1) What is the main goal of strategic capacity planning?

A) To reduce employee turnover

B) To balance production with market demand

C) To minimize the number of suppliers

D) To increase marketing efforts

E) To cut down training costs

Answer: B

Diff: 1

Skill: Knowledge

Objective: Understand the goal of strategic capacity planning

2) What does effective capacity measure?

A) Maximum output under theoretical conditions

B) Actual output considering real-world constraints

C) The cost of labor and materials

D) The speed of the production line

E) Customer satisfaction levels

Answer: B

Diff: 1

Skill: Knowledge

Objective: Define effective capacity

3) Which strategy involves increasing capacity before an increase in demand?

A) Following Capacity Strategy

B) Leading Capacity Strategy

C) Tracking Capacity Strategy

D) Static Capacity Strategy

E) Dynamic Capacity Strategy

Answer: B

Diff: 1

Skill: Knowledge

Objective: Identify different capacity strategies

4) What is a primary effect of having a bottleneck in a process?

A) Increased flexibility

B) Lower operational costs

C) Reduced process throughput

D) Enhanced product quality

E) Simplified management tasks

Answer: C

Diff: 1

Skill: Comprehension

Objective: Explain the impact of bottlenecks on process capacity

5) What is the first step in the capacity planning process?

A) Implement the selected alternative

B) Monitor results and adjust

C) Estimate future capacity requirements

D) Conduct financial analyses of alternatives

E) Assess qualitative factors for alternatives

Answer: C

Diff: 1

Skill: Knowledge

Objective: Outline the steps in the capacity planning process

6) What does the term 'design capacity' refer to?

A) The actual output achieved per day

B) The maximum possible output under ideal conditions

C) The minimum necessary output to break even

D) The average output expected during peak times

E) The planned downtime for maintenance

Answer: B

Diff: 1

Skill: Knowledge

Objective: Define design capacity

7) Which performance indicator measures how well available capacity is being used?

A) Design Capacity

B) Effective Capacity

C) Utilization

D) Efficiency

E) Throughput

Answer: D

Diff: 1

Skill: Knowledge

Objective: Identify key capacity measures

8) In which strategy is capacity added only after demand has increased?

A) Leading

B) Following

C) Tracking

D) Expanding

E) Contracting

Answer: B

Diff: 1

Skill: Knowledge

Objective: Describe the Following Capacity Strategy

9) What does a high utilization rate indicate?

A) Underutilization of resources

B) Overproduction of goods

C) Efficient use of full capacity

D) High levels of employee dissatisfaction

E) Poor quality control

Answer: C

Diff: 1

Skill: Comprehension

Objective: Relate utilization rates to capacity usage

10) Which is NOT a direct factor affecting effective capacity?

A) Facility size

B) Policy factors

C) Product and service factors

D) External market trends

E) Human factors

Answer: D

Diff: 1

Skill: Knowledge

Objective: Distinguish between factors influencing effective capacity

11) What is the result of a break-even analysis?

A) Total cost savings

B) Optimal resource allocation

C) Point where total revenue equals total costs

D) Highest possible profit margin

E) Minimum acceptable production level

Answer: C

Diff: 1

Skill: Comprehension

Objective: Understand the purpose of break-even analysis

12) What typically occurs when a process experiences a bottleneck?

A) Production speeds up

B) Costs decrease

C) Quality improves

D) Inventory builds up before the bottleneck

E) Employee morale increases

Answer: D

Diff: 1

Skill: Comprehension

Objective: Recognize effects of bottlenecks

13) Which capacity strategy adjusts capacity in small increments?

A) Leading

B) Following

C) Tracking

D) Maximizing

E) Minimizing

Answer: C

Diff: 1

Skill: Knowledge

Objective: Explain the Tracking Capacity Strategy

14) How is efficiency calculated in a production setting?

