



C14-M-503

4651

BOARD DIPLOMA EXAMINATION, (C-14)

MARCH/APRIL—2021

DME - FIFTH SEMESTER EXAMINATION

ESTIMATING AND COSTING

Time : 3 hours]

[Total Marks : 80

PART—A

4×5=20

- Instructions :** (1) Answer *any five* questions.
(2) Each question carries **four** marks.
(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. Define estimation. List reasons for doing estimation.
2. Define (a) Production cost and (b) Total cost.
3. Define (a) Prime cost and (b) Office overheads.
4. Write the formula for finding the volume of (a) Cylinder and (b) Sphere.
5. Define (a) RPM and (b) Speed.
6. What is length of approach? Why it is required?
7. Sketch three types of welding joints.
8. List forging losses that occur in drop forging.
9. What are the forging losses to be considered in hand forging?
10. How do you estimate foundry cost?

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PART—B

15×4=60

- Instructions :** (1) Answer *any four* questions.
(2) Each question carries **fifteen** marks.
(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

11. (a) What are the constituents of estimation?
(b) Define the terms depreciation and appreciation in estimation of cost.
12. List out various methods of calculating depreciation. Explain briefly about sinking fund method.
13. Estimate the weight of material required to produce a workpiece of stepped pulley of total length 800 mm. With 40 mm diameter for 250 mm length, 50 mm diameter for 300 mm length and 60 mm diameter for remaining length. The density of the material is 4 grams/cc. Find the material cost also if the rate is ₹ 50 per kg.
14. Estimate the machining time required to turn a M.S. bar of 30 mm diameter down to 26 mm for length of 300 mm in a single cut. Cutting speed is 35 m/min and feed is 0.5 mm/rev.
15. Explain the various time allowances to be considered in estimation of machining time.
16. Explain the techniques of leftward welding and rightward welding with sketch.
17. Explain briefly various methods of forging.
18. What is process scrap? What is the importance of machining allowances?

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