A **Reg. No. :** | | | | | | | | | | |

Question Paper Code: 59720

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2019

Elective

Mechanical Engineering

15UME920 - PRODUCTION PLANNING AND CONTROL

(Regulation 2015)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. _____ helps in establishing the interchangeability of products. CO1- R

   (a) Standardization (b) Simplification

   (c) Specialization (d) Diversification

2. Job evaluation is the method-of determining the CO1- R

   (a) Relative worth of jobs (b) Skills required by a worker

   (c) Contribution of a worker (d) Contribution of a job

3. Work Study Consists of _____. CO2- R

   (a) Effective use of plant and equipment (b) Effective use of human effort

   (b) Evaluation of human work (d) All of the above

4. Micro motion study is CO2- R

   (a) Enlarged view of motion study

   (b) Analysis of one stage of motion study

   (c) Minute and detailed motion study

   (d) Subdivision of an operation into therbligs and their analysis

5. The correct sequence of operation in production planning and control is CO3- R

   (a) Addition of orders (b) Failures in delivery commitment

   (c) Cancellation of orders (d) Complaints from customers

6. Routing assists engineers in deciding in advance CO3- R

(a) Routing-Scheduling-Dispatching-Follow up

(b) Scheduling-Routing- Dispatching-Follow up

(c) Dispatching-Routing-Scheduling- Follow up

(d) Routing-Scheduling-Follow up-Dispatching

7. Scheduling gives information about CO4- R

(a) When work should start and how much work should be completed during a certain period

(b) When work should complete

(c) That how idle time can be minimized

(d) Proper utilization of machines

8. Gnatt chart provides information about the CO4- R

(a) Material handling (b) Proper utilization of manpower

(c) Production schedule (d) Efficient working of machine

9. Which of the following is an example of purchasing costs? CO5- R

(a) Incoming freight (b) Storage costs (c) Insurance (d) Spoilage

10. In ABC analysis, the classification is based on :- CO5- R

(a) Carrying cost (b) Cumulative cost (c) Ordering cost (d) Raw material cost

PART – B (5 x 2= 10 Marks)

11. State objectives of Production Planning and Control. . CO1- R

12. Is idle time affects productivity? Justify the reason. CO2- R

13. Interpret the parameters affecting the selection of batch size. CO3- R

14. What is MRP? List the various inputs required for it CO4- R

15. Differentiate Independent and Dependent demand. CO5- R

PART – C (5 x 16= 80 Marks)

16. (a) Explain about the functions of production planning cycle. CO1- U (16)

Or

(b) (i) Exemplify the job shop and batch production systems. CO1- U (8)

(ii) Discuss in brief: Economics of a new design for a product. CO1- U (8)

17.	(a)	Briefly explain the different tools and techniques used in the recording phase of method study.	CO2- U	(16)
		Or		
	(b)	Elucidate the basic requirements of work sampling and also mention its characteristic and applications.	CO2- U	(16)
18.	(a)	Explain briefly steps involved in value analysis.	CO3- U	(16)
		Or		
	(b)	Explain the importance of process planning with reference to production control. Discuss the activities involved in process planning.	CO3- U	(16)
19.	(a)	Discuss in detail about the various factors that affect scheduling. Explain any one technique used in loading and scheduling process.	CO4- U	(16)
		Or		
	(b)	Discuss the concept, input characteristics, working, output sand benefits of MRP?	CO4- U	(16)
20.	(a)	Explain in detail with a block diagram, the basic elements of JIT manufacturing system.	CO5- U	(16)
		Or		
	(b)	Explain ABC analysis? Explain its significance in the inventory control with suitable example.	CO5- U	(16)

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