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Reg. No.:						

Question Paper Code: 42823

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2018 Seventh Semester Mechanical Engineering ME 2027 – PROCESS PLANNING AND COST ESTIMATION (Regulations 2008)

Time: Three Hours

Maximum: 100 Marks

Answer ALL questions

PART - A

 $(10\times2=20 \text{ Marks})$

- 1. What is meant by method study?
- 2. Define standard time.
- 3. State the parameters involved in material selection.
- 4. Define: Break even point.
- 5. Give the methods of costing.
- 6. How are Standard Data developed?
- 7. List the types of estimates.
- 8. What are the sources for cost estimation?
- 9. What is meant by 'Overhead expenses'?
- 10. Define cutting speed.

PART - B

(5×16=80 Marks)

a) Write the recording techniques used in method study. Explain with a neat sketch of material type flow process chart. (16)

(OR)

b) What do you understand by Analytical estimating? Give the procedure for conducting work measurement study by analytical estimating. (16)



12. a) Explain the process planning procedure.

(16)

(OR)

- b) Describe the various types of charts and diagrams used in process planning. (16)
- 13. a) i) Write the difference between cost accounting and cost estimating. (8)
 - ii) Write basic steps in cost estimation. (8)

(OR)

b) Calculate prime cost, factory cost, production cost, total cost and selling price per item from the data given below for the year 2012-13.

	Rs.
Cost of raw material in stock as on 01-04-2012	25,000
Raw material purchased	40,000
Direct labour cost	14,000
Direct expenses	1,000
Factory/work overheads	9,750
Administrative expenditure	6,500
Selling and distribution expenses	3,250
Number of items produced	650
Cost of raw material in stock as on 31-03-2013	15,000
Net profit of the items is 10 percent of the total cost of	the product.

14. a) From the following data for a sewing machine manufacturer, prepare a statement showing prime cost, works/factory cost, production cost, total cost and profit.

	Rs.
Value of stock of material as on 1-04-2010	26,000
Material purchased	2,74,000
Wages to labour	1,20,000
Depreciation of plant and machinery	8,000
Depreciation of office equipment	2,000
Rent, taxes and insurance of factory	16,000
General administrative expenses	3,400
Water, power and telephone bills of factory	9,600
Water, lighting and telephone bills of office	2,500
Material transportation in factory	2,000