



Bahria University, Islamabad Campus
Department of Computer Science
Mid Term Examination
Class & Section: BS(CS)-3A, 3B
(Spring 2023 Semester)
Paper Type: Descriptive

Course:	Professional Practices	Date: 10/04/2023
Course Code:	CSC-307	Session: II
Faculty's Name:	Faima Abbasi	Max Marks: 20
Time Allowed:	1.5 Hours	Total Pages: 2(including this)

INSTRUCTIONS:

1. All questions are compulsory and there are three questions in total.
2. The paper is a closed book and students are not allowed any helping material (books, tables, formulas, etc.).
3. **Comprehension of the question is part of the examination, do not call the instructor or ask the invigilator, make assumptions.**
4. **Answer to each question needs proper explanation. Marks will be deducted for not explaining.**
5. **RETURN QUESTION PAPER WITH ANSWER SHEET. -2 for not returning.**

Student's Name: _____ Enroll No: _____
(USE CAPITAL LETTERS)

Question # 1 Profession & Ethics (6 Marks) CLO 1

- a. You are a software engineer working at a large publicly traded corporation, where a colleague invents a new kind of compiler. Your managers see it as a huge potential cash cow. After analysing how would you respond in way that is **legal, moral, and ethical?**

Solution:

Legal: First I will check the rules and regulation of company that whether my company supports that kind of stuff or not. If it does support, then I will have to check our budget so according to which company will decide to provide partially funded training or fully funded training.

Moral: I will assume myself as employee and see that does this training will cause any beneficial impact on company or not.

Ethically: Ethics says that it is the right of any person to seek the advancement and company's prosperity.

Deny Ethically: After checking all above features, if in case I have to deny then I will give them reasons that either there will be any other training that would be more beneficial or I will give them some time so that after that time company will hire our own instructors.

- b. Alice is the head of a computer science department at a university. Alice boss("dean") wants her to find a way to tweak departments curriculum, so undergrads are more likely to choose her department for their majors. After analysing how would you respond in way that is **legal, moral, and ethical?**

Solution:

Legally: Yes, it would be unfair for students of other departments and only be in favor of computer science students.

Morally: Morally it not right to do any kind of changes which is against the other department and only work in your department favor.

Ethically: Create an equal ratio for all the departments. All the students should have given equal chance as everyone pays equal fees to study and there shall be no any type of favouritism.

- c. Every person wants to live healthy and risk-free life. So do company owners thinks and motivate their employees to work hard, be productive, behave ethically and main point stay healthy. Companies provide insurance for the employees' health so that employees can easily take care of their selves. Health care costs are rising, and employers are finding that unhealthy habits such as smoking or being overweight are costing companies big bucks. Your company is concerned about the rising health care costs and decides to motivate employees to adopt healthy habits. Therefore, employees are given a year to quit smoking. If they do not quit by then, they are going to lose their jobs. New employees will be given nicotine tests, and the company will avoid hiring new smokers in the future. The company also wants to encourage employees to stay healthy. For this purpose, employees will get cash incentives for weight loss. If they do not meet the weight, cholesterol, and blood pressure standards to be issued by the company, they will be charged extra fees for health insurance. And their promotion will also be stopped is employees aren't healthy.

- i. Is this plan **ethical**? Why or why not?

Solution:

This is not the ethical way to treat the employees/or your company workers. You can motivate your employees by adding gym member ship in your job package. Give discount to them and encourage them to take care of their health. Instead of forcing your employee you can arrange different sessions/seminar related to health importance.

- ii. **Identify** which **ACM code of conduct** is violated in the given scenario?

Solution:

2 rules of ACM is violated here, Rule 1 : Respect the privacy of others. Rule 2: Be fair and take action not to discriminate.

In present condition company is discriminating among healthy and non-healthy employees. And they are forcing employee.

Question # 2 Organizational Structure & Financial Practices (8 Marks)CLO 3

Suppose that Burberry, a hypothetical company, was founded in **1856** by **Thomas Burk and his son David Burk, an apprentice draper**. Drapers made cloth, sold fabric and dry woods. Initially two members were in board of directors, i.e., father and son. Later two of their friends also became board of directors by buying the shares. Its head office is in **Luxembourg** and two other offices are in **Austria** and **Netherland**. The company follows a traditional organizational structure given below. You need to analyze this company and give your opinion regarding following situations.

- a. In **1856**, when drapers decided to start this business, which ways they might have considered to raise their **long-term capital**.

Solution:

1. **Grants:** A grant is a sum of money given to a company while the company is obliged to demonstrate that it has been used for the purposes for which it was intended, it is not intended that the grant should ever be paid back to the organization which gave it.

