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## American Institute of Accountants' Examinations, May 14 and 15, 1925

American Institute of Accountants. Board of Examiners

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# The JOURNAL of ACCOUNTANCY

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## AMERICAN INSTITUTE OF ACCOUNTANTS' EXAMINATIONS

(Following is the text of the examinations in auditing, law and accounting presented by the board of examiners of the American Institute of Accountants, May 14 and 15, 1925.)

### Auditing

MAY 14, 1925, 9 A. M. TO 12.30 P. M.

*The candidate must answer all the following questions:*

No. 1 (12 points):

A concern which you are auditing has several branches, each of which carries a large cash fund on the imprest system. In counting this fund in one office, where your working papers indicate that there should be \$12,000, you find \$9,000 made up as follows:

Receipts for expenditures . . . . .	\$4,700.00
Cash in bank per cashier's cheque book . . . . .	2,100.00
Cash in drawer . . . . .	860.00
Various I O U's . . . . .	140.00
Various cheques in drawer . . . . .	1,200.00

These cheques include one for \$380.00 signed by the cashier, one for \$500.00 signed by the branch manager, the others being personal cheques the drawers of which you do not know. State fully what you will do with regard to each of the items. How will you show them on your balance-sheet? Which, if any, would you take up with the officers of the concern and why?

No. 2 (12 points):

Corporation A received on July 1, 1923, an option to purchase all the assets of corporation B for \$1,000,000, payable \$50,000 upon the date of the option and \$50,000 semi-annually thereafter

until the expiration date, July 1, 1925, when the balance will be due. The assets appear at a value of \$800,000 on the accounts of corporation B. In the event that the option is not taken up on or before the expiration date, the payments made become forfeited to corporation B. Corporation B had no surplus on June 30, 1923, all of its income having been distributed. Subsequent to July 1, 1923, all its income, together with the moneys received from corporation A, was paid out in dividends. You are auditing the accounts of corporation C, which is a stockholder in corporation B and is in receipt of the stated dividends from that company, which have been credited to profit and loss. State if you would accept the entries on the books of corporation C and, if you would not, state how you would advise that the matter be handled.

No. 3 (10 points):

What steps would you employ to verify the amount carried on the balance-sheet of a corporation as insurance prepaid, where several hundred insurance policies are in force and handled in a special department? What, if anything, would you do as to premiums on employers' liability insurance? What amount, if any, should the corporation carry on its balance-sheet for insurance premiums paid on the life of officers for the benefit of the corporation?

No. 4 (10 points):

A suburban real-estate development company charges, at the close of each year, into its land account, six per cent on the cost of property remaining unsold, crediting interest account for the amount so charged. The value appearing in the land account is apportioned to the plots held for sale. Interest account is closed each year to profit and loss and the balance in the latter transferred to the surplus account. The difference between the book value of a plot, including interest added thereto, and the amount received for sale thereof is carried to profit and loss.

If, in the audit of the accounts, you disagree with the procedure used, state what you would consider to be the proper entries to record the charge for interest at the end of the year, the profit upon sales of land, and the effect upon profit and loss and surplus. If, in your opinion, the method used is correct, support your opinion with reasons therefor.

No. 5 (8 points):

(a) A concern prepares its payroll for 1,000 employees, drawing its cheque for the total amount of the payroll to the order of the local bank which makes the disbursements to the concern's employees. What would you consider the proper steps for the auditor to take, with reference to the payroll, in auditing the accounts of such a concern?

(b) In the audit of the accounts of a corporation having about 1,000 employees, you decide to supervise the disbursement of the payroll by the paymaster. What, in your opinion, might be a proper reason for such a procedure, and state the advantages or disadvantages, if any, of adopting such a course.

No. 6 (8 points):

A corporation has been in business for ten years and both business and plant facilities have undergone a continual expansion. It has made large profits and is in good credit standing with the banks. Describe how you would ascertain the amount which is practically and legally available for dividends.

No. 7 (12 points):

A traction company, in a small city, has sustained continuous yearly losses showing, consequently, an operating deficit. The company calls on you to audit its accounts and prepare a statement which may aid the company in pressing its request, with the public service commission, to allow an increase of fare. Tabulate the various points to which you would give special consideration.

