Reg. No.

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Question Paper Code

11772

B.E. / B.Tech. - DEGREE EXAMINATIONS, APRIL/MAY 2023

Eighth Semester

Mechanical Engineering IE8693 - PRODUCTION PLANNING AND CONTROL

(Regulation 2017)

Duration: 3 Hours

Max. Marks: 100

PART - A $(10 \times 2 = 20 \text{ Marks})$

Answer ALL Questions

			Marks,	
1.	Wr	ite the objectives of PPC.	K-Level,CO 2,K1,CO1	
2.	W	nat do you understand by break even analysis?	2,K2,CO1	
3.	De	fine are Therbligs.	2,K1,CO2	
4.	Name the few charts used in motion studies.		2,K1,CO2	
5.	Difference between process planning and product planning.		2,K2,CO3	
6.	Compute the information that can be obtained from the system operation concept.		2,K2,CO3	
7.	Lis	t the various charts that are used in line-of-balance analysis.	2,K1,CO4	
8.	Wh	nat is master scheduling?	2,K1,CO4	
9.	Wh	at is JIT? List its benefits.	2,K1,CO5	
10.	Wh	at are the objectives of inventory control?	2,K1,CO5	
	PART - B ($5 \times 13 = 65$ Marks) Answer ALL Questions			
11.	a)	Discuss in detail about the various functions of production planning and control.	13,K2,CO1	
		OR		
	b)	Explain with example the various aspects of product development and design.	13,K2,CO1	
12.	a)	Explain the procedural steps involved in conducting method study with suitable example. OR	13,K2,CO2	
	b)	Explain how use of work study leads to higher productivity in a manufacturing unit.	13,K3,CO2	
13.	a)	Compute the analysis of process capabilities in a multi-product system.	13,K3,CO3	
K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create			11772	

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13,K3,CO3 b) Explain the extending the original product information with suitable examples. 13,K2,CO4 Describe the Material Requirement Planning. 14. a) 13,K2,CO4 b) Examine the various phases of value engineering. 13,K3,CO5 Explain ABC analysis and its significance in the inventory control 15. a) with suitable examples. OR 13,K2,CO5 b) Briefly explain the various techniques used for loading and scheduling. PART - $C(1 \times 15 = 15 \text{ Marks})$ 15,K3,CO6 a) Explain the purpose of maintaining inventory in any production unit. OR 15,K3,CO6 b) Explain about the various costs associated with the inventory control. Give appropriate examples for each cost element?