


National University of Computer and Emerging Sciences, Lahore Campus

	Course Name:	Professional Practices in IT	Course Code:	CS 4001
	Degree Program:	BCS	Semester:	Spring 2023
	Exam Duration:	60 Minutes	Total Marks:	30
	Paper Date:	27-02-2023	Weight	15
	Sections:	ALL	No of Page(s):	4
	Exam Type:	Midterm I		

Student : Name: _____ Roll No. _____ Section: _____

Instruction/Notes: Attempt all questions in the space given below. Write to the point.

Q1. [8 marks]

You work for ABC Tech Inc. and your core team has developed a software product. Your company at this stage is concerned about copyright infringements on different parts of your product. The team informs you that the software is a combination of:

1. Efficiently implemented software components based on established optimization techniques
2. Highly innovative collaboration algorithms implemented by our company
3. Programming hacks and implementation tricks your coders developed over the years
4. Graphics design of the product

For each of the parts above, you have the choice to file a patent, register copyright, keep it as a trade secret, or make it public for usage. Which one will you choose keeping in mind the company's profitability and constraints of each part? Give reasons.

1. Make available to public
2. Patent
3. Tradeseecret
4. Copyrightz

Q2. Question7: Describe how the two types of asset are valued for balance sheet purposes, using as an example the following assets owned by a company that writes and sells software packages: [4 Points]

- a stock of 500 user manuals for version 1 of a package, version 2 of which is to appear shortly. The company paid £5,000 to have 1,000 manuals printed and has been selling them at £25 per copy;

- a file server costing £15,000 that is used by the software development teams.

Current assets are valued at the lower cost price and net realisable value. The cost of the stock of user manuals was £2,500. The net realisable value of the stock is affected by the fact that version 2 of the package is coming out shortly. We shall probably not sell more than 50 of the remaining manuals, to yield £1,250. The net realisable value of the stock is therefore lower than its cost. The valuation is therefore the net realisable value, i.e., £1,250. The cost of acquiring a fixed asset is spread over its useful economic life. This is done by reducing the value of the asset each

year by an amount called the depreciation, until the value reaches zero at the end of its useful economic life. The original cost is not charged to the profit and loss account but, each year, the depreciation is charged to it. There are several ways in which the depreciation can be calculated. The commonest (and simplest) is straight line depreciation. Using this method, if the useful economic life is N years, the depreciation in each year is one N 'th of original cost. The file server is clearly a fixed asset and its useful economic life is perhaps three years. The depreciation in each year is therefore $\text{£}15,000/3 = \text{£}5,000$. Its value at the end of the first year is therefore $\text{£}10,000$, at the end of the second year, $\text{£}5,000$, and at the end of the third year, zero.

Q3. Recall the case study discussed during lectures from the chapter of "Anatomy of a Software house". Identify the factors that need to be considered if they want to open new office in new geographical areas (other European countries). [6]

Q4. Question 6: Identify and briefly discuss three key advantages that trade secret law has over the use of patents and copyrights in protecting intellectual property. Are there any drawbacks with the use of trade secrets to protect intellectual property? [3 + 1 Points]

1. No need to file.
2. No time limitation of rights.
3. Cannot be invalidated.

Disadvantage:

First, nothing prevents one from independently deriving the same or similar design for an invention protected with a trade secret.

A second disadvantage is that trade secrets require diligent attention to the administration and enforcement of noncompetition and nondisclosure agreements, the marking of documents, limiting information access, and consistent enforcement

Q5. Question 10: Briefly explain following ownership rights issues for the Contracts for the supply of custom-built software at a fixed price. [2x3 Points = 6 Points]

Duration of the license.

duration of the licence—a licence should be for a fixed period; or there should be some provision for termination, for example by giving notice, or on the happening of certain events, common terminating events being death;

Scope of license

scope of the licence: does the licence cover use on one particular computer, or can the software be run on other machines. If so, is the licence limited to one site? If the client is one of a group of companies, can others in the group also benefit from the licence?

Confidentiality

confidentiality: the licence will often seek to restrain the licensee from allowing anyone other than company employees to become familiar with the use of the software. This can be an embarrassment for educational establishments who wish to purchase the software for use by their students.