If, in the above case, instead of being called by the traction company, you are employed by the city, which is opposing such increased fare, what points would you particularly emphasize in your investigation?

No. 8 (12 points):

What would you do with regard to each of the following accounts before certifying balance-sheets in which they appear:

- Reserve for depreciation,
- Reserve for restoration of leased property,
- Reserve for undeclared dividends,
- Reserve for contingencies,
- Reserve for bond sinking fund,
- Reserve for prepaid leasehold,

Unamortized discount on securities purchased,  
Reserve for premium on future bond redemption?

No. 9 (8 points):

(a) During the course of an audit, you note some items of outlay, charged in the period under review, which are applicable to a previous period. How would you deal with such items in your report? Would attendant circumstances have any bearing upon the manner in which you would refer to them?

(b) If, in your opinion, the accounts were incorrect, would you make entries on the books of the corporation to make the adjustments you believe necessary? State your reasons.

(c) What officer of a corporation is responsible for the proper keeping of books of account? Are his records subject to approval or disapproval by anyone?

(d) Describe four kinds of entries you consider should properly be made to surplus account. Should the bookkeeper determine which are proper transactions to be transferred to the surplus account?

No. 10 (8 points):

At the close of the year 1920, owing to the drop from war prices in material values, a concern suffered a loss in its inventory value of approximately one-third, or \$750,000. At December 31, 1924, the same concern deemed it prudent to establish a reserve for inventory in the sum of \$500,000. The items on the inventory were priced in detail at cost or market, whichever was lower. State, with reasons, how you would show the reserve on the balance-sheet, and any other financial statements prepared by you, to record the operations and financial position.

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### **Accounting Theory and Practice**

#### **PART I**

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MAY 14, 1925, 1 P. M. TO 6 P. M.

*The candidate must answer the first four questions and one other question.*

No. 1 (28 points):

Company A owns all the capital stock of company B, consisting of 800 shares of common stock, par value \$100 per share.

This stock was acquired by A, January 1, 1924, in exchange for 2,000 shares of its own 7% preferred stock, par value \$100 per share.

At that date the net tangible assets of B, as shown by the balance-sheet, duly certified, were worth \$150,000.

The balances shown by the books of A and B, December 31, 1924, were respectively as follows:

*Company A*

Cash \$20,000; accounts receivable \$75,000, of which \$5,000 represents cash withheld by note brokers to secure the payment of customers' notes discounted by A; notes receivable \$90,000, of which \$85,000 are secured by chattel mortgages and of the \$85,000 so secured, \$50,000 are pledged as security for A's bank loans; advances to B \$20,000; inventories \$80,000; prepaid expenses \$5,000; investments \$215,000, of which \$200,000 represents A's investment in company B; capital assets, less reserves for depreciation, \$85,000, including land & buildings, book value, \$60,000 subject to mortgage of \$25,000; accounts payable \$50,000 including \$5,000 due B; notes payable \$60,000, of which \$20,000 represents notes given to B (endorsed and discounted by B) and \$40,000 to banks which are secured by \$50,000 notes receivable; accrued items \$4,000; mortgage payable on land & buildings \$25,000; capital stock—"A" preferred (no par value) \$90,000, 7% preferred (par value \$100 per share) \$300,000, common (no par value) \$50,000; surplus \$11,000.

*Company B*

Cash \$2,000; accounts receivable \$10,000 including \$5,000 due from A; inventories \$85,000; prepaid expenses \$2,500; machinery & equipment, less reserves for depreciation, \$125,000; trade accounts payable \$35,000; notes payable \$25,000 including \$15,000 to trade creditors and \$10,000 to banks; advances from A \$20,000; capital stock—common (par value \$100 per share) \$80,000; surplus \$64,500.

It is the practice of company A to pay part of its obligations to company B with its own customers' notes duly endorsed; these notes B invariably endorses and discounts immediately; B also discounts, at once, all notes given by A, as maker, in payment of its obligations to B.

