Chettinad College of Engineering & Technology
Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai.

Department of Mechanical Engineering

IE8693 -PRODUCTION PLANNING AND CONTROL

Unit III - PRODUCT PLANNING AND PROCESS PLANNING MCQ Bank

1. The simplex method is the basic method for
   A) Value analysis
   (B) Operation research
   (C) Linear programming
   (D) Model analysis
   Answer: Option C
2. 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
3. '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
4. 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
5. In process layout
   (A) Handling and backtracking of materials is too much
   (B) Production control is more difficult and costly
   (C) Routing and scheduling is more difficult
   (D) All of the above
   Answer: Option D
6. Routing prescribes the

(A) Flow of material in the plant
(B) Proper utilization of man power
(C) Proper utilization of machines
(D) Inspection of final product
Answer: Option A

7. The technique of value analysis can be applied to
(A) Complicated items only
(B) Simple items only
(C) Crash programmer items only
(D) Any item.
Answer: Option D
8. Which of the following organisation is preferred in automobile industry
(a) functional organization
(b) line organization
(c) staff organization
(d) line and staff organizations
(e) scalar organization.
Ans: Option d
9. Which of the following organizations isbest suited for steel plants
(a) functional organization
(b) line organization
(c) staff organization
(d) line, staff and functional organizations
(e) scalar organization.
Ans: Option d
10. The wastage of material in the store istaken into account by the following method in the evaluation of the material issued from the store
(a) inflated system
(b) primary cost method
(c) current value method
(d) fixed price method
(e) variable price method.
Ans: Option a
11. Which of the following is independent of sales forecast
(a) productivity
(b) inventory control
(c) production planning
(d) production control
(e) capital budgeting.
Ans: Option a

12. The technique of value analysis can be applied to
    (a) complicated items only
    (b) simple items only
    (c) crash programmer items only
    (d) cost consciousness items only
    (e) any item.
    Ans: Option e

13. The term 'value' in value engineering refers to
    (a) total cost of the product
    (b) selling price of the product
    (c) utility of the product
    (d) manufactured cost of the product
    (e) depreciation value.
    Ans: Option c

14. 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 re-quires change
    (e) selling price of an item.
    Ans: Option c

15. In the perpetual inventory control, the material is checked when it reaches its
    (a) minimum value
    (b) maximum value
    (c) average value
    (d) alarming value
    (e) original value.
    Ans: Option a

16. According to MAPI formula, the old machine should be replaced by new one when
    (a) CAM < DAM
    (b) CAM > DAM
    (c) CAM = DAM
    (d) there is no such criterion
    (e) none of the above.

(CAM = Challenger's Adverse minimum DAM = Defender's Adverse minimum)
Ans: Option a

17. Merit Rating is the method of determining worth of
(a) a job
(b) an individual employee
(c) a particular division in workshop
(d) machine
(e) overall quality.
Ans: Option b

18. Material handling and plant location is analysed by
(a) Gnatt chart
(b) bin chart
(c) Emerson chart
(d) travel chart
(e) activity chart.
Ans: Option d

19. Works cost implies
(a) primary cost
(b) factory cost
(c) factory expenses
(d) primary cost + factory expenses
(e) none of the above.
Ans: Option d

20. For calculating the PCR Cp, the process should be in statistical control.
a) True
b) False
Ans: Option a
21. To remove the errors in the estimation of the PCR, the _____ is used.
a) Acceptance Sampling
b) Sample mean
c) Sample variance
d) Confidence intervals
Answer: Option d
22. Which one of these tells explicitly about the potential capability of the process?
a) Histogram

b) Probability plots
c) PCRs
d) Control charts
Answer: Option d

23. Which one of these addresses the issue of statistical control?
a) Design of process experiments
b) Probability plots
c) Control charts
d) Histogram
Answer: Option c

24. Which one of these is primary technique of the process capability analysis?
a) Histogram
b) Process capability ratios
c) Probability plots
d) Control charts
Answer: Option d

25. What is the second name of instantaneous variability?
a) Long term variability
b) Short term variability
c) Long distance variability
d) Variability across time
Answer: Option b