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Question Paper Code: 60837

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2016.

Eighth Semester

Mechanical Engineering

ME 2036/ME 802/10122 MEE 44 — PRODUCTION PLANNING AND CONTROL

(Common to Production Engineering and Mechanical and Automation Engineering)

(Regulations 2008/2010)

(Also common to PTME 2036 — Production Planning and Control for B.E. (Part-Time) Seventh Semester — Mechanical Engineering – Regulations 2009)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A —
$$(10 \times 2 = 20 \text{ marks})$$

- 1. Define the term production control and mention how it forms the basis for other control.
- 2. What is Break Even Point and mention its significance.
- 3. Bring out the meaning of the term Therbligs.
- 4. List out the various techniques of work measurement.
- 5. What is value analysis?
- 6. Define product planning.
- 7. Differentiate between sequencing and scheduling.
- 8. Cite the meaning of the term line of balance.
- 9. What is ABC analysis?
- 10. List out the various elements of JIT systems.

PART B — $(5 \times 16 = 80 \text{ marks})$

11.	(a)	(i) Describe the functions of production control.	(10)
		(ii) Explain the economics of a new design.	(6)
		\mathbf{Or}	•
	(b)	Discuss the various aspects of product development and design.	(16)
12.	(a)	Explain the steps involved in work study.	
		\mathbf{Or}	
	(b)	Briefly discuss the steps in work sampling study.	
13.	(a)	Explain in detail the various steps in product and process planning.	•
		\mathbf{Or}	
	(b)	Elaborate on the procedures involved in the determination of quant machine capacity and balancing in batch production.	ıtity,
14.	(a)	Discuss in detail the method of obtaining the master production sche for a system with examples. Suitable assumptions can be made.	dule
		\cdot Or	
	(b)	Explain in detail the various components of MRP and their functions objectives	and

Stating the assumptions in the EOQ model, derive systematically the

expression for economic lot size providing explanations wherever

(b) Discuss in detail the fundamentals of MRP II and ERP.

15.

appropriate.