Your Name

Instructor Name

Course Number

Date

Chapters 9-12

**Problem one-----Depreciation**

***Solution***

**Straight-line method**
Annual depreciation = Original cost- salvage value/ estimated life

 = ($600,000 - $50,000)/5 years

= $110,000

Now, using this annual depreciation,

2014 depreciation = $110,000/2 = $55,000

And for 2015

2015 depreciation = $110,000

Accumulated depreciation at December 31, 2015 = $165,000

For book value,

December 31, 2015 book value = $$600,000 - $165,000

= $435,000

**Units of production method**

Depreciation = monthly units produced /lifetime production \* cost

Depreciation per unit = ($600,000 - $50,000)/800,000 units

= $0.6875 per unit

Now, using this depreciation per unit

2014 depreciation = 130,000 units x $0.6875 = $89,375

And for 2015

2015 depreciation =140,000 units x $0.6875 = $96,250

Accumulated depreciation at Dec 31, 2015 = $185,625

For book value,

Book value = $600,000 - $185,625 = $414,375

**Problem two— adjusting entries**

***Solution***

* Revenue earned for fitness center fees, but not yet billed, totaled $2,700 on November 30

Revenue has been earned but not yet received is requiring the adjusting entry.

|  |  |  |
| --- | --- | --- |
| Accounts Receivable  | $2,700  |  |
| Service Revenue  |  | $2,700  |

* The note payable is a 9%, 1-year note issued October 1, 2014

Interest expense has been charged but missing in books of accounts.

|  |  |  |
| --- | --- | --- |
| Interest Expense  | $2,400 |  |
| Interest Payable  |  | $2,400 |

Interest Expense = (32,000 x 9% x 1/12)

 = $2,400

* The equipment was purchased on January 2, 2012. It has an estimated life of 8 years and an estimated salvage value of $6,000. Active Fitness uses the straight-line depreciation method.

|  |  |  |
| --- | --- | --- |
| Interest Expense  | $2,400 |  |
| Interest Payable  |  | $2,400 |

* The equipment was purchased on January 2, 2012. It has an estimated life of 8 years and an estimated salvage value of $6,000. Active Fitness uses the straight-line depreciation method.

The amount for the equipment purchased has not been given. However, there is Depreciation Expense missing in the books.

|  |  |  |
| --- | --- | --- |
| Depreciation Expense | Equipment value |  |
| Accumulated Depreciation |  | Equipment value |

* An insurance policy was acquired on June 30, 2014; the premium paid for 1 year had a cost of $15,000.

There is no entry of insurance expense.

|  |  |  |
| --- | --- | --- |
| Insurance Expense | $625 |  |
| Prepaid Insurance |  | $625 |

Insurance Expense = (15,000 / 24)

= $625

* Active Fitness received $22,800 in advance on November 1, 2014, from customers who paid for 3 months of prepaid fitness fees.

Revenue has been received but not realized in books of accounts.

|  |  |  |
| --- | --- | --- |
| Revenue Unearned | $15,200 |  |
| Service Revenue |  | $625 |

Revenue Unearned = ($22,800 x 2/3)

 = $15,200

**Problem three— inventory**

***Solution***

**FIFO:**

Ending inventory = $100

Cost of goods sold = $685

**LIFO:**

 Ending inventory =$70

Cost of goods sold = $ 715

**Problem four — ratio analysis**

***Solution***

1. Current ratio = Current assets/ Current liabilities

 = 100,000/ 60, 000

 = 1.67

1. Debt to assets ratio = Total debts/ total assets

= 220, 000+ 60,000/ 390,000

= 280,000/ $390,000

= 0.717

1. Times interest earned = Earning before interest and taxes/ interest expense

 = 110,000/ 33,000

 = 3.33

1. Inventory turnover = COGS / avg inventory

= 360,000/ (43,000+47,000/2)

= 360,000/ 45,000

= 8 times

1. Profit margin = Net income / Net sales

= 77,000/ $650,000

= 0.12

1. Return on common stockholders' equity = Net income – dividend on preferred stock/ avg. common stock holder equity

= 77,000 / 140,000

= 0.55

1. Return on assets = Net income / Avg. total assets

= 77,000/ 420,000+ 390,000

= 77,000 / 810000

= 0.095

**Problem five — statement of cash flows**

***Solution***

**Indirect Method of Cash Flow Statement**

|  |  |
| --- | --- |
| **Cash flows from operating activities**  |  |
| Net income $ 19,200 Adjustments:Depreciation 8,600 Loss on equipment disposal 1,400 Increase in accounts receivable (3,600) Decrease in inventories 10,500 Decrease in prepaid expenses 800 Decrease in accounts payable (14,100) Increase in wages payable 1,300 Net cash from operating activities  | $24,100  |
| **Cash flows from investing activities**  |  |
| Purchase of equipmentBeginning balance of equipment $98,100 Cost of equipment sold ($17,000)Purchase of equipment $42,900 Ending balance of equipment $124,000 Proceeds from sale of equipment 2,900 Net cash used in investing activities  | (42,900) (40,000)  |
| **Cash flows from financing activities**  |  |
| Proceeds from issue of share capital $4,000 Proceeds from issue of bonds $35,000 Dividends paid ($17,200) Net cash from financing activities 21,800 Net increase in cash and cash equivalents CCE at beginning of year CCE at end of year  | 5,900 26,500 32,400  |

**Cash Flow Statement for Zyr Electronics**

**Problem six – long term Liabilities**

**Convertible bond**

A convertible bond refers to the fixed-income debt security that yields interest payments. However, it can be converted into a preset number of common stock or equity shares. The conversion is a choice of the bondholder. Thus, these are thelithe financing choice for companies.Upon converting a bond, the number of shares depends upon the bond's conversion ratio. However, there is also disadvantage of these bonds. As these can be converted, thus they offer lower coupon rate.

**Advantages of a convertible bond from the standpoint of the bondholders and of the issuing corporation:**

One purpose of their issuance is to avoid the negative investor sentiment. The number of shares outstanding increases with the issuance of every new share. This weakens existing investor proprietorship. Thus, by issuing the convertible bonds, company can satisfy the investors. Moreover, these arealso kind of hybrid security as these have interest payments as features of a bonds and ownership as feature of stock. Upon selling convertible bonds, cash interest payments are reduced. Conversely, the bond holder also has advantages. He can trade the bond for equity and get high dividends. Furthermore, the bondholder can also get the bond cash upon its maturity date.