

B.E. (Full Time) DEGREE END SEMESTER EXAMINATIONS, NOV / DEC 2011
 PRINTING TECHNOLOGY BRANCH
 SIXTH SEMESTER
PT 9353 – COST ESTIMATION FOR PRINTING
 (REGULATIONS 2008)

33

Time: 3 hr

Max Mark: 100

Answer ALL Questions

1. What is meant by profit analysis?
2. If the cost price of the item is Rs.10,000 and profit is 10% on selling price, calculate profit?
3. List out the steps required for cost estimating?
4. State the needs of an estimator?
5. Calculate the weight of paste required in kg for pasting of endpapers of 5000 books of A5 size to the inside of the hard covers. The coverage power of paste used is 100 m²/ kg.
6. Find out the weight of one ream of paper of 80 gsm in double medium size.
7. Define "Discretionary fixed cost"?
8. What is known as "marginal costing"?
9. What are the reasons for the preference of money with time?
10. Define 'margin of safety'?

Part – B (5 x 16 = 80 Mark)

11. What is known as budgetary control? Comment on 'Budgetary control as a management tool' and list out its advantages to management.
12. (a) Write down in detail about the various classification of Budget and also list out the difference between forecast and budget?

(or)

- (b) (i) From the following, calculate the works cost: (8)

Material cost	:	Rs.60,000
Labour cost	:	Rs.40,000
Direct expenses	:	Rs.10,000
Factory overheads	:	Rs.50,000
Work in progress		
Opening stock	:	Rs.10,000
Closing stock	:	Rs.8,000

- (ii) What are the various methods of estimating? Explain. (8)

13. (a) (i) Find out the weight of reel of paper having width, outer and inner diameters as 63 cm, 100 cm and 15 cm respectively. The substance of the paper is 80 and its caliper is 1/12 mm. (4)

- (ii) Cream wove paper of 60 gsm of size 51 x 76 cm required for 10,000 copies of the book of 396 text pages of crown octavo. The book thickness is 1.8 cm. Calculate the cost of paper and board assuming the cost/kg of paper as Rs.45/- and cost/kg of board as Rs.68/ (12)

(or)

- (b) (i) Calculate the quantity of black ink required for 30,000 copies of a 32 page booklet of A5 size each page with a print area of 200 cm². There are 8 pages printed

in black ink from halftone pictures and 24 pages in type matter in black. The booklet is printed by offset process on a coated art paper. (8)

(ii) Find out the quantity of ink required for the printing of 10000 posters of 38 x50 cm size in 4 colors from a color transparency on Art paper by using offset process. Wastage of paper and ink should also be taken into account. (8)

14. (a) Calculate the CMHR of a folding machine for the following specification:

The capital cost of the machine is Rs.8, 00,000/-. One operator, two helpers and a supervisor (50%) are working at the monthly salary of Rs.5000, Rs.3000 (each) and Rs.8000 respectively. The fixed direct cost of all the machine is Rs.40, 50,000 and fixed indirect cost of all the machine is Rs.8, 00,000. Power consumption is 150 units per month @ Rs.2.50/unit and consumables per year is Rs.3000. Capacity utilization is 65%.

(or)

(b) (i) Calculate the depreciation value by straight line method and written down value method, considering the capital cost of the machine to be Rs.25, 00,000 and depreciation at 15%. The expected useful life of the machine is 7 years approx. (8)

(ii) The number of Demy Octavo size that can be typeset in 8 hrs shift is 24 pages. The factor for the features for the job is 1.9. The CMHR of the typesetting unit is Rs.145/-. Find out (8)

- The typesetting rate per sq.cm assuming the text area per page is 200 sq.cm.
- Calculate the cost of 393 pages of text area of 156 sq.cm

15. (a) (i) Ram is borrowing Rs.50,000 to buy a table top laminating machine. If he pays equal installments for 25 years and 4 percent interest on outstanding balance, what is the amount of installments? What shall be the amount of installment if quarterly payments are required to be made? (12)

(ii) XYZ Bank pays 12 percent and compound interest quarterly. If Rs.1000 is deposited initially, how much shall it grow at the end of 5 years? (4)

(or)

(b) (i) A factory manufacturing table top laminating machine has the capacity to produce 600 machines per annum. The marginal cost of each machine is Rs.25,000 and each machine is sold for Rs.30,000. Fixed overheads are Rs.1,50,000 per annum. Calculate the break-even points for output and sales and show what profit will result if output is 90% of capacity? (12)

(ii) Total sales is Rs.2,50,000; Variable costs is Rs.1,00,000; Fixed costs is Rs.75,000. Calculate the margin of safety. (4)