The availability of grants and other help for new companies depends very much on where the company is located, how many people it expects to employ, and on government policy at the time.

2. **Loans:** A loan is a sum of money lent to the company; interest is paid on it, at a rate that may be fixed or variable, and the loan is usually for a fixed period.

The company is liable to pay back the loan and, if the company goes into liquidation, the lender is entitled to recover the loan from the sale of the assets of the company.

In most cases, security is required for the loan.

3. **Sales of Equity:** Equity capital is money paid to the company in exchange for a share in the ownership of the company. Shareholders are at a much greater risk of getting a poor return on their capital or even losing it completely than are lenders but, in compensation for this, they stand to make a greater profit than lenders if all goes well.

- b. Initial for 20 years, company was going fine and was giving reasonable profits, but in year **1877** there were seen a major decrease in companies profit and revenue. In your opinion which factors should company focus on to **monitor its financial performance**.

Solution:

1. **Cost and Revenue:** A major problem is caused by random fluctuations, themselves the product of many individual factors, for example: (1) Annual Budget and Staff hiring, (2) Large projects cause deviation in Budget (e.g resources), (3) Fixed Price Project Estimation.
2. **Project Costing:** Because of these difficulties in monitoring the overall performance of the company, Syniad also tries to monitor the financial performance of individual projects, through a project costing system. The costs and revenue of each project are calculated each month and the cumulative gross margin (i.e., the difference between total costs and total revenue to date on the project) calculated as a percentage of the total revenue.
3. **Sales:** The budgeted increase in revenue derives partly from increased charge rates, partly from better staff utilization and partly from an increased number of staff. All these factors are influenced by the forward sales position, that is by the staff required, and the rates earned on the work to which the company is committed in the coming months. Two reports are used for assessing and monitoring the sales position.

The confirmed sales report shows, for each grade, the number of staff in that grade who are committed to contracts in each of the following twelve months and the total expected revenue from that grade in each month. It consists of 3 things:

- Revenue generated.
- No. of staff working
- No. of units/products produced.

The sales prospects report shows, for each sales prospect, the potential value of the sale, its likelihood and the likely start date. This report is produced as a result of survey, before launching a product and highlights following aspects:

- What are expected sales for a product to be made in future.
- What are potential customers of the product, divided in age group

- c. Suppose that you are assigned a task to do the **long-term planning** for this company. Which factors would you consider while completing this task. Also state the **vision** and **mission** of this company.

Solution:

1. Expansion Plans
 - ☐ Expansion on global level
 2. Company Image
 - ☐ Good quality software
 3. Product mix (Fee based revenue vs. Package Software)
 - ☐ Revenue generated from software on demand.
 - ☐ Revenue generated from package software.
 - ☐ One Package software is released followed by its different versions.
 4. Finance (under-capitalization)
 - ☐ The company does not have much finance.
- d. What **conclusions** you can **draw** from Burberry's working environment and what **improvements** you suggest increasing the company's revenue and profit.

Solution:

- Syniad, despite its problems, is a successful and well- managed company, however, they need to go multinational.
- Do directors have the expertise to manage this transition or to run the resulting company? (Agreements for collaboration with comparable companies)
- Syniad has now reached a point where it can no longer thrive as a private company and its future must, inevitably, be very different from its past



Question # 3 Human Resource Management (6 Marks)CLO 2

The job of **Human Resource Manager** is difficult as they need to make critical decisions at every step regarding employees. Suppose that you are hired as **HR manager** in a well-known trading company, you face certain situations which are defined below, representing organizational culture, for which you may need to make decisions as a manager. Read each question and select one from each pair of statements. Then, think about the impact your choice would have on the company's culture. And **describe** why you selected it.

- a. You need to monitor employees during work hours. Would you

- i. **not monitor them because they are professionals, and you trust them?**
- ii. install a program monitoring their Web usage to ensure that they are spending work hours doing work?

Solution: do not monitor them because they are professional, and you trust them. As well as it is unethical to do such things. For creative work you need to give space to your employees.

b. **You need to conduct performance appraisals. Would you**

- i. evaluate people based on their behaviors?

ii. **evaluate people based on their results?**

Solution: evaluate people based on their result. Because as a manager I should think in favor of company benefits.

c. **You need to promote individuals. Would you promote individuals based on:**

- i. seniority?

ii. **Yearly performance?**

Solution: Yearly performance because performance of the employee matter for company, it is unfair to hard worker employee if I promote on the basis of seniority

Best of Luck
