| Seat No.:  |  | Enrolment No                                   |  |
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|  | T TECHNOLOGICA<br>ER – VI (NEW).EXAMINAT   |  |  |
| Subject Code: 2162505  |  | Date: 25/10/2016                               |  |
| Subject Name: Estimate Time: 10:30 AM to 01: Instructions:   | 0  | Total Marks: 70                                |  |
| <ol> <li>Attempt all quest</li> <li>Make suitable ass</li> </ol>   | ions.<br>sumptions wherever necessary.<br>ht indicate full marks.  |  |  |
| capacity. Lathes of area. During one (i) Building rent at (ii) Indirect labout (iii) Insurance = F (iv) Depreciation (v) Depreciation (vi) Power consumption (vii) Power consumption (vii) Power consumption (viii) Power consumption (viii) Power consumption (viii) Power consumption (viii) Power consumption (viiii) Power consumption (viiiii) Power consumption (viiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii | occupy 30m2 area while shape<br>calendar year factory expense<br>and depreciation = Rs 5,000<br>r and material = Rs 15,000 | es are follows:  00  napers, if all the lathes |  |

| Q.1 (a | ) A f      | actory has 15 lathes of same makes and capacity and 5 shapers of same <b>07</b> make a capacity. Lathes occupy 30m2 area while shapers occupy 15 m2 area. During one calendar year factory expenses are follows:  (i) Building rent and depreciation = Rs 5,000  (ii) Indirect labour and material = Rs 15,000  (iii) Insurance = Rs 2,000  (iv) Depreciation charges of lathes = Rs 5,000  (v) Depreciation charges of shapers = Rs 3,000  (vi) Power consumptions for lathes = Rs 2,000  (vii) Power consumptions for shapers = Rs 1,000  Find out the machine hour rate for lathes and shapers, if all the lathes and shapers work for 25,000 hours and 8,000 hours respectively. | and  |
|--------|------------|--|------|
|        | (b)        | Why careful study of Mensuration is essential? Explain in details the various methods used for calculating area of irregular figures.  | 07   |
| Q.2    | 2 (a)      | Explain in details the various elements which go to make up the total cost of any product.   | 07   |
|        | <b>(b)</b> | Explain in detail the different methods of ON COST allocation.   | 07   |
|        |            | OR   |      |
|        | <b>(b)</b> | Explain in details the estimation of volume of solids of revolution of a <b>07</b> trianguarea, rectangular area, semi circular area and trapezoidal area by using Guldinus rules.   | ılar |
| Q.3    | (a)        | Define Estimating. Give importance of estimating and also list various functions   | 07   |
|        | <b>(b)</b> | of estimation department.  Define Overheads. Give classification of Overheads. Explain Fixed and variable Overheads.   | 07   |
| 0.2    | (-)        | OR   | 07   |
| Q.3    | (a)        | Define costing. Describe various costing methods. How the cost of a product is controlled?   | 07   |
|        | <b>(b)</b> | A press making 60 strokes per minutes is used for making 30 blanks   | 07   |
|        |            | of 100 mm × 170 mm size from each strip. Calculate the time required for blanking each strip if only 60 % of the strokes are   |      |
|        |            | 1/2  |      |
|        |            |  |      |

|     | total time for blanking and piercing for 200 components.   |              |
|-----|--|--------------|
| Q.4 | (a) Explain cost accounting. Give its objectives and also write advantages of coaccounting.  | st <b>07</b> |
|     | (b) Explain in details various factors of production.  | 07           |
|     | OR   |              |
| Q.4 | (a) Explain in details tools and techniques for cost reduction.  | 07           |
|     | (b) Explain the Trade cycle. Give characteristics and causes of trade cycle.   | 07           |
| Q.5 | <ul> <li>(a) What is Blanks layout in sheet metal shop? A steel pipe 10 m long and 0.6 n diameter is to be fabricated from M.S. plate of 1 cm thickness. Estimate cost (i) M.S. plates of size 2 m x 1 m are available at the rate of Rs 70.</li> <li>(ii) Cost of rolling 10 % of material cost</li> <li>(iii) Cost of riveting 20 % of material cost</li> <li>(iv) Overhead charges 10 % of material cost</li> </ul> |              |
|     | (b) Explain Estimation of pattern cost and Estimation in foundry shop.   | 07           |
|     | OR   |              |
| Q.5 | (a) Explain in details the Estimation procedure in forging shop.   | 07           |
|     | (b) Explain in details the Estimation procedure in sheet metalworking shop.  | 07           |

utilized. If holes are also pierced on this press, find out the