Company A declared dividends to the amount of \$6,000 which had not been paid nor entered upon the books December 31,

1924. At that date company A had an unsettled claim against the federal government for taxes overpaid for the calendar year 1922 in amount \$2,000 and B had an outstanding, uncontested, additional assessment by the federal government, in amount \$1,500 for the same year. Neither of these items appears on the books.

At the close of the year A had customers' unmatured notes under discount, in amount \$45,000, and had endorsed and turned over to B customers' notes (due subsequent to December 31, 1924) in amount \$9,000 as part payment of its account with B.

Having made an examination of the books of account and records of the two companies and ascertained that the foregoing data are correct and, further, having verified the inventories as to quantities, valuations and mathematical accuracy of extensions and additions and that the items are valued at the lower, cost or market

(1) Prepare, in columnar form, a consolidated balance-sheet of companies A and B as at December 31, 1924, showing inter-company eliminations;

(2) Prepare a consolidated balance-sheet, as at the same date, with an appropriate auditor's certificate in form for presentation to banks for credit purposes.

No. 2 (25 points):

On January 20, 1924, the receiver of the Wide-Ray Searchlight Co. gives you the following statements prepared by the company's bookkeeper:

THE WIDE-RAY SEARCHLIGHT CO.

BALANCE-SHEETS

<i>Assets</i>	December 31		
	1921	1922	1923
Land . . . . .	\$5,000	\$5,000	\$5,000
Buildings—depreciated @ 4% per annum . . . . .	25,000	27,000	30,000
Machinery . . . . .	50,000	60,000	65,000
Cash . . . . .	2,000	2,500	2,100
Accounts receivable . . . . .	5,000	7,000	6,000
Raw material—at cost . . . . .	12,000	11,000	13,500
Material in process—at cost . . . . .	2,000	2,500	1,500
Finished goods—at cost . . . . .	1,000	1,100	2,000
Patents . . . . .	150,000	155,000	157,000
Deficit . . . . .	90,000	130,000	160,000
	<u>\$342,000</u>	<u>\$401,100</u>	<u>\$442,100</u>
<i>Liabilities</i>			
Capital stock—authorized and issued . . . . .	\$200,000	\$200,000	\$200,000
Loans from officers . . . . .	121,000	176,100	197,100
Accounts payable . . . . .	6,000	5,000	19,000
Reserve for depreciation, machinery . . . . .	15,000	20,000	26,000
	<u>\$342,000</u>	<u>\$401,100</u>	<u>\$442,100</u>

*American Institute of Accountants' Examinations*

INCOME ACCOUNTS

	For the years		
	1921	1922	1923
Sales.....	\$50,000	\$70,000	\$60,000
Cost of sales (details below).....	65,000	89,000	77,600
Gross losses for years:.....	<u>\$15,000</u>	<u>\$19,000</u>	<u>\$17,600</u>
General and administrative expenses:			
Salaries.....	\$7,500	\$12,500	\$7,500
Taxes.....	1,000	1,100	1,200
General.....	2,500	4,500	2,500
Bad debts.....	2,000	4,000	1,200
	<u>\$13,000</u>	<u>\$22,100</u>	<u>\$12,400</u>
Net losses for years.....	<u>\$28,000</u>	<u>\$41,100</u>	<u>\$30,000</u>

Salaries and general expenses for 1921 and 1923 are 50% for selling; in 1922 they were 75%.

COST OF SALES

	For the years		
	1921	1922	1923
Labor.....	\$15,000	\$20,000	\$16,000
Purchases, raw material.....	34,800	52,700	49,800
Factory overhead:			
Engineering expense, supervision.....	3,600	3,600	3,600
Repairs and maintenance.....	3,000	5,000	2,500
Light, heat and power.....	2,000	2,300	2,100
Depreciation.....	5,000	5,000	6,000
	<u>63,400</u>	<u>88,600</u>	<u>80,000</u>
Changes in inventories, raw materials.....	1,200	1,000	2,500*
	<u>64,600</u>	<u>89,600</u>	<u>77,500</u>
Changes in inventories, goods in process.....	500*	500*	1,000
	<u>64,100</u>	<u>89,100</u>	<u>78,500</u>
Changes in inventories, finished goods.....	900	100*	900*
Cost of sales, as above.....	<u>\$65,000</u>	<u>\$89,000</u>	<u>\$77,600</u>

In conversation with the receiver and by subsequent investigation, the following facts are elicited:

The company has been operating seven years and shown a loss each year.