A) Actual Output ÷ Design Capacity × 100%

B) Design Capacity ÷ Actual Output × 100%

C) Actual Output ÷ Effective Capacity × 100%

D) Effective Capacity ÷ Actual Output × 100%

E) Actual Output ÷ Total Costs × 100%

Answer: C

Diff: 1

Skill: Application

Objective: Calculate efficiency

15) What does the term 'capacity requirements' imply in capacity planning?

A) The need for skilled labor only

B) The total cost involved in production

C) Elements like equipment and physical space needed

D) The theoretical output achievable

E) The legal obligations of a facility

Answer: C

Diff: 1

Skill: Comprehension

Objective: Explain components of capacity requirements

16) What is the main focus of the Leading Capacity Strategy?

A) To minimize inventory

B) To reduce costs

C) To anticipate and meet future demand

D) To follow market trends

E) To decrease production rates

Answer: C

Diff: 1

Skill: Comprehension

Objective: Discuss the Leading Capacity Strategy

17) What are the implications of failing to align production capacity with market demand?

A) Increased market share

B) Lower operational costs

C) Potential customer attrition and high costs

D) Faster production times

E) More efficient use of resources

Answer: C

Diff: 1

Skill: Analysis

Objective: Analyze consequences of poor capacity planning

18) Which is a quantitative measure of capacity?

A) Employee satisfaction

B) Customer feedback

C) Units produced per hour

D) Quality of raw materials

E) Design aesthetics

Answer: C

Diff: 1

Skill: Knowledge

Objective: Identify quantitative measures of capacity

19) What does the efficiency measure in capacity planning?

A) The speed of production

B) The cost-effectiveness of operations

C) The percentage of effective capacity utilized

D) The environmental impact of production

E) The accuracy of production forecasts

Answer: C

Diff: 1

Skill: Knowledge

Objective: Define efficiency in the context of capacity planning

20) In capacity planning, what is meant by 'tracking'?

A) Monitoring employee performance

B) Following competitors' actions

C) Gradually adjusting capacity to match demand

D) Reducing operational costs

E) Increasing production speed

Answer: C

Diff: 1

Skill: Comprehension

Objective: Describe the Tracking Capacity Strategy

21) Which approach to capacity planning involves adding capacity in anticipation of an increase in demand?

A) Tracking Capacity Strategy

B) Following Capacity Strategy

C) Leading Capacity Strategy

D) Static Capacity Strategy

E) Dynamic Capacity Strategy

Answer: C

Diff: 2

Skill: Knowledge

Objective: Explain different capacity planning strategies

22) How does a bottleneck affect a production process?

A) It increases efficiency throughout the process

B) It decreases the overall throughput of the process

C) It simplifies operational procedures

D) It reduces the cost of production

E) It increases the speed of production

Answer: B

Diff: 2

Skill: Understanding

Objective: Analyze the impact of a bottleneck on production

23) What must be estimated at the beginning of the capacity planning process?

A) Employee satisfaction levels

B) Future capacity requirements

C) Past financial performance

D) Competitor capacity levels

E) Current market trends

Answer: B

Diff: 2

Skill: Knowledge

Objective: Outline the steps in the capacity planning process

24) What is meant by 'design capacity'?

A) The maximum output under ideal conditions

B) The minimum necessary output to break even

C) The actual output achieved under normal conditions

D) The standard output expected by management

E) The projected output based on market trends

Answer: A

Diff: 2

Skill: Comprehension

Objective: Define design capacity

25) Which of the following is a key output of a break-even analysis?

A) Identification of market trends

B) Calculation of total fixed costs

C) Determination of the point where total revenue equals total costs

D) Assessment of employee productivity

E) Evaluation of supplier performance

Answer: C

Diff: 2

Skill: Understanding

Objective: Understand the purpose of break-even analysis

26) What does an efficient use of capacity involve?

A) Minimal use of the available resources

B) Maximum output with the least amount of input

C) Slower production processes to save costs

D) Increased workforce to meet production targets

E) Larger inventory to meet sudden increases in demand

Answer: B

Diff: 2

Skill: Comprehension

Objective: Define efficiency in a production context

27) What strategy would a company likely follow if it increases capacity only after an increase in demand is confirmed?

