



B.E DEGREE EXAMINATIONS: NOV 2015

(Regulation 2009)

Seventh Semester

MECHANICAL ENGINEERING

MEC121: Production Planning and Control

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. Process layout is best suited for
 - a) job shop production
 - b) batch production
 - c) continuous production
 - d) heavy production
2. In break even analysis, total cost consists of
 - a) fixed cost + sales revenue
 - b) variable cost + sales revenue
 - c) fixed cost + variable cost
 - d) fixed cost + variable cost + profit
3. Work study involves
 - a) only method study
 - b) only work measurement
 - c) method study and work measurement
 - d) only motion study
4. In time study, the rating factor is applied to determine
 - a) standard time of a job
 - b) merit rating of the worker
 - c) fixation of incentive rate
 - d) normal time of a worker
5. In value engineering, the term value refers to
 - a) manufacturing cost of the product
 - b) selling price of the product
 - c) total cost of the product
 - d) utility of the product
6. The routing is concerned with
 - a) manpower utilization
 - b) quality assurance of the product
 - c) machine utilization
 - d) optimizing material flow through the plant
7. Loading may be defined as
 - a) sending the raw material to the machine
 - b) sending the finished material to the store
 - c) assigning the work to the facilities
 - d) uploading a software in machine control panel

8. Master schedule is prepared for
- a) single product continuous production b) multi product batch production
 c) assembly product continuous production d) single product batch production
9. A-B-C analysis
- a) is a basic technique of materials management b) is meant for man power control
 c) does depend upon the unit cost of the item but on its annual consumption d) is effective utilization of machines
10. 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

PART B (10 x 2 = 20 Marks)

11. What is meant by breakeven point?
12. Define standardization.
13. What are the objectives of method study?
14. What is the use of micro motion study?
15. What is value analysis?
16. What is meant by process planning?
17. Define scheduling.
18. Define line of balance.
19. What do you mean by EOQ?
20. What are two bin systems?

PART C (5 x 14 = 70 Marks)

21. a) Explain the various types of production in detail
 (OR)
 b) Explain the steps involved in product design and development process
22. a) Explain the various steps for time study.
 (OR)
 b) Discuss about work sampling and state its advantages and disadvantages.
23. a) Explain the steps involved in the application of value analysis.

(OR)

b) What is meant by product planning? Explain the steps involved in product planning.

24. a) Define dispatching. Explain the various functions of dispatching.

(OR)

b) With an example, explain Gantt chart.

25. a) Define ERP. List out the benefits of ERP.

(OR)

b) Explain the various elements of JIT.