Alfred Jones, a retired banker, is president of the company; he owns 45% of the capital stock and has advanced one-half of the amount described as "loans from officers" on the balance-sheets.

Walter Williams, a lawyer, was treasurer of the company to the time of his death, January 10, 1924; he also owned 45% of the capital stock and advanced the other one-half of the amount described as "loans from officers".

An agreement is in existence which provides that advances from Jones and Williams are to be converted into capital stock.

John Hawkins, vice-president, inventor of the Wide-Ray lens and operating head of the company, owns 10% of the capital stock.

\* Increases in inventories.



The estate of Walter Williams has put the company into the hands of a receiver and you are requested to report the results as they affect stock-holders and creditors upon:

- (a) Immediate cessation of operations and disposal of assets.
- (b) Continuance of present business until raw material on hand is worked up and sold; all assets to be disposed of at that time.
- (c) What results would probably have been attained in 1923 if certain new processes and machines, as represented by Hawkins, had been in operation with all the increased output sold?

Hawkins estimates that if certain machinery, already designed and patented by him, were installed, breakage could be reduced to 10% and the gross output of the machines doubled, i. e. 90% of twice the gross output would be salable in place of 50% of the present gross output by substituting the same number of new machines for the present equipment. The new machinery would cost \$25,000.

Purchases of optical glass in 1923 amounted to \$40,000 and breakage was 50%. Labor on broken and defective lenses amounted to \$7,000 while labor on fittings scrapped amounted to \$1,000.

The high manufacturing costs have been due chiefly to breakage of lenses in the course of manufacture and small output, both due to imperfectly designed machinery.

Land is appraised at over cost.

Buildings are modern and in good industrial location; 75% of the machinery is specially built for the company and probably cannot be used in any other business; 25% of the machinery is standard.

Accounts receivable have been written down consistently and sufficiently.

Accounts payable are current accounts for merchandise.

Patents are entirely on the Wide-Ray lens.

Raw material consists of optical glass cut to special size and shapes \$10,000; sheet metal—copper, nickel plated, standard size sheets \$3,500.

A formal report is not required. Statements showing the effect of plans (a), (b) and (c) with any notes or explanations you think desirable or necessary will be considered a satisfactory form of solution.

No. 3 (12 points):

Cost systems, in general, may be divided into two groups:

- (a) Those in which costs are obtained by jobs, products or classes of products and
- (b) Those in which costs are obtained for operations and processes.

Describe the salient characteristics of and principal points of difference between the two groups of systems and show how unit costs are attained in each.

Indicate which system is most suitable for the following classes of businesses noting particularly where one system may be desirable in one department and a different method applicable in another:

1. Manufacture of metal novelties.
2. Foundry.
3. Machine shop.
4. Coal mining.
5. Steamship line.
6. Stone quarry.
7. Manufacture of standard sizes of iron pipe.
8. Brick making.
9. Pneumatic tire making.
10. Manufacture of fertilizer.

No. 4 (10 points):

The ten stock-holders of a "close" corporation each contributed \$2,000 and invested the \$20,000 in bonds for the purpose of converting into cash and purchasing, at a later period, a larger and more advantageous site for their plant.

The transaction was duly entered on the books of the company.

When the time arrived for a decision as to change of location, it was agreed that they should remain where they were and return the bonds, or the equivalent, to each of the contributing stock-holders.

The officers of the company request your advice as to the proper disposition of the bonds, as the market value thereof is \$10,000 in excess of the value as recorded on the books. Then, providing the bonds are converted into cash, they desire the proper entries for the minute book and other records to show such disposition and to know how the company's, and each individual's, federal income-tax return would be affected by the transactions.