A) Leading

B) Following

C) Tracking

D) Expanding

E) Contracting

Answer: B

Diff: 2

Skill: Knowledge

Objective: Describe the Following Capacity Strategy

28) Which scenario would likely lead to high utilization rates?

A) Production significantly below capacity

B) Frequent machine breakdowns

C) Use of the full capacity of the production facilities

D) High levels of employee turnover

E) Poor quality raw materials

Answer: C

Diff: 2

Skill: Comprehension

Objective: Relate high utilization rates to cause

29) What type of strategy adds capacity in small, measured amounts to keep pace with increasing demand?

A) Leading

B) Following

C) Tracking

D) Expanding

E) Contracting

Answer: C

Diff: 2

Skill: Comprehension

Objective: Explain the Tracking Capacity Strategy

30) What does high efficiency in a production process indicate?

A) Low quality of output

B) Minimal utilization of resources

C) High rate of production errors

D) Effective use of available capacity

E) Increased production costs

Answer: D

Diff: 2

Skill: Understanding

Objective: Analyze efficiency as a performance metric

31) Which capacity measure considers real-world production constraints?

A) Theoretical capacity

B) Design capacity

C) Effective capacity

D) Static capacity

E) Dynamic capacity

Answer: C

Diff: 2

Skill: Knowledge

Objective: Differentiate between design and effective capacity

32) What is a likely consequence of failing to align production capacity with market demand?

A) Increased customer satisfaction

B) Reduced production costs

C) Decreased sales opportunities

D) Simplified management decisions

E) Faster production times

Answer: C

Diff: 2

Skill: Analysis

Objective: Discuss the effects of misalignment between capacity and demand

33) How does utilizing a 'Leading Capacity Strategy' benefit a company?

A) By reducing the cost of goods sold

B) By preparing for future demand increases

C) By minimizing workforce requirements

D) By decreasing production lead time

E) By cutting down investment in technology

Answer: B

Diff: 2

Skill: Comprehension

Objective: Assess the advantages of a Leading Capacity Strategy

34) What impact does a bottleneck have on resource utilization?

A) Increases efficiency of resource use

B) Reduces the need for raw materials

C) Decreases overall resource idleness

D) Causes uneven resource utilization

E) Eliminates the need for capacity planning

Answer: D

Diff: 2

Skill: Analysis

Objective: Identify the effects of bottlenecks on resources

35) Which indicator is used to measure how well a production process is using its total designed capacity?

A) Efficiency

B) Utilization

C) Throughput

D) Capacity margin

E) Performance index

Answer: B

Diff: 2

Skill: Knowledge

Objective: Define and calculate utilization

36) In what scenario is 'Following Capacity Strategy' typically employed?

A) When demand is unpredictable and fluctuates

B) When market conditions are stable

C) When rapid expansion is required

D) When a company has excess production capability

E) When new technology is rapidly changing the industry

Answer: A

Diff: 2

Skill: Application

Objective: Apply knowledge of capacity strategies to specific scenarios

37) What is typically the focus of efficiency measures in capacity planning?

A) Cost reduction per unit produced

B) Maximum output regardless of cost

C) Proportion of effective capacity used

D) Total production time for all units

E) Number of units produced in a fixed period

Answer: C

Diff: 2

Skill: Comprehension

Objective: Understand the role of efficiency in capacity planning

38) How does strategic capacity planning affect an organization's competitiveness?

A) By increasing operational costs

B) By enhancing alignment with market demand

C) By reducing the quality of products

D) By limiting production capabilities

E) By simplifying operational processes

Answer: B

Diff: 2

Skill: Analysis

Objective: Analyze the strategic impact of capacity planning

39) What does 'Effective Capacity' take into account that 'Design Capacity' does not?

