

Department of Mechanical Engineering

IE8693 - PRODUCTION PLANNING AND CONTROL

Unit I - INTRODUCTION MCQ Bank

1. Breakeven analysis is a

(A)Short term analysis

- (B) Long term analysis
- (C) Average of short and long term analysis
- (D) Any one of these

Option A

- 2. ABC analysis deals with
 - (A) Analysis of process chart
 - (B) Flow of material
 - (C) Ordering schedule of job

(D) Controlling inventory costs money

Answer: Option D

3. Which of the following layouts is suited to job production?

(A) Process layout

- (B) Product layout
- (C) Fixed position layout
- (D) Plant layout
- Answer: OptionA
- 4. Value' for value engineering and analysis purposes is defined as
 - (A) Purchase value
 - (B) Saleable value
 - (C) Depreciated value
 - (D) Function/cost

Answer: Option D

- 5. The product layout
 - (A) Lowers overall manufacturing time
 - (B) Requires less space for placing machines
 - (C) Utilizes machine and labour better
 - (D) All of these

Answer: Option D

- 6. The unit cost in case of batch production is ______as compared to jobbing production.
 (A) Same
 - (B) Low
 - (C) High
 - (D) None of these

Answer: OptionB

- 7. For a product layout the material handling equipment must
 - (A) Have full flexibility
 - (B) Employ conveyor belts, trucks, tractors etc.
 - (C) Be a general purpose type
 - (D) Be designed as special purpose for a particular application

Answer: Option D

8. Which of the following is independent of sales forecast?

(A) Productivity

- (B) Inventory control
- (C) Production planning
- (D) Production control
- Answer: Option A
- 9. Which of the following layouts is suited for mass production?
 - (A) Process layout

(B) Product layout

- (C) Fixed position layout
- (D) Plant layout
- Answer: Option B
- 10. At the break-even point,
 - (A) Total cost is more than the sales revenue
 - (B) Total cost is less than the sales revenue

(C) Total cost is equal to sales revenue

(D) Fixed cost is equal to variable cost

Answer: Option C

- **11**. The simplex method is the basic method for
 - (A) Value analysis
 - (B) Operation research

(C) Linear programming

- (D) Model analysis
- Answer: Option C
- 12. The production cost per unit can be reduced by

(A) Producing more with increased inputs(B) Producing more with the same inputs(C) Eliminating idle time

(D) Minimizing resource waste

Answer: Option B

13. In break-even analysis, total cost consists of

(A) Fixed cost

(B) Variable cost

(C) Fixed cost + variable cost

(D) Fixed cost + variable cost + overheads

Answer: Option C

- 14. Bin card is used in
 - (A) Administrative wing
 - (B) Workshop
 - (C) Foundry shop
 - (D) Stores

Answer: OptionD

15. The disadvantage of product layout is

(A) High initial investment for the specialized facilities

(B) Skilled labour to operate machines

- (C) Production time is longer, requiring more goods in inventory
- (D) High cost of inspection Answer:

Answer:Option A

16. If 'F' is the fixed cost, 'V' is the variable cost per unit (or total variable costs) and 'P' is the selling price of each unit (or total sales value), then break-even point is equal to

(A) (F × V)/P
(B) (F × P)/V
(C) (C) F/[1 + (V/P)]
(D) (D) F/[1 - (V/P)]
Answer: Option D

17. The break-even point represents

(A) The most economical level of operation of any industry

(B) The time when unit can run without i loss and profit

(C) Time when industry will undergo loss

(D) The time when company can make maximum profits Answer: Option C

18. Value engineering aims at finding out the (A) Depreciation value of a product (B) Resale value of a product (C) Major function of the item and accomplishing the same at least cost without change in quality (D) Break-even point when machine requires change Answer: Option C 19. Break-even analysis shows profit when (A) Sales revenue > total cost (B) Sales revenue = total cost (C) Sales revenue < total cost (D) Variable cost < fixedcost Answer: Option A 20. Gantt charts are used for (A) Forecasting sales **(B)** Production schedule (C) Scheduling and routing (D) Linear programming Answer: Option B 21.Basic tool in work study is (A) Graph paper (B) Process chart (C) Planning chart (D) Stop watch Answer: Option D 22.For a product layout the material handling equipment must (A) Have full flexibility (B) Employ conveyor belts, trucks, tractors etc. (C) Be a general purpose type (D)Be designed as special purpose for a particular application Answer: Option D Which of the following is independent of sales forecast? (A) Productivity (B) Inventory control (C) Production planning (D) Production control Answer: Option A 24. For ship vessel industry the following layout is best suited (A) Process layout

(B) Product layout (C) Fixed position layout (D) Plant layout Answer: Option C 25.For handling materials during manufacture of cement, a is widely used. (A) Belt conveyor (B) Bucket conveyor (C) Fork lift truck (D) Overhead crane Answer: Option B 26. Process layout is employed (A) Where low volume of production is required (B) Where similar jobs are manufactured on similar machines (C) Where machines are arranged on functional basis (D) All of the above Answer: Option D 27. Which of the following incentive plans ensures a part of the swing to the worker and rest to the employer? (A) Emerson efficiency plan (B) Taylor plan (C) Halsey premium plan (D) Gilbert plan Answer: Option C 28. The type of organisation preferred for a steel industry, is (A)Line organisation (B)Functional organisation (C) Line and staff organisation (D)Line, staff and functional organisation Answer: Option D 29. What does symbol 'O' imply in work study? (A)Operation (B)Inspection (C) Transport (D)Delay/temporary storage Answer: Option A 30. Work study involves (A)Only method study (B) Only work measurement

(C) Method study and work measurement

(D)Only motion study Answer: Option C

31. Military organisation is known as

(A)Line organisation

(B)Line and staff organisation

(C) Functional organisation

(D) All of the above

Answer: Option A

32 .For a small scale industry, the fixed cost per month is Rs. 5000. The variable cost per product is Rs. 20 and sales price is Rs. 30 per piece. The break even production per month will be

(A) 300

(B) 460

(C) **500**

(D)1000

Answer: OptionC