It may be assumed that none of the stock-holders' returns warranted the computation of surtaxes.

No. 5 (25 points):

In the course of an examination of the accounts of a corporation having two foreign branches operated through subsidiary companies, the accounts of which are consolidated with those of the parent company, you are given the following comparative balance-sheets of the two branches, one in Great Britain, the other in France:

<i>British balance-sheet</i>			
Assets			
	1923	1922	
*Fixed assets . . . . .	£5,000	£4,500	
Current assets . . . . .	20,000	19,500	
Deferred charges . . . . .	1,000	1,000	
	<u>£26,000</u>	<u>£25,000</u>	
Liabilities			
Current liabilities . . . . .	£8,000	£8,000	
Capital stock . . . . .	5,000	5,000	
Surplus . . . . .	13,000	12,000	
	<u>£26,000</u>	<u>£25,000</u>	

The investment in the capital stock of the British company is carried on the books of the head office at \$24,300 representing the value at the rate of exchange current at the date of incorporation. The rate of exchange as at the end of 1922 was 4.50 and at the end of 1923, 4.20.

<i>French balance-sheet</i>			
Assets			
	1923	1922	
*Fixed assets . . . . .	Fr. 500,000	Fr. 475,000	
Current assets . . . . .	180,000	160,000	
	<u>Fr. 680,000</u>	<u>Fr. 635,000</u>	
Liabilities			
Current liabilities . . . . .	Fr. 40,000	Fr. 30,000	
Capital stock . . . . .	600,000	600,000	
Surplus . . . . .	40,000	5,000	
	<u>Fr. 680,000</u>	<u>Fr. 635,000</u>	

The investment in the capital stock of the French company is carried on the books of the head office at \$114,000, representing the value at the rate of exchange current at the date of incorporation. The rate of exchange at the end of 1923 was .04 cents and that of 1922 was .06 cents.

\* No additions to fixed assets were made from the date of incorporation to December 31, 1922.

The current liabilities of the foreign corporations include, in the case of the British company, £1,000 and in that of the French company 5,000 francs, due to the head office at the end of each year.

The treasurer of the company proposes to convert each item on the 1923 balance-sheet at the rate of exchange current at the close of that year and to use these figures in preparing the consolidated balance-sheet. The difference between the value at which the capital stock of the foreign subsidiaries is carried on the books of the head office and the net worth thus determined, he proposes to add to the consolidated fixed assets.

Criticise or justify the proposed method of handling these accounts. Explain and illustrate what method, if any, you would consider preferable.

No. 6 (25 points):

A series of 5% bonds totalling \$100,000 is issued, dated January 1, 1925, redeemable at par by ten annual payments of \$10,000 each, beginning December 31, 1935. What equal annual sinking fund is required to be provided on a 4% basis to pay off the bonds as they mature?

The first payment to the sinking-fund trustees is to be made December 31, 1925, and annually thereafter.

What is the status of the sinking fund on December 31, 1934, 1935 and 1936?

Given at 4%: $(1+i)^{10}$	1.48024428	$(1+i)^{20}$	2.19112312
$v^{10}$	.67556417	$v^{20}$	.45638695
at 5%: $(1+i)^{10}$	1.6288946	$(1+i)^{20}$	2.6532977
$v^{10}$	.6139133	$v^{20}$	.3768895

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### Commercial Law

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MAY 15, 1925, 9 A. M. TO 12.30 P. M.

(Each satisfactory answer is entitled to 10 points)

#### NEGOTIABLE INSTRUMENTS

Answer three of the following four questions:

No. 1. A delivered to B the following instrument: "Jan. 5th, 1925. One month after date I promise to pay to B, seven hundred fifty dollars". (Signed) "A". B. endorsed the instrument

in blank before maturity and delivered it to C for value. When due, A refused to pay and C sued B. Could C recover?

No. 2. Burns lent a sum of money to Atkins, but at a usurious rate of interest. He took a note payable to bearer for the amount of the loan and interest. Burns then sold the note to Wilson but endorsed "Without recourse". Wilson could not recover the face amount of the note from Atkins because of the usury and so attempted, by suit, to recover from Burns, the endorser. Could he recover?

