur.
60. As exemplified by the Innes brothers, the use of stock options is common in employment contracts for which of the following reasons?
- (A) It is a quick way of raising cash.
 - (B) It aligns the motivations of the employees and the owners.
 - (C) It is cheaper than bonds in the long run.
 - (D) It may never be exercised and therefore cost the firm nothing.

STOP

If you finish before time is called, you may check your work on this section only.
Do not turn to the other section in this book.