

22662

22223

3 Hours / 70 Marks

Seat No.

--	--	--	--	--	--	--	--

- Instructions* –
- (1) All Questions are *Compulsory*.
  - (2) Answer each next main Question on a new page.
  - (3) Illustrate your answers with neat sketches wherever necessary.
  - (4) Figures to the right indicate full marks.
  - (5) Assume suitable data, if necessary.
  - (6) Use of Non-programmable Electronic Pocket Calculator is permissible.
  - (7) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

**Marks**

1. **Attempt any FIVE of the following:** **10**
- a) State importance of estimating.
  - b) Describe 'process costing' in brief.
  - c) Define:
    - i) Direct overheads
    - ii) Indirect overheads
  - d) Briefly describe customer based pricing.
  - e) Define depreciation.
  - f) State meaning of terms 'pouring time' and 'pouring rate.'
  - g) State elements of 'Balance Sheet.'

P.T.O.

- 2. Attempt any THREE of the following: 12**
- a) Enlist aims of Costing.
  - b) Describe steps in estimation procedure.
  - c) Draw a neat and labelled diagram of Break even chart. Indicate all important elements in it.
  - d) Describe method of making pricing decision.
- 3. Attempt any THREE of the following: 12**
- a) An asset is purchased at initial cost of Rs. 24,000/-. The depreciable life of that asset is 5 years and expected salvage value is Rs. 3,000/-. Using declining balance method, prepare a table showing depreciation accumulated depreciation and book value of asset at end of every year in useful life of asset.
  - b) Summarise reasons for addition of unnecessary costs in the product.
  - c) Derive formula to calculate time required for cutting in turning operation on lathe.
  - d) A keyway is cut on a shaft using end mill cutter, on milling machine. Enlist data necessary to find time required for this cutting operation.
- 4. Attempt any THREE of the following: 12**
- a) Analyse value of following things:
    - i) Bonnet of car
    - ii) Bench Grinder
    - iii) Door Knob
    - iv) Screw Driver
  - b) A hole is cut on a metal sheet using EDM Process. Enlist data required to find time required.
  - c) Find time required to drill a hole using drilling machine; on a workpiece having thickness = 50 mm. The diameter of hole is 18 mm. Assume cutting speed = 12 m/min. and feed = 0.2 mm/revolution. Neglect length of approach.
  - d) Describe following:
    - i) Pay back period
    - ii) Net Present Value
  - e) Differentiate between 'Value Analysis' and 'Value Engineering.'

**5. Attempt any TWO of the following:****12**

- a) The monthly expenses incurred on manufacturing 50 no. of products in XYZ manufacturing Company are as following:  
Direct material cost → Rs. 3,15,000/-  
Direct labour cost → Rs. 2,50,000/-  
Direct expenses → Rs. 1,35,000/-  
Manufacturing expenses = 50% of direct labour cost.  
Administration expenses = 7% of prime cost.  
Selling expenses = 10% of prime cost.  
Profit - 12.5% of cost of sales.  
Calculate selling price of single product.
- b) Describe procedure of evaluation of project report on basis of different parameters.
- c) Two 1 m. long M.S. plates of 8 mm thickness are to be welded by a lap joint with a 6 mm. electrode. Calculate the cost of welding. Assume following data:
- Current used = 250 Amp.
  - Voltage = 30 V
  - Welding speed = 8 m/hr.
  - Electrode used = 0.1 kg/m. of welding.
  - Labour charges = Rs. 2.5 / hour.
  - Power charges = Rs. 0.4 / kwh.
  - Cost of electrode = Rs. 40 / kg.
  - Efficiency of machine = 60%.

**6. Attempt any TWO of the following:****12**

a) Following data is available for ABC &amp; Co.

<b>F.Y.</b>	<b>Sales (Lakhs Rs.)</b>	<b>Profit (Lakhs Rs.)</b>
2017-18	92.60	14.26
2018-19	98.20	23.90

- i) Find P/V ratio.
  - ii) Break even sales.
  - iii) Sales to earn profit of Rs. 30 lakhs / year.
  - iv) Margin of safety in year. (2018-19)
- b) Describe reasons of replacement of equipment with justification.
- c) A sum of Rs. 1 lakh is lent to 'X Bank' with simple interest of 8% for 5 years. Another sum of Rs. 1 lakh is lent to 'Y Bank' with 7% interest for 5 years. The interest in Y Bank is compounded semi annually. At end of 5 years, which bank will give more interest or interest will be same in both options? Justify your answer by calculating interests.
-