1. List the principle sources of revenue for funding institutions of higher education and briefly discuss how the relative proportions of each source vary in accordance with the institution's size, location, mission and locus of control. (5 points)

**Sources of Revenue:** Tuition and fees, government appropriations (state, federal and local), grants and contracts are both restricted and unrestricted funds, endowment income, and sales and services of educational activities. Other sources could include interest from short term current fund investments or rents and sales such as office space. Auxiliary enterprise sales and services could include student housing, bookstores or athletics, usually in student services areas that are self-supporting entities that do not contribute to educational and general revenue.

**Size of Institution:** Public colleges receive a greater proportion of their income from state appropriations than private colleges. Private colleges are heavily dependent on student tuition and fees and private gifts as opposed to assistance from the state government.

**Location of Institution:** Community colleges receive local government appropriations levied by the district board of some other local governing body. Community colleges could also have taxing authority and could also receive money through the county.

**Mission of Institution:** Depending on the primary purpose of the institution or department, sales and services could be sold as part of a program. An example would be the services of hospitals that are part of the university.

**Locus of Control:** Private institutions are more dependent on tuition and fees (2/3) while public institutions are not (sometimes less than 10 percent of their revenue come from tuition and fees).

1. List the principle expenditure categories of institutions of higher education and briefly discuss the differences the institution's size, location, mission and locus of control have on these expenditures. (5 points)

**Expenditure Categories**: personnel compensation or salaries and wages (70-80 percent); supplies and expenses and capital outlay; educational and general (instruction and research and public service); academic support, student services, instructional support, operations and maintenance of physical plant and scholarships and fellowships; and, auxiliary enterprises and any hospitals and independent operations.

**Size of Institution:** Proportion of instruction of the educational and general expenditures are higher in public colleges because private colleges spend more on public relations, fundraising and recruitment because they do not receive as much funding or support from government appropriations.

**Location of Institution: Expenditures for** intercollegiate athletics and student services might be more depending not only on the size of the institution but the location and affiliation with community as well.

**Mission of Institution:** The bulk of instructional costs are faculty compensation, and depending on the size of the institution, the student/faculty ratio might be higher in larger institutions than small private colleges. Departmental research (research university as opposed to a liberal arts private college) affects expenses because members may not teach in order to research in their field of specialization, and adjuncts are needed in order to teach the classes.

**Locus of Control:** Indirect costs with grant work can be difficult to determine because of operations and administrative support.

1. Briefly describe the principle methods of (a) planning, (b) budgeting, and (c) accounting generally used by institutions of higher education. (3 points)

**Planning:** Mission statements, long term and medium and short term range goals are essential at a university in order to evaluate and assess the growth and progress of the institutions. Some institutions do not engage in systematic planning because it is a labor intensive institution that operates day to day with immediate problems and crises being taken care of as they arise. Sometimes the fires just have to be put out as they start, but most institutions should aim to be more proactive in their planning as opposed to reactive.

All institutions should have mission statements in order to help make major decisions as well as have a structure for the departments and multiple offices within the university to have a goal to follow. Research, instruction, and public service are the mission, but more specific goals of how to achieve them is useful and beneficial to growth.

**Budgeting:** Budgeting is usually the financial detailed plan for a one-year period for the school. There are two sides to the budget, the income (revenues) and the expenditures, but it is an estimate for spending and receiving funds for the budget year. The budget should provide cushion in case of emergencies and could take one of three approaches.

The incremental approach uses the previous year’s budget as a benchmark and increases incrementally based on predictions such as enrollment growth or change in economy or programs. It is simple and requires little time and effort, but it is unsuitable for periods of change such as decline.

The program approach centers on the resources that are needed to conduct certain programs within the university. It is more complex and because academic departments have several programs that might overlap, it is hard to determine where each program’s funds should be allocated. Costs are assigned to each resource, and appropriate proration of academic, institution support and other expenditures are made, but it is very voluminous because it requires a lot of time and effort. Many in higher education do not use this approach.

The zero based approach adheres to the assumption that all new budget years should start at base zero. This works for a new program or department, but without historical data it can be difficult to know where to start. It is time consuming. The best approach to budgeting depends on the college itself, and it is usually the responsibility of the Vice President of Finance with the approval of the boards of trustees and other major administrative officers.

**Accounting:** Students, faculty and staff are impacted both short and long term by the financing principles of a university or college. Ratios and percentages are used often in higher education. One example is the student/ faculty ratio. Gathering the data and statistics help make decisions for future and short term planning.

1. Describe the fiscal management technique "ratio analysis", and briefly discuss the advantages and disadvantages of its application to higher education. (4 points)

**Ratio Analysis Technique:** A financial ratio or accounting ratio is the relationship between two selected numerical values taken from the organization’s financial statements such as the balance sheet, operating statement or other records. The ratios can be analyzed in order to understand various financial conditions of the organization or as a comparison tool to other similar organizations or as a comparison tool for the past performances of the organization itself. Using the ratios for comparison purposes can help suggest the relative financial condition of the organization (university) in order to make sound judgment decisions regarding budget planning and accounting for the university in line with its mission and assessment practices.

**Advantages:** The ratios that can be used are ones to evaluate what sources of revenues are earned and for what services expenses are incurred. These ratios can help monitor the efficiency of the institution as well as assessing the financial condition of the institution. It also helps monitor the inflows and outflows.

