1. In legal and science translation, mainly the formal, standard language of a country should be used and features like regional dialects, diglossia, ambiguity etc. should not be used. Explain.

2. Science and legal translator should not only have a knowledge of science and law, but also literary and technical terminology. Explain with examples.
Explain with examples how a science or legal translator should be careful about responsibility, confidentiality, social norms and freedom in his process of translation.

11 මාසය – Part II

04. මාසය ප්‍රබලතාව මෙන්ද.
Translate into Sinhala

**Major U.S. Pollution-Control Statutes**

One of the first modern environmental protection laws enacted in the United States was the National Environmental Policy Act of 1969 (NEPA), which requires the government to consider the impact of its actions or policies on the environment. NEPA remains one of the most commonly used environmental laws in the nation. In addition to NEPA, there are numerous pollution-control statutes that apply to such specific environmental media as air and water. The best known of these laws are the Clean Air Act (CAA), Clean Water Act (CWA), and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) commonly referred to as Superfund. Among the many other important pollution control laws are the Resource Conservation and Recovery Act (RCRA), Toxic Substances Control Act (TSCA), Oil Pollution Prevention Act (OPP), Emergency Planning and Community Right-to-Know Act (EPCRA), and the Pollution Prevention Act (PPA). Pollution-control laws focus on the regulation of activities that utilize materials that are potentially harmful to human health and the environment. These laws frequently vary in terms of their expectations and potential penalties for violators, depending on the risks associated with the materials involved. For example, CERCLA and RCRA are similar in terms of the activities they address. Both statutes focus on the storage, transport, and disposal of waste. However, the penalties for violating CERCLA are much more serious because that statute covers activities surrounding accidental or negligent releases of hazardous wastes, after the fact. RCRA's penalties are less severe, because the threat of harm is lower.

U.S. pollution-control statutes are numerous and diverse. Although many of the environmental statutes passed by Congress are useful tools in pollution prevention, they often need to be expanded before their impact is fully realized. Pollution-control laws are generally too broad to be managed by existing legal bodies, so Congress must find or create an agency for each that will be able to implement the mandated mission effectively. The statute then serves as a framework for the agency in organizing its agenda. At each level, the law becomes more specific and targeted.
Civil Law

Property rights and personal rights

Property rights are also distinguished from personal rights. Practically all contemporary societies acknowledge this basic ontological and ethical distinction. In the past, groups lacking political power have often been disqualified from the benefits of property. In an extreme form, this has meant that people have become "objects" of property—legally "things" or chattels. (See slavery.) More commonly, marginalized groups have been denied legal rights to own property. These include Jews in England and married women in Western societies until the late 19th century. The dividing line between personal rights and property rights is not always easy to draw. For instance, is one's reputation property that can be commercially exploited by affording property rights to it? The question of the proprietary character of personal rights is particularly relevant in the case of rights over human tissue, organs and other body parts.

There have been recent cases of women being subordinated to the fetus, through the imposition of unwanted caesarian sections. English judges have recently made the point that such women lack the right to exclusive control over their own bodies, formerly considered a fundamental common-law right. In the United States, a "quasi-property" interest has been explicitly declared in the dead body. Also in the United States, it has been recognized that people have an alienable proprietary "right of publicity" over their "persona". The patenting of biotechnological processes and products based on human genetic material may be characterized as creating property in human life. A particularly difficult question is whether people have rights to intellectual property developed by others from their body parts. The Supreme Court of California held in Moore v. Regents of the University of California that individuals do not have such a property right.
Metabolism

Metabolism is the set of chemical reactions that happen in living organisms to maintain life. These processes allow organisms to grow and reproduce, maintain their structures, and respond to their environments. Metabolism is usually divided into two categories. Catabolism breaks down organic matter, for example to harvest energy in cellular respiration. Anabolism uses energy to construct components of cells such as proteins and nucleic acids. The chemical reactions of metabolism are organized into metabolic pathways, in which one chemical is transformed through a series of steps into another chemical, by a sequence of enzymes. Enzymes are crucial to metabolism because they allow organisms to drive desirable reactions that require energy and will not occur by themselves, by coupling them to spontaneous reactions that release energy. As enzymes act as catalysts they allow these reactions to proceed quickly and efficiently. Enzymes also allow the regulation of metabolic pathways in response to changes in the cell's environment or signals from other cells. The metabolism of an organism determines which substances it will find nutritious and which it will find poisonous. For example, some prokaryotes use hydrogen sulfide as a nutrient, yet this gas is poisonous to animals. The speed of metabolism, the metabolic rate, also influences how much food an organism will require.

A striking feature of metabolism is the similarity of the basic metabolic pathways and components between even vastly different species. For example, the set of carboxylic acids that are best known as the intermediates in the citric acid cycle are present in all organisms, being found in species as diverse as the unicellular bacteria Escherichia coli and huge multicellular organisms like elephants. These striking similarities in metabolism are probably due to the high efficiency of these pathways, and their early appearance in evolutionary history.
Servomechanism,

A servomechanism, or servo, is an automatic device that uses error-sensing feedback to correct the performance of a mechanism. The term correctly applies only to systems where the feedback or error-correction signals help control mechanical position or other parameters. For example, an automotive power window control is not a servomechanism, as there is no automatic feedback that controls position—the operator does this by observation. By contrast, the car's cruise control uses closed-loop feedback, which classifies it as a servomechanism. A servomechanism may or may not use a servomotor. For example, a household furnace controlled by a thermostat is a servomechanism, yet there is no