No. 3. A entered into an agreement to purchase certain shares of stock of the X Y Company, the agreement providing for the giving of a note for the amount of the deposit on the signing of the contract. The agreement further gave A the right to cancel his agreement to purchase on notice to the X Y Company. A gave the note. The X Y Company induced C to endorse the note as an accommodation and the note was thereupon discounted at a bank. A duly cancelled his purchase agreement but the note was not returned. On maturity, as neither A nor the X Y Company paid the note, C did so and the note, endorsed in blank, was turned over to him. C sued A on the note. Could he recover?

No. 4. You are the holder of a negotiable promissory note endorsed in blank by John Jones. How would you transfer the note so as not to become liable as a party to it, as a guarantor of its genuineness or as to prior parties?

#### CONTRACTS

*Answer two of the following three questions:*

No. 5. Hecht purchased from McCormick a team of horses for \$650, a set of double harness for \$185 and a wagon for \$75. Before delivery the harness was stolen. McCormick tendered delivery of the team and wagon, but Hecht refused to accept and pay for them on the ground that McCormick could not deliver the harness also. Was Hecht correct in his position?

No. 6. A entered into a contract to erect a house for B at a cost of \$10,000. During construction, A notified B that the price of a certain material called for by the specifications had advanced so that it could not be used unless B would agree to pay \$600 more. B agreed, but when the house was completed refused to pay the extra \$600, so A brought suit. Did B have a defence?

No. 7. Smith contracted to sell to Jones certain goods of specific quality to be delivered by truck to Jones' place of business

on March 10, 1925. On that date Smith delivered the goods and Jones paid for them. At the date of delivery the goods were of considerably higher market value than the price under the contract. The next day Jones found the goods were not as specified. He, Jones, then returned the goods, notifying Smith that he rescinded the contract, and replaced them by purchasing other goods in the open market. Jones subsequently sued Smith to recover the amount he had paid to Smith and also the amount he had been compelled to pay above the contract price in order to purchase in the open market. What did Jones recover?

#### PARTNERSHIP

*Answer one of the following two questions:*

No. 8. State the rule for the marshalling of assets and payment of firm and individual debts where a copartnership becomes insolvent, the members thereof having personal assets and individual creditors.

No. 9. To what extent is a partner liable to his copartners for losses incurred in his conduct of partnership transactions?

#### CORPORATIONS

*Answer one of the following two questions:*

No. 10. A meeting of the board of directors of the Z corporation was called to consider the issuance of bonds. A, one of the directors, did not attend but gave a proxy to F authorizing F to attend in his place. Was this proper and could F attend and act at the meeting?

No. 11. The Z corporation had a board consisting of fifteen directors. It adopted a by-law authorizing the board to appoint a committee of five of its members with authority to act whenever the board was not in session or could not be convened. This committee at one of its meetings authorized the sale of a bond and mortgage held by the corporation. Subsequently the assignment of the bond and mortgage, executed in accordance with the authorization, was attacked on the ground that it was not the act of the corporation, it not having been authorized by the whole board at a board meeting. Was the claim made correct?

BANKRUPTCY

*Answer the following question:*

No. 12. Explain the difference between a trustee in bankruptcy and a receiver in bankruptcy.

INCOME TAX

*Answer both the following questions:*

No. 13. A purchased an apartment house in 1921. A never received any income from the property; in fact, it never produced sufficient revenue to pay for the cost of running it. He sold the property in 1924 at a price lower than that he paid for it. You are called upon to prepare A's income-tax return for 1924. Upon examining his returns for prior years, you find that no depreciation was ever deducted by A in regard to the apartment house property, A explaining that as there was no income from the property to serve as the basis of a reserve fund for depreciation, he had never taken any. How would you compute A's loss on the sale and should any action be taken with reference to the returns for prior years?