* Liquidity = helps monitor cash flow even with a balanced budget because the cash flows are usually just two or three times a year at the beginning of every semester. (current ratio will measure financial strength and helps to measure if the institution can meet current obligations) (quick ratio can help better than the current ratio if the institution has large inventories ) (available funds ratio helps the organization identify the true cash position)
* Debt structure is measured by the debt-equity ratio and debt service.
* Sources of funds allow institutions to measure proportion of revenue from tuition as opposed to gifts.
* Uses of funds help indicate the institution’s planning and priorities based on expenditures which are based on program or function.
* Net operating results can evaluate the management of revenues compared to expenditures.

**Disadvantages:** It is not enough evidence by itself to account for qualitative data such as leadership and reputation and should be taken in consideration with other factors. Colleges and universities need to be careful because few standards exist and can’t compare with business firms that are for profit; these business firms evaluate differently because they must report to shareholders.

1. List the three Rs described by Kent Chabotor in the supplemental readings and briefly discuss how they can be applied to reengineering the financing of higher education in the 21st century. (3 points)

All three are retrenchment strategies to help reduce expenses at the institutions and help the financial conditions at the university.

**Reorganization:**  Laying off or cutting staff and assets shouldn’t be done because lifecycles alternate between periods of decline and growth and maybe certain departments or areas need more help in leaner times. More revenues can mean more costs and expenses so reorganization of departments needs to be analyzed.

**Reallocation:** When enrollments increase sometimes it is because of lower admission standards, and colleges and universities need to be aware that the overall image of the university is important. Also it may help to increase tuition and fee revenues when enrollment increases, but other services might show an increase in costs, such as student services or payroll for additional labor; the offset of costs may not allow for the changes. Operation deficits still might increase. Also internal reallocation allows for flexibility when revenue does not grow.

**Reduction:** Sometimes it might be more beneficial to decrease expenses instead of increasing revenues. Staff cutbacks or building closings are predictable and are less high risk and effective. Across the board reductions should be minimized (“selective pruning”). Across the board reductions are beneficial for shared decision making throughout the university.

1. Assume you are the Vice President for Finance at a highly selective, four-year private college in the southwestern region of the United States. Your enrollment has been steady (around 6000 students) for the past five years, your college's annual budget is about $180 million, and the average tuition charged is approximately $16,000 per academic year. Your discount rate is 30%. This is the regional average charged by your peer colleges. Approximately two thirds of the students live on campus in college owned dormitories. The annual room and board rate is also at the regional average of approximately $2000 per semester. The college has a large endowment of $450 million and receives 50% of its current operating budget from tuition and fees. For the past two years the college has been experiencing a budget deficit of 1-2% of its annual operating budget. Your President has asked you to develop a plan of action for solving the college's financial problems and securing its economic future. Question: (a) Outline your recommended plan of action and (b) Explain your rationale for each element of it. (10 points)

Budget is 180 million

Tuition = 6000\*16000 = 96 million \* .50 = 48 million\*.70 =33.6 million

Room and Board = .66\*6000 = 3960.00\*2000= 7.92 million

Endowment = 450 million

Discount rate= tuition revenue and institutional aid to offset the cost of attendance for some students

If the college has been experiencing a budget deficit, then expenses have been more than revenues during the past two years. In order to balance the operating budget, the school needs to increase revenues or reduce expenses. The school needs to evaluate what is the easiest to predict or accomplish of the two alternatives.

In order to cover the two percent budget deficit of 3.6 million the college could raise tuition by 3.4 percent (which is very standard and below the standard cost of living increase) or $550.00. Housing costs could also be increased by 3.8 percent to only $75.00. Of course when tuition and housing are increased, the discount rate might have to be increased in order to increase institutional aid and offset the costs for students.

If the school only wants to cover one percent of the budget deficit, the school could keep everything the same but raise the overall tuition by 2.8 percent to $16450 per student, which should not affect students’ overall decision to attend.

I would recommend to the president to analyze the increase of tuition for other comparable schools in the areas that would pose competition for students but would only recommend an increase of tuition of less than 4 percent as a last resort. If this is the last resort, I would also, in conjunction with the tuition increase, increase housing but offset those costs by offering additional scholarships or institutional aid that could be borrowed from the endowment. Students and parents would like to know that the college is trying to decrease or at least contain costs, however, so I would recommend some other alternatives to the president before the increase of tuition and housing.

The first thing that everyone wants to do is increase tuition. I believe that with a budget of $180 million you should be able to cut expenses. It doesn’t take $30 million per year for education – there has to be frills worked into the budget. With the economy, I believe that there are only a few colleges that can afford to keep increasing tuition, and the endowment income could also continue to decrease. Payroll could also continue to increase, along with health care costs.

I would suggest several if not all of the alternatives listed below:

1. Control all costs, including health benefit costs – they can increase 20% a year and represent the largest part of your fringe benefit.

2. Develop cost containment strategies for all departments. As an example, moving away from mailing and use of more e-mail, reviewing viability of instructional programs (low enrollment) and expensive programs and to be careful about adding more positions and reexamine open positions to see if they’re necessary, etc.

3. I would work with the financial aid office to analyze if all students are receiving all of the federal financial aid that they are entitled to. I would encourage students to apply for external scholarships that do not cost the university monies.

4. I would evaluate whether the university is getting the most out of contracts i.e. bookstore.

5. In the past, the college may not have felt the need to apply for grants, including student support grants, but certain selective universities have the opportunity for some of these.

6. It is not known what the average debt load is for students or the graduation rate for students. One could assume with the high cost of tuition that the students could have a high debt load and would be less likely to support the university through endowment support. I would want to know the source of the endowment and if it has increased in the past few years to evaluate the likelihood of endowment altering the budget along with the purposed changes.