

TOPICS : Process Costing, Joint Product & By Product

QUESTION NO.1

(10 MARKS)

Alpha Ltd. is engaged in the production of a product A which passes through 3 different process – Process P, Process Q and Process R. The following data relating to cost and output is obtained from the books of accounts for the month of April 2017 :

Particulars	Process P	Process Q	Process R
Direct Material	38,000	42,500	42,880
Direct Labour	30,000	40,000	50,000

Production overheads of Rs. 90,000 were recovered as percentage of direct labour.

10,000 kg of raw material @ Rs. 5 per kg. was issued to Process P. There was no stock of materials or work in process. The entire output of each process passes directly to the next process and finally to warehouse. There is normal wastage, in processing, of 10%. The scrap value of wastage is Rs. 1 per kg. The output of each process transferred to next process and finally to warehouse are as under :

Process P = 9,000 kg

Process Q = 8,200 kg

Process R = 7,300 kg

The company fixes selling price of the end product in such a way so as to yield a profit of 25% selling price.

Prepare Process P, Q and R accounts. Also calculate selling price per unit of end product.

QUESTION NO.2

(10 MARKS)

JB Limited produces four joint products A, B, C and D, all of which emerge from the processing of one raw material, The following are the relevant data :

Production for the period :

Joint Products	Number of units	Selling price per unit
A	500	Rs. 18.00
B	900	8.00
C	400	4.00
D	200	11.00

The company budgets for a profit of 10% of sales value. The other estimated costs are :

Carriage inwards	Rs.1,000
Direct wages	3,000
Manufacturing overhead	2,000
Administration overhead	10% of sales value

You are required to :

- (a) Calculate the maximum price that may be paid for the raw material.
- (b) Prepare a comprehensive cost statement for each of the products allocating the materials and other costs based upon.
 - (i) Number of units
 - (ii) Sales value

QUESTION NO.3

(10 MARKS)

Following information is available regarding process A for the month of February 20X1.

Production Record

Units in process as on 31st Jan. 20X1	4,000
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(All material used 25% complete for labour and overhead)

Net units started in process	<u>16,000</u>
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20,000

Production report shows following results :

Units completed	14,000
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Units in process on 28th February 20X1	6,000
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(All material used, 33-1/3% complete for labour and overhead)

Cost records

Work-in-process as on 31.1.20X1

Material	Rs.1,200
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Labour	200
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Overhead	200
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Cost on February 20X1

Material	Rs.5,120
Labour	3,000
Overhead	<u>3,000</u>
Total cost to be accounted for	<u>12,720</u>

Presuming that average method of inventory costing is used, prepare:

- (i) Statement of equivalent production.
- (ii) Statement showing cost for each element.
- (iii) Statement of apportionment of cost.
- (iv) Process cost account for process A

QUESTION NO.4

(10 MARKS)

Tee Pee Ltd. in the course of refining crude oil obtains four joint products A, B C, and D. The total cost till the split-off point was Rs. 97,600. The output and sales in the year 1990 were as follows :

Product	Output (Gallons)	Sales	Separate Costs
A	5,00,000	Rs. 1,15,000	Rs. 30,000
B	10,000	10,000	6,000
C	5,000	4,000	-
D	9,000	30,000	1,000

You are required to :

- (i) Calculate the net income for each of the products if the joint costs are apportioned on the basis of sales value of the different products.
- (ii) What would be the net income of the company from each product if it decides to sell the products at the split-off point itself @ A 15 paise; B 50 paise; C 80 paise and D Rs. 3 per gallon?
- (iii) In case the company expects to operate at the same level of production and sales in the year 1991, could the company increase the net income by altering its processing decisions? If so, what would be the expected overall net income? Which products should be processed further and which would be sold at split-off? Assume that all costs incurred after the split-off are variable.