Question Paper Code: 59710

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2020

Elective

Mechanical Engineering

01UME910 - PROCESS PLANNING AND COST ESTIMATION

(Regulation 2013)

Duration: 1.15 hrs Maximum: 30 Marks

PART A - $(6 \times 1 = 6 \text{ Marks})$

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	(Answer any six of t	he following questions)			
1.	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			
2.	Which techniques are commonly used in work measurement				
	(a) Time study				
	(b) Work sampling				
	(c) Pre-determined Motion Time System (PMTS)				
	(d) All of the above				
3.	Which one of the following chart gives simultaneously information about the progress of work and machine loading?				
	(a) Process chart	(b) Machine load chart			
	(c) Man-machine chart	(d) Gantt chart			
4.	In Batch Production, the products are made in				
	(a) Small batches and in Less variety	(b) Small batches and in Large variety			
	(c) Large batches and in Large variety	(d) None of the above			

5.	What does the symbol 'o' imply in work study					
	(a) Operation	(b) Inspection	(c) Delay	(d) Transpor	t	
6.	Direct labour cost	includes				
·	(a) supervisors		(b) Foreman			
	(c) storekeeper		(d) Direct worker on Machines			
7.	Standard Time is equal to					
	(a) Normal Time + Allowances		(b) Observed time x Rating factor			
	(c) Normal Time + Rating factor		(d) None of the above			
8.	If one wanted to double the volume of an investment casting turbine blade from 4 to 8 cubic centimeters, what would be the increase in cost?					
	(a) 2.5 times	(b) 1.5times	(c) 2 times	(d) 3.5 tin	nes	
9.	The work study is done by means of					
	(a) Planning chart		(b) Process chart			
	(c) Stop watch		(d) Travel chart			
10.	Set-up time includes the time taken to:					
	(a) Study the component drawing					
	(b) Draw tools from tool crib					
	(c) Install and adju	st the tools, jigs and fix	xtures on the machine			
	(d) All of the abov	e				
		PART - B (3)	x 8= 24 Marks)			
	(Answer any three of t	the following questions)			
11.	Briefly explain	the various techniques	of work measurement.		(8)	
12.	Explain the two approaches commonly used in CAPP system and bringing ou advantages and limitations.				their (8)	
13.	Why costing is essential for industrial control.				(8)	
14.	Describe the data requirements and sources of information for cost estimation.				(8)	
15.	Explain the cost of the product with ladder diagram.				(8)	