

17557

21819

3 Hours / 100 Marks

Seat No.

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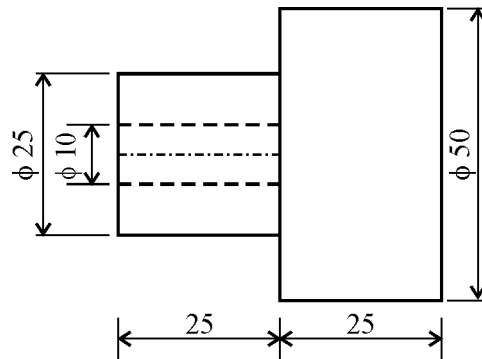
- Instructions :**
- (1) All Questions are *compulsory*.
 - (2) Illustrate your answers with neat sketches wherever necessary.
 - (3) Figures to the right indicate full marks.
 - (4) Assume suitable data, if necessary.
 - (5) Use of Non-programmable Electronic Pocket Calculator is permissible.

Marks

1. Attempt any FIVE :

20

- (a) State any four objectives of costing.
- (b) Explain the quality of estimator and its qualification.
- (c) State the various causes of depreciation.
- (d) Find the time required to turn 50 mm dia. Cylindrical bar as shown in figure
Cutting speed is 15 m/min and feed 1 mm/rev and all cuts are 3.5 mm deep.



All dimensions are in mm.

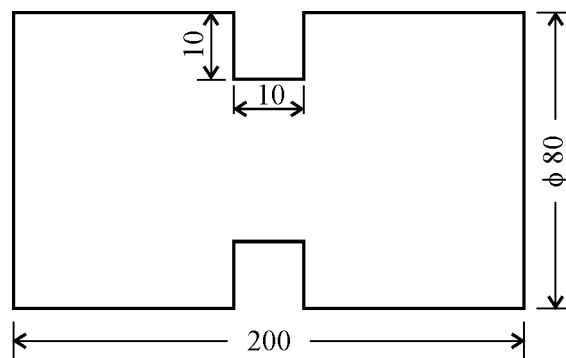
- (e) Explain different forging losses.
- (f) Explain in brief :
 - (i) Importance of mensuration.
 - (ii) Machining time calculation for turning operation.

2. Attempt any TWO :**16**

- Explain actual cost method. Explain its significance.
- What are the factors to be considered while estimating welding cost ?
- What are blank layouts and how the sheet metal time is estimated ?

3. Attempt any FOUR :**16**

- Differentiate between costing and estimating.
- Explain sinking fund method to calculate depreciation.
- A chromium steel shaft of 80 mm diameter has a square slot turn in at centre of bar. The dimension of slot is as shown in figure. Calculate the weight of material removed, if density of material is 7.83 g/cm^3 .



All dimensions are in mm.

- Explain inflated price method.
- Differentiate between hand forging and machine forging.
- How capacity of power press is determined ?

4. Attempt any TWO :**16**

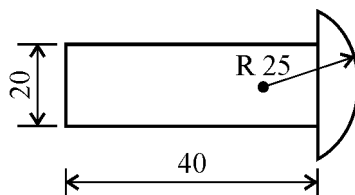
- How the valuation of material is done by first in first method ?
- Explain any two welding joints with neat sketch.
- What is erection costing ? Explain the steps in estimation of erection costs.

5. Attempt any FOUR :**16**

- (a) Explain any two overhead charges.
- (b) Differentiate between depreciation and obsolescence.
- (c) A square bar of 25 mm side and 250 mm length is to be converted by hand forging into a bar of heragonal section of side 20 mm. Calculate the length of hexagonal bar produced consider scale loss of 8% of the total.
- (d) State importance of estimating and describe estimating procedure.
- (e) Explain machine hour basis method.
- (f) What are the characteristics of process cost accounting ?

6. Attempt any FOUR :**16**

- (a) Differentiate between direct labour and indirect labour cost.
- (b) Write complete procedure of sheet metal cost estimation.
- (c) What is material costing ? Which are the expenses included in the cost of material ?
- (d) Explain the shaping and planning operations giving their time estimate determination method.
- (e) A stainless steel rivet as shown in figure. Calculate the no. of rivets manufactured from 5 kg of stainless steel. Assure density of material is 7.8 g/cm^3 .



All dimensions are in mm.

- (f) Explain job order and process order costing.

