Roll No.										

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B.E. (Full Time) DEGREE END SEMESTER EXAMINATIONS, NOV / DEC 2011

PRINTING TECHNOLOGY BRANCH

SIXTH SEMESTER

PT 384 – COST ESTIMATION

(REGULATIONS 2004)

Time: 3 hr Max Mark: 100

Answer ALL Questions

1. What is accounting?
2. If the selling price of the item is Rs.10,000 and profit is 10% on cost, calculate profit?
3. Differentiate between 'direct cost and indirect cost'?
4. What is known as 'Price estimating'?
5. Calculate the quantity of sewing thread required for the binding of 6000 books in A5 size assuming that each book contains 18 sections and the thread contained in each reel is 450 meters.
6. A ream of paper in 61x88 cm weighs 21.5 kg. Find out the weight of the same paper in quad crown size.
7. 24 page can be typeset in 8 hours shift and CMHR is Rs.150. The typeset area per page is 200 cm^2. Factor for the features of the job is 1.9. What is the basic rate and rate of typesetting?
8. Define shut down and sunk cost?
9. What is meant by "Time value of money"?
10. What is known as 'Break – even analysis'?

Part – B (5 x 16 = 80 Mark)

11. Explain the general procedure for selling, estimating, pricing and quoting in printing

12. (a) (i) The accounts of a manufacturing company provides the following information for the six months ending 31st December, 2010 (8)

Material cost	-	Rs.1, 50,000
Wages	-	Rs.1, 20,000
Factory overheads	-	Rs.24, 0000
Establishment & General expenses	-	Rs.17, 640

Prepare the cost sheet of the machine and calculate the price which the company should quote for the manufacture of a machine requiring materials valued Rs.1250, wages Rs.750 so that the price may yield a profit of 20% on the selling price.

(ii) State the different types of budgets (8)

(or)

(b) Explain 'budgetary control as a management tool' and state the limitations of budgetary control.

13. (a) (i) Cream wove paper of 60 gsm of size Double crown required for 10,000 copies of the book of 396 text pages of crown octavo. The book thickness is 1.5 cm. Calculate the cost of paper and board (200 gsm) assuming the cost/kg of paper is Rs.51/- and cost/kg of board is Rs.68/- (12)

P.T.O.

(ii) The net weight of a reel of paper of 62cm width is 175kg. Calculate the length of paper wrapped around the reel assuming that the paper has a gsm of 80 (4)

(or)

(b) (i) Calculate the quantity of black ink required for 20,000 copies of a 16 page booklet of A5 size each page with a print area of 220 cm^2. 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 paper cutting machine for the following specification:

The capital cost of the machine is Rs.12, 00,000/-. One cutter, two helpers and a supervisor (50%) are working at the monthly salary of Rs.5000, Rs.3000 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 150 units per month @ Rs.2.50/unit and consumables/year is Rs.2000. Capacity utilization is 70%. (make suitable assumptions if needed)

(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) (i) 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.6.00
		Product Y – Rs.2.50
		Product Z – Rs.4.00
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 and Composite B.E.P. (12)

(ii) From the following data, find (i) Profit and (ii) number of units to be sold for a profit of Rs.2000. (4)

Selling price/unit	-	Rs.5	Variable cost/unit	-	Rs.3
Units sold	-	2000	Fixed cost	-	Rs.3000

(or)

(b) (i) You can get an annual rate of interest of 15 percent on a public deposit with a company. What is the effective rate of interest if compounding is done yearly, half-yearly, quarterly and weekly? (8)

(ii) Determine the future values utilizing a time preference rate of 9% (8)

- The future value of Rs.25,000 invested now for a period of 4 years
- The future value at the end of 8 years of an annual deposit of Rs.20,000 each year