No. 14. A was the owner of a majority of the capital stock of the M corporation; in fact, he held all the stock with the exception of a few shares. He was also the president of the corporation and the directors voted him a salary of \$20,000 per annum. The corporation deducted the \$20,000 from its 1922 return as compensation paid. Upon audit of the return the commissioner of internal revenue refused to allow the full \$20,000 deduction and reduced it to \$16,000. Has the commissioner such power and, if so, in what circumstances?

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**Accounting Theory and Practice**

**PART II**

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MAY 15, 1925, 1 P. M. to 6 P. M.

*The candidate must answer all the following questions:*

No. 1 (32 points):

The Rollins company, manufacturing one main product "X" from which are recovered two by-products "Y" and "Z", maintains a number of processing departments and a selling branch. Product "X" is shipped to the selling branch as manufactured

and billed at cost. "Y" is shipped as recovered to an affiliated company which is billed for it on the basis of a yearly contract price of \$20 per ton. "Z" is held in stock pending instructions from the selling branch.

Three raw materials, "R", "S" and "T", are used. These when acquired are held in store until requisitioned.

The manufacturing process passes through five consecutive stages. In department A, materials "R" and "S" are received from store in equal daily quantities which are combined in equal amounts by weight. At the completion of the process in this department, by-product "Y" (equal to ten per cent of the materials processed) is drawn off and shipped direct to the purchasing company as explained above. Eighty per cent by weight of the total ingredients is piped to department B, at a constant rate, for further treatment. The remaining ten per cent of the original materials represents evaporation loss in this department.

In department B, material is received from A in the proportion of 4 tons of the mixture to each ton of material "T" issued. The process used in B is complicated and requires several days. While the process is continuous and the mix is effected and delivered to department C at a constant rate, there are always, approximately, 100 tons of the mix in process in the retorts of this department when the plant is being operated to capacity.

In department C, ingredients to the amount of ten per cent of the total mix are separated and transferred to department D, where, after further refinements involving a ten per cent loss, the by-product "Z" is recovered. The processes in both departments C and D require only a short time and are continuous, so that, ordinarily, at the close of each day no goods in process remain in either.

The main product, equal to ninety per cent of the materials handled in department C, goes to department E where it is stored until the manufacturing process is completed by grinding and packing.

On January 1st the plants resumed operations, after a month's shut-down for general overhauling, and when the processing was begun again were run to capacity throughout the month.

A summary of the inventories on hand at the beginning of the month was as follows:

Raw materials:

"R"	100 tons	\$5,200 (cost)
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Goods in process:

None

Finished goods:

Product "X" boxed and ready for  
shipment to the selling branch    4,210 (cost)  
Product "Z"            10 tons                            820 (market)

During the month of January, the purchases of raw materials were:

"R"	300 tons	\$7,200
"S"	500 "	2,500
"T"	120 "	4,800

Issues of materials at cost for the same period were:

"R"		\$11,200
"S"		1,750
"T"		4,000
	Total	\$16,950

Analysis of payrolls for the month shows:

Dptmt.	Total hours	Total wages
A	6,000	\$ 2,400
B	7,000	4,200
C	3,600	3,600
D	1,200	840
E	5,000	2,500
	Totals	\$13,540

Departmental burden, amounting to \$11,400, was distributed to the departments on the basis of labor hours.

On February 1st, there were on hand 46 tons of product "Z" which can be sold at the current market for \$75 per ton. None of the product has been sold or shipped during the month.

All of product "X" completed during the month of January, amounting to 200 tons, together with that on hand at the beginning of the month, ready for shipment, has been delivered to the selling branch.

You are required:

- (a) To make a summary of all inventories as at February 1st, showing both tonnage and value of the goods in process remaining in each department

- (b) To give the billing price per ton of product "X" manufactured during the month.

No. 2 (14 points):

Two companies, A and B, enter into an agreement to develop mineral properties at present owned by B. The agreement provides that A shall furnish cash capital of \$1,000,000 which is to be used in the development of the properties, that the profits are to be shared equally but that B is to receive the sum of \$1,000,000 out of A's share of profits before A receives any of the profits.

It is estimated that the property will have a life of 20 years.

At the end of the first year of operation, the profits amounted to \$600,000.

