Total No. of Questions: 6

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## Faculty of Engineering End Sem Examination May-2023

## ME3EI03 Production Planning & Control

Programme: B.Tech. Branch/Specialisation: ME

Maximum Marks: 60 **Duration: 3 Hrs.** 

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of

		Qs) should be written in full in . Notations and symbols have	nstead of only a, b, c or d. Assume suitable data their usual meaning.	a
Q.1	i.	Which of the following func- related to the timetable of ac	etions of Production Planning and Control is a stivities?	l
		(a) Scheduling	(b) Dispatching	
		(c) Expediting	(d) Routing	
	ii.	The correct sequence of o	perations in the Production Planning and 1	l
		Control process is		
		(a) Routing – Scheduling –	Follow up – Dispatching	
		(b) Scheduling – Follow up	<ul><li>Dispatching – Routing</li></ul>	
		(c) Routing – Scheduling –	Dispatching – Follow up	
		(d) Dispatching – Routing –	Scheduling – Follow up	
	iii.	At breakeven point there is-	1	1
		(a) Profit (b) Loss	(c) No profit or loss (d) None of these	
	iv.	Production planning is esser	ntial for	1
		(a) Inventory management	(b) Quality management	
		(c) Supply management	(d) All of these	
	v.	Which of the following is N	OT a time-series model?	1
		(a) Moving Average	(b) Naïve Approach	
		(c) Exponential smoothing	(d) Linear Regression	
	vi.	Delphi method is used for-	1	1
		(a) Judgmental forecast	(b) Time series forecast	
		(c) Associative model	(d) All of these	
	vii.	Johnson Rule is used for-	1	1
		(a) Sequencing Problem	(b) Assignment Problem	
		(c) Aggregate Planning	(d) Scheduling	
			P.T.O	

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	Viii.	viii. Gantt chart is mostly used for-		1
		(a) Routing	(b) Scheduling	
		(c) Follow up	(d) Inspection and quality control	
	ix.	Work study involves-		1
		(a) Method study	(b) Work measurement	
		(c) Both (a) and (b)	(d) Motion study	
	х.	Basic tool in Time study is-		1
		(a) Graph Paper	(b) Process Chart	
		(c) Planning Chart	(d) Stop Watch	
Q.2	i.	What are the objective of planning & control?		
	ii.	Explain the different type of l	Production system.	3
	iii.	What do you understand by s	tandardization?	5
OR	iv.	Explain the different aspect o	f product development & design.	5
Q.3	i.	Explain process planning des	ign.	4
	ii.	Differentiate process planning	g and facility planning.	6
OR	iii.	What is the break-even point,	and why is it important?	6
Q.4	i.	What is the importance of for	recasting?	4
	ii.	What are the types of forecas	ting? Explain any one in brief.	6
OR	iii.	Describe 'Exponential Smootits advantages and limitations	othing Method' of sales forecasting. State s.	6
Q.5	i.	What do you understand by L	oading and scheduling?	4
	ii.	Define routing. Explain the ro	outing procedure in brief.	6
OR	iii.	Describe Gantt charts. What a	are their uses?	6
Q.6		Attempt any two:		
	i.	Explain work study. Also exp	olain its objectives.	5
	ii.	Explain steps in conducting n	nethod study.	5
	iii.	Define objectives and concep	ts of work measurement.	5

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## Marking Scheme

Q.1	i.	a. Scheduling	1
	ii.	b.Routing - Scheduling - Dispatching - Follow up	1
	iii.	At breakeven point there is c.No profit or loss	1
	iv.	Production planning is essential for  d. All of the above	1
	v.	Which of the following is NOT a time-series model?	1
	vi.	d. Linear Regression  Delphi method is used for  a. Judgmental forecast	1
	vii.	Johnson Rule is used for  a. Sequencing Problem	1
,	viii.	Gantt chart is mostly used for b.Scheduling	1
	ix.	Work study involves  c.Method study and work measurement	1
	х.	Basic tool in Time study is d. Stop Watch	1
Q.2	i.	Objective of planning & control?	2
	ii.	type of Production system.	3
	iii.	Standardization explain & example	5
OR	iv.	product development & design aspect	5
Q.3	i.	Explain process planning design.	4
	ii.	Differentiate process planning and facility planning.	3+3
OR	iii.	What is the break-even point, and why is it important?	3+3
Q.4	i.	Forecasting & importance	1+3
	ii.	What are the types of forecasting? Explain any one in brief.	3+3
OR	iii.	Describe 'Exponential Smoothing Method' of sales forecasting. State its advantages and limitations	2+2+2
Q.5	i.	Define routing. Explain the routing procedure in brief.	2+2
	ii.	What do you understand by Loading and scheduling?	3+3

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OR	iii.	Describe Gantt charts. What are their uses?.	3+3
Q.6		Attempt any two:	
	i.	Explain work study. Also explain its objectives	2+3
	ii.	Explain steps in conducting method study.	5
	iii.	Define objectives and concepts of work measurement.	3+2

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