



UNIVERSITY OF KELANIYA – SRI LANKA
FACULTY OF SCIENCE

Bachelor of Science Honours in Applied Chemistry

Honours Degree Examination, November/December 2022

Academic Year 2020/2021 – Semester I

MANAGEMENT AND COMPUTER STUDIES

MACS 11521 - Introduction to Intellectual Property

No. of Questions: 4

No of Pages: 2

Time: 2 hrs

- Answer All 4 questions.
- When allocating time for questions, take marks allocated into consideration.
- Organization and methodical presentation of facts will be taken into account when awarding marks.

1. Provide brief but complete answers for the followings.

- a) What is Intellectual Property (IP) Right? (05 marks)
- b) What are the four (04) main types of IPs? (04 marks)
- c) Briefly explain each IP given above. (16 marks)

You should include the following information in your answer;

- i. what covers by each IP
- ii. what information is included in each IP
- iii. who is benefited from each IP and how they are benefited

[Total 25 Marks]

2. Explain the following in detail,

- a) The three (03) criteria a patent application must satisfy. (09 marks)
- b) Four (04) reasons for patenting an invention. (08 marks)
- c) Four (04) factors to be considered before filing a patent. (08 marks)

[Total 25 Marks]

3.

- a) Explain the purpose and role of the claims in a patent. (04 marks)
- b) Distinguish between independent claim and dependent claim. (04 marks)
- c) You are the owner of Roca-Cola (Pvt.) Ltd., a new beverage manufacturing company with new and innovative machinery and recipes for a series of new cold drinks. You must safeguard your company from large beverage manufacturing companies and new companies entering the market.
 - i. what all IPs will you register under your company (04 marks)
 - ii. how can those protect your company (04 marks)
 - iii. how you will be benefited from it (04 marks)
 - iv. Can the company Coca-Cola Inc. file a lawsuit against you under the infringement of IP? (05 marks)

[Total 25 Marks]

4. a).

Miracle Materials Incorporation is a materials manufacturing company operating under the Sri Lankan Companies Act and within the Sri Lankan territory's jurisdiction. Miracle Materials, Inc. produces and sells a line of unique Graphene products, including camera lenses, solar cells, and glass-based electronics. The packaging of all of the company's products has a distinctive dark red colour, and they have an attractive logo and a tagline for their branding. Miracle Materials Inc. is also producing training materials of digital and printed content, including workbooks, exercises, courses, and videos to train budding scientists in the research on Graphene materials. Miracle Materials, Inc. has recently developed software code and a simulation program for a computer program that uses mathematical modelling to analyze graphene-based applications and now is released to the public as open ware software.

Some of the technologies Miracle Materials Inc. uses are not known to the general public, but some are available in the public domain with certain information. In recent years one of the company researchers for Miracle Materials Inc. found a technology for creating a graphene-metal alloy with incredible strength and durability properties. The researcher found information about the technology while reading printed volumes of an old journal that was only published briefly from 1960 to 1970. Although this alloy would represent an incredible breakthrough for the materials industry, no one has used the formula. No one ever noticed the write-up in this obscure journal. A few days ago, an engineer for Miracle Materials Inc. figured out an ingenious new way to develop graphene sheets that reduce the cost of production raw materials usage and with high efficiency compared to the existing technologies. Miracle Materials Inc. recently created a unique hexagonal shape graphene camera lens. As camera lenses go, the shape is both new and strange. Indeed, no one has ever thought of making a lens in such a shape.

With your knowledge of IPs, identify all types of IPs the company Miracle Materials Inc. should consider for the maximum competitive advantage. You have to give your reasoning for your recommendations. (10 marks)

b). Which of the following constitutes patentable subject matter? Explain your answer by giving the reasons for consideration or not consideration for patents.

- i. Disinfectant properties of turmeric for wound healing – A chemist claimed that he had discovered the healing properties of turmeric. (03 marks)
- ii. A novel wound-healing cream made out of turmeric - A chemist described the manufacturing of a novel wound-healing cream. (03 marks)
- iii. Perpetual motion machine - a new machine claiming to produce perpetual motion by giving output without any input and any energy loss, and with 100% efficiency. (03 marks)
- iv. Cooling umbrella – An inventor developed an Umbrella with an electric motor having a fan propeller fitted on its shaft. (03 marks)
- v. New medication for liver disease – A chemist developed a new drug that can be prescribed for liver disease by mixing a drug used to relieve headaches and another drug used to reduce heart attacks. (03 marks)

[Total 25 Marks]