

B.E. (Full Time) DEGREE END SEMESTER EXAMINATIONS, NOV / DEC 2012
PRINTING TECHNOLOGY BRANCH
SIXTH SEMESTER
PT 9353 COST ESTIMATION FOR PRINTING
(REGULATIONS 2008)

Time: 3 hr

Max Mark: 100

Answer ALL Questions
Part – A (10 x 2 = 20 Mark)

1. Differentiate between shut down cost and sunk cost.
2. If the selling price of a product is Rs.10, 000 and profit 10% on cost, calculate the profit.
3. Which estimating procedure is faster, price estimating or cost estimating? Why?
4. List out the steps required for cost estimating?
5. A reel having a net weight of 250 kg is to be cut into sheets of 44 x 62 cm size. How many sheets will it make if the paper on reel has a substance of 60 gsm?
6. What are factory costs and list out the costs which come under factory cost?
7. Estimate the quantity of stitching wire required for making 1, 50,000 answer books in A4 size. There are two wire staples in each answer book and each stitch requires 30 mm wire of 22 gauge. Length of wire per kg of 22 gauge is 285 meters.
8. Calculate the weight of paste required in kg for the pasting of endpapers of 3000 books of A5 size to the inside of the hard covers. The coverage power of paste used is 100 m² per kg.
9. A person receives an annuity of Rs.5000 for four years. If the rate of interest is 10 percent, find the present value of Rs.5000 annuity?
10. What is meant by "Time value of money"?

Part – B (5 x 16 = 80 Mark)

11. What is known as Budgetary Control? Comment on "Budgetary control as a management tool". State its advantages and limitations.
12. (a) Write down the procedure for selling, estimating, pricing and quoting for a typical print job.

(or)

(b) The following information has been obtained from the records of printing press for period from June 1 to June 30 2011

Cost of Raw Materials on June 1, 2011	Rs. 30,000
Purchase	Rs. 4, 75,000
Wages Paid	Rs. 2, 30,000
Factory overheads	Rs. 92,000
Cost of work in progress on June 1, 2011	Rs. 12,000
Cost of work in progress on June 30, 2011	Rs. 15,000
Cost of stock of finished goods on June 1, 2011	Rs. 60,000
Cost of stock of finished goods on June 30, 2011	Rs. 55,000
Selling and distribution overheads	Rs. 20,000
Sales	Rs. 9, 00,000
Administrative overheads	Rs. 30,000

Prepare the statement of cost.

P.T.O.

13. (a) (i) Machine finished paper of 70 gsm of size double crown required for 20,000 booklets of 396 pages of crown octavo. The thickness of the spine is 1 cm and the wrapper is printed in four colors in art paper of size 56 x 71 cm of 200 gsm. Calculate the (i) quantity of paper and board (ii) estimate the cost of paper and board assuming the cost/kg of paper is Rs.42 and cost/kg of board is Rs.62 (12)
- (ii) The number of Demy Octavo size that can be typeset in 8 hrs. shift is 24 pages (200 sq.cm). The factor for the features for the job is 1.9. The CMHR of the typesetting unit is Rs.145/-. Find out the total typesetting cost for typing 320 pages of typeset area per page is 153 sq.cm. (4)

(or)

- (b) (i) Calculate the quantity of black ink required for 25,000 copies of a 16 page booklet of A5 size each page with a print area of 200 cm². There are 10 pages printed in black ink from halftone pictures and 6 pages in type matter in black. The booklet is printed by offset process on a coated art paper. (8)
- (ii) Estimate the quantity of ink required in kilogram for 30,000 copies of a sheet of labels, 20 labels to view per sheet with each label having a print area 179 x 194 mm printed on one side of a high gloss coated paper. The process of printing is offset and the labels are printed in four color halftone picture. Find the cost of ink assuming the cost/kg of ink is Rs.500. (8)
14. (a) Calculate the CMHR of a adhesive binding machine for the following specification:

The capital cost of the machine is Rs. 7, 50,000/-. One binder, two helpers and a supervisor (50%) are working at the monthly salary of Rs. 5000, Rs.3500 and Rs.10,000 each respectively. The fixed direct cost of all the machine is Rs. 35,20,000 and fixed indirect cost of all the machine is Rs. 8,00,000. Power consumption is 25 units per month @ Rs.2.50/unit and consumables/year is Rs.8000. Capacity utilization is 55%.

(or)

- (b) (i) List out the different methods adopted to calculate the depreciation cost of the machine every year and also calculate the depreciation cost of the machine in all the methods whose capital cost is Rs.10 lakhs. (8)
- (ii) Estimate the cloth required in meters for 2,500 hard case full cloth bound books having a trimmed size 210 × 297 mm with a spine thickness of 15 mm. Cloth is available in rolls of 80 cm width and 30 meter length (8)
15. (a) The budget of AB Ltd. Includes the following data for the forthcoming financial year:

Fixed expenses	Rs.3, 00,000
Contribution per unit	Product X – Rs.6 Product Y – Rs.2.50 Product Z – Rs.4
Sales forecast	Product X – 24,000 units @ Rs.12.50 Product Y – 1, 00,000 units @ Rs.7.00 Product Z – 50,000 units @ Rs.10.00

Calculate the Composite P/V ratio, Composite B.E.P. and B.E.P. sales for the three products. (12)

(ii) Variable cost is Rs.50, 000, Fixed cost is Rs.20, 000 and Selling price is Rs.80, 000. Calculate contribution and profit. (4)

(or)

- (b) (i) Find out the compound value of Rs.1000, interest rate being 12 percent per annum if compounded annually, semi-annually, quarterly and monthly for 2 years (8)
- (ii) Determine the future value at the end of eight years of an annual deposit of Rs.18,000 each year and at the beginning of each year. (8)