

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

- 1) The ability of manufacturing to produce goods and services is called:
- A) production planning.
  - B) capacity.
  - C) scheduling.
  - D) routing.
  - E) none of the above

Answer: B

- 2) Priority in production planning relates to:
- A) routing.
  - B) an objective of the firm.
  - C) capacity.
  - D) how much of what is needed and when.
  - E) none of the above

Answer: D

- 3) Which of the following is an input to the production plan?
- A) engineering plan
  - B) strategic business plan
  - C) market plan
  - D) financial plan
  - E) All of the above are inputs.

Answer: E

- 4) Which of the following plans has the longest planning horizon and the least level of detail?
- A) master production schedule
  - B) production plan
  - C) strategic business plan
  - D) All of the above have the same level of detail.
  - E) none of the above

Answer: C

- 5) In terms of INCREASING level of detail, which is the correct sequence of activities?
- I. Material requirements planning
  - II. Master production scheduling
  - III. Production planning

A) III, II, and I      B) II, III, and I      C) I, III, and II      D) II, I, and III      E) I, II and III

Answer: A

- 6) Over the time span of the production plan, which of the following can usually be varied to change capacity?
- A) inventories
  - B) work force
  - C) plant and equipment
  - D) all of the above
  - E) A and B

Answer: E

7) Which of the following is a characteristic of a production plan?

- A) The production plan is for individual items.
- B) The only objective is to have an efficient plant.
- C) Time horizons are five years.
- D) All of the above are characteristics of a production plan.
- E) None of the above is characteristic of a production plan.

Answer: E

8) Determining the need for labor, machines, and physical resources to meet the production objectives of the firm is called:

- A) production planning.
- B) production control.
- C) capacity planning.
- D) all of the above
- E) none of the above

Answer: C

9) The function of setting the limits or levels of manufacturing operations based on the market plan and resource availability is called:

- A) capacity planning.
- B) production activity level.
- C) production planning.
- D) all of the above
- E) none of the above

Answer: C

10) A statement of a schedule of requirements for individual end items is called:

- A) a material requirements plan.
- B) a production plan.
- C) a master production schedule.
- D) a capacity plan.
- E) none of the above

Answer: C

11) Which of the following statements is true regarding production planning?

- A) A translation must be made from product demand to capacity demand.
- B) Product groups based on similarity of manufacturing process should be used in planning.
- C) A high level of detail is not needed.
- D) All of the above are true.
- E) None of the above is true.

Answer: D

12) Which of the following statements is true about sales and operations planning?

- A) It includes only the marketing and production plans.
- B) It provides a means of updating the material requirements plan.
- C) It has no effect on inventory levels.
- D) It is usually updated on a monthly basis.

Answer: D

13) Which of the following are characteristics of an MRP II system?

- I. It incorporates the plans of marketing, production and finance.
- II. It is a fully integrated planning and control system.
- III. It has feedback from the bottom up.

A) I only

B) II only

C) III only

D) I, II and III

Answer: D

14) For the purposes of production planning, product groups should be established on the basis of:

- A) market segments.
- B) the availability of machinery.
- C) similarity of manufacturing process.
- D) the availability of materials.
- E) all of the above

Answer: C

15) Which of the following is a basic strategy in developing a production plan?

- A) hybrid strategy
- B) production leveling
- C) chase strategy
- D) A and B above
- E) B and C above

Answer: E

16) A production planning strategy which turns away extra demand is called:

- A) hybrid strategy.
- B) production leveling.
- C) demand matching.
- D) all of the above
- E) none of the above

Answer: E

17) Which basic production planning strategy will build inventory and avoid the costs of excess capacity?

- A) subcontracting
- B) production leveling
- C) demand matching (chase)
- D) all of the above
- E) none of the above

Answer: B

18) Which basic production planning strategy avoids hiring and layoff costs and the costs of excess capacity?

- A) demand matching
- B) subcontracting
- C) operation smoothing
- D) all of the above
- E) none of the above

Answer: B

19) If the opening inventory is 100 units, the sales are 500 units and the ending inventory is 200 units, then manufacturing must produce:

- A) 300 units.
- B) 600 units.
- C) 500 units.
- D) 400 units.
- E) none of the above

Answer: B

20) Over a 10-week period the cumulative sales are forecast at 10,000 units, the opening inventory is 200 units and the closing inventory is to be 100 units. What should be the weekly planned production for level production?

- A) 1000
- B) 1010
- C) 1030
- D) 990
- E) none of the above

Answer: D

21) Firms will generally make-to-stock when:

- A) demand is unpredictable.
- B) delivery lead times are long.
- C) there are many product options.
- D) all of the above
- E) none of the above

Answer: E

22) Firms will generally make-to-order when:

- A) there are many product options.
- B) products are produced to customer specifications.
- C) product is expensive to make and store.
- D) all of the above
- E) none of the above

Answer: D

23) Which of the following information is needed to develop a make-to-stock production plan?

- I. Forecast by time period for the production plan
- II. Opening inventory
- III. Opening backlog of customer orders
- IV. Desired ending inventory

- A) I, II and III
- B) I, III and IV
- C) I, II and IV
- D) II, III and IV
- E) none of the above

Answer: C

24) If the old backlog was 200 units, the forecast for the next period is 500 units, and production for the next period is 600 units, what will be the backlog at the end of the next period?

- A) 100 units
- B) 200 units
- C) 300 units
- D) 700 units
- E) 800 units

Answer: A

25) Which of the following is concerned with long-term planning of manufacturing activity?

- A) production activity control
- B) sales and operations planning
- C) master production scheduling
- D) master planning
- E) MRP

Answer: B

26) Which of the following is NOT a rule of Sales and Operations Planning?

- A) Performance review periods to be compared should be decided.
- B) Product groups need not be decided.
- C) Planning units of measure need to be decided.
- D) A planning horizon must include new product development time.

Answer: B

27) Which of the following is a complete closed loop planning system that develops plans for all materials and operations?

- A) enterprise resource planning
- B) supply chain management
- C) material requirements planning
- D) capacity requirements planning

Answer: A

28) Which of the following represents the major reason for developing the production plan as part of Sales and Operations Planning?

- A) to plan for resources required to produce to the agreed plan
- B) to decide how to best produce exactly what is in the sales plan
- C) to plan a schedule for the production of individual products
- D) to plan the acquisition of new manufacturing facilities

Answer: A

29) Which of the following is true?

- I. The strategic plan is stated in product terms.
  - II. The strategic business plan is stated in financial terms.
  - III. The strategic business plan is developed from the strategic plan.
- A) I and II only
  - B) I and III only
  - C) I, II, and III
  - D) II and III only
  - E) None is correct.

Answer: D

30) Which following best represents the concept of sustainability?

- A) the ability to make long production runs
- B) the ability to maintain the supplier base
- C) the ability to continue operation in the long term
- D) the ability to train labor effectively

Answer: C

31) When a company establishes a program to recycle or reuse products discarded or returned from customers it is typically called which of the following?

- A) customer servicing
- B) reverse supply chain
- C) resupply planning
- D) product return contract

Answer: B

32) Which of the following is most true about Sales and Operations Planning?

- A) It usually includes all functions at the executive level.
- B) It is typically done in financial terms.
- C) It usually includes only sales and manufacturing people.
- D) It usually is produced only once a year.

Answer: A