The accounting records relative to these transactions are kept by company B.

You are required to prepare journal entries giving effect to the above on the books of company A and state how the liability for the \$1,000,000 payable out of earnings should be set up on company A's balance-sheet.

No. 3 (10 points):

What is meant by "budgetary control" in business? State definitely some of its advantages.

No. 4 (10 points):

You are called into consultation by the president and general manager of the Women's Retail Stores Corporation and told that although the company has been "marking up" all its merchandise  $66\frac{2}{3}$  per cent, yet at the close of the year it is surprised to learn of a loss, a substantial profit being expected.

The president lays stress on the point that the "mark up" ( $66\frac{2}{3}\%$ ) is "enormous" and that the operating expenses are not excessive.

What is your opinion of the president's statement?

No. 5 (20 points):

On January 1, 1919, A and B bought land in Malaya, for a rubber plantation, for \$570,000, each partner contributing \$400,000 cash as capital. Interest on capital was to be allowed at 6% per annum and net profits were to be divided equally. Personal drawings were limited, for the first five years, to \$5,000 per annum each, to be charged to expense as management salaries.

During 1919 they spent \$150,000 in clearing one-half of the land (called estate No. 1) of jungle growth, making roads and building houses and sheds; they also paid \$30,000 for planting rubber trees.

Wages and direct expenses for rubber cultivation cost \$5,000 in 1920, \$6,000 in 1921, \$8,000 in 1922 and \$7,000 in 1923.

In 1922, sales of gathered rubber realized \$80,000 and the 1923 crop realized \$200,000.

As rubber trees do not reach maturity until after three years, "catch" crops of tobacco were planted. The planting and cultivation of these tobacco crops cost as follows:—in 1919 \$1,500, 1920 \$2,500, 1921 \$4,000, 1922 \$3,000 and 1923 \$5,000.

The tobacco produced from estate No. 1 realized \$3,500 in 1919, \$6,000 in 1920, \$8,000 in 1921, \$5,500 in 1922 and \$9,000 in 1923.

In 1921, an additional one-quarter of the land (called estate No. 2) was cleared at a cost of \$90,000 and was planted with rubber trees at a cost of \$20,000. Labor and expense charges paid for the rubber cultivation on this estate were \$5,000 in 1922 and \$6,000 in 1923.

The cost of tobacco planting and cultivation on estate No. 2 was \$2,000 in 1922 and \$3,500 in 1923, these crops realizing \$3,000 and \$6,000 respectively.

The general expenses connected with the foregoing transactions were as follows:—1919 \$6,000, 1920 \$7,500, 1921, \$7,000, 1922 \$9,000 and 1923 \$10,500.

The foregoing data were gathered from cheque-book stubs, verified by bank statements, and information supplied by the partners, no other records being in evidence.

Prepare profit-and-loss accounts and balance-sheets at the end of each year, 1919 to 1923, inclusive, carrying forward the profits or losses.

No. 6 (14 points):

Brown and Green entered into a joint adventure.

On May 1, 1924, they purchased 5,000 tons of coal in Philadelphia at \$4 per ton, f.o.b., for which they gave notes on May 10th for one-half at 3 months and for the other half at 6 months. The coal was shipped to Mexico City on May 15th, the freight, etc., amounting to \$5,000.

A joint banking account was opened on May 10th, each party contributing \$6,000.

The freight was paid for by cheque on May 20th and on May 25th a cheque was drawn for \$1,000 for charges at Mexico City.

The coal was sold at \$7 per ton and the proceeds used to purchase a cargo of timber, which was shipped to Philadelphia. Freight and other charges thereon, amounting to \$3,750, were paid by cheque June 30th.

During July four-fifths of the timber was sold for \$32,000. This was received and paid into the joint account, August 2nd.

In order to close the transaction, Brown agreed to take over the remaining one-fifth at cost price including freight and charges and he paid a cheque for this into the joint account, August 10th.

The first note fell due and was paid August 13th and on the same day the other note was paid under discount at the rate of four per cent per annum.

Prepare accounts showing the result of the foregoing transactions, disregarding interest on capital contributions.