A) Theoretical output limits

B) Real-world production conditions

C) Total possible market demand

D) Historical production data

E) Future technological advancements

Answer: B

Diff: 2

Skill: Comprehension

Objective: Differentiate between effective and design capacities

40) Which capacity planning strategy adjusts capacity in response to actual changes in demand?

A) Leading

B) Following

C) Tracking

D) Proactive

E) Reactive

Answer: B

Diff: 2

Skill: Knowledge

Objective: Describe the Following Capacity Strategy

41) How do organizations use break-even analysis in strategic capacity planning?

A) To determine the maximum output for profitability

B) To identify the minimum output needed to avoid losses

C) To calculate the exact time for a new product launch

D) To estimate the impact of capacity changes on market share

E) To forecast long-term demand trends

Answer: B

Diff: 3

Skill: Application

Objective: Utilize break-even analysis in capacity decisions

42) What role does 'Design Capacity' play in determining production schedules?

A) It sets the maximum limit for daily production planning

B) It dictates the minimum workforce required

C) It defines the scope of market expansion

D) It influences the choice of raw materials

E) It determines the duration of machine downtimes

Answer: A

Diff: 3

Skill: Analysis

Objective: Link design capacity with production planning

43) In capacity planning, what does analyzing 'Effective Capacity' involve?

A) Evaluating the theoretical output capacity

B) Assessing actual production against possible output

C) Checking the financial viability of capacity expansions

D) Comparing market demand with production outputs

E) Forecasting future capacity requirements based on past data

Answer: B

Diff: 3

Skill: Analysis

Objective: Evaluate the role of effective capacity in operational efficiency

44) What strategic advantage does the 'Leading Capacity Strategy' provide?

A) It minimizes investment in new technologies

B) It allows a company to respond instantly to increased demand

C) It positions a company to take advantage of anticipated market growth

D) It reduces the overall cost of production by limiting capacity

E) It avoids the need for frequent adjustments in production levels

Answer: C

Diff: 3

Skill: Comprehension

Objective: Assess the strategic benefits of a Leading Capacity Strategy

45) How can a bottleneck impact a company's strategic positioning?

A) By facilitating rapid innovation and flexibility

B) By limiting throughput and affecting service levels

C) By increasing the efficiency of resource utilization

D) By enhancing the company's responsiveness to market changes

E) By reducing the cost of goods sold per unit

Answer: B

Diff: 3

Skill: Analysis

Objective: Analyze the strategic implications of bottlenecks

46) What is the primary challenge of utilizing a 'Following Capacity Strategy'?

A) It can lead to missed opportunities during sudden demand spikes

B) It typically requires a larger initial investment

C) It always results in higher operational costs

D) It reduces the overall quality of the products

E) It leads to a decrease in market share

Answer: A

Diff: 3

Skill: Analysis

Objective: Evaluate challenges associated with a Following Capacity Strategy

47) Which performance indicator would be most affected by an increase in design capacity?

A) Efficiency

B) Utilization

C) Return on Investment (ROI)

D) Customer Satisfaction

E) Inventory Turnover

Answer: B

Diff: 3

Skill: Application

Objective: Predict the impact of capacity changes on performance indicators

48) What factor must be carefully managed when employing a 'Tracking Capacity Strategy'?

A) The speed of technology adoption

B) The timing of capacity additions

C) The selection of new market segments

D) The reduction of production costs

E) The implementation of quality control measures

Answer: B

Diff: 3

Skill: Application

Objective: Implement a Tracking Capacity Strategy effectively

49) How does strategic capacity planning interact with organizational growth?

A) By limiting the scope for entering new markets

B) By dictating the pace at which new products are developed

C) By aligning production capabilities with future market demands

D) By determining the geographical location of new facilities

E) By influencing the decision to adopt new technologies

Answer: C

Diff: 3

Skill: Synthesis

Objective: Connect capacity planning with organizational growth strategies

50) What does a high utilization rate fail to indicate about a process?

A) That it is cost-efficient

B) That it is using resources effectively

C) That it may be overburdening equipment or personnel

D) That it is meeting production targets

E) That it is producing at maximum capacity

Answer: C

Diff: 3

Skill: Critical Thinking

Objective: Critique the implications of high utilization rates

51) Why is it critical to select the right capacity measure in strategic planning?

A) To ensure accurate financial forecasting

B) To facilitate easier employee training programs

C) To align with environmental sustainability goals

D) To accurately assess production capabilities

E) To simplify the procurement process

Answer: D

Diff: 3

Skill: Evaluation

Objective: Select appropriate capacity measures for strategic planning

52) What potential issue can arise from misalignment between capacity and demand?

A) Excessive production flexibility

B) Inefficient resource allocation

C) Decreased innovation rates

D) Improved supplier relationships

E) Faster production cycles

Answer: B

Diff: 3

Skill: Analysis

Objective: Analyze consequences of capacity and demand misalignment

53) How can economies of scale affect capacity planning?

A) By reducing the impact of fixed costs as output increases

B) By increasing the variability of product quality

C) By simplifying the management of supply chains

D) By enhancing the customization of products

E) By decreasing the dependence on skilled labor

Answer: A

Diff: 3

Skill: Comprehension

54) Which of the following is a primary consideration when dealing with the strategic implications of capacity decisions?

A) Speed of raw material supply

B) Short-term profit margins

C) Long-term organizational effects

D) Immediate workforce satisfaction

E) Local community interests

Answer: C

Diff: 3

Skill: Analysis

Objective: Analyze broader organizational effects of capacity decisions

55) How does a bottleneck affect resource allocation in a production process?

A) It optimizes resource distribution evenly across all processes.

B) It necessitates additional resources at the bottleneck point to increase throughput.

C) It reduces the need for resources in non-bottleneck processes.

D) It allows for greater flexibility in job assignments.

E) It decreases the overall resource requirements.

Answer: B

Diff: 3

Skill: Analysis

Objective: Analyze the impact of bottlenecks on resource allocation

56) When performing a break-even analysis, what critical financial metric is assessed to evaluate capacity alternatives?

A) Total revenue generated at maximum capacity

B) Cost-benefit ratio of new technology implementation

C) Point where costs and revenues are equal

D) Return on investment from increased production

E) Long-term financial stability of the organization

Answer: C

Diff: 3

Skill: Application

Objective: Perform break-even analysis for capacity decisions

57) In what way do economies of scale influence capacity planning decisions?

A) They ensure that smaller production volumes are more cost-effective.

B) They reduce the unit cost as production volume increases.

C) They increase the unit cost as more products are made.

D) They discourage the use of technology in production.

E) They lead to higher variability in product quality.

Answer: B

Diff: 3

Skill: Understanding

Objective: Evaluate the impact of economies of scale on capacity decisions

58) What is a critical outcome of effective capacity planning regarding competitive advantage?

A) It guarantees a larger share of the market regardless of demand.

B) It minimizes the impact of external business forces.

C) It aligns production capabilities with market demand to optimize performance.

D) It reduces the importance of marketing strategies.

E) It eliminates the need for market research.

Answer: C

Diff: 3

Skill: Synthesis

Objective: Connect capacity planning with competitive advantage

59) How does the concept of 'design capacity' factor into strategic planning for new products?

A) It is only considered after product launch.

B) It defines the maximum output possible, shaping investment and marketing strategies.

C) It is used to determine the minimum viable product specifications.

D) It dictates the pricing strategy for new products.

E) It is irrelevant to the strategic planning process.

Answer: B

Diff: 3

Skill: Application

Objective: Apply design capacity concepts in strategic planning for new products

60) What strategic benefit does a Tracking Capacity Strategy offer over a Leading Capacity Strategy?

A) It involves less risk in terms of over-investing in capacity.

B) It provides quicker returns on investment.

C) It always leads to lower operational costs.

D) It allows for more rapid expansion in response to demand spikes.

E) It reduces the need for market analysis.

Answer: A

Diff: 3

Skill: Analysis

Objective: Compare and contrast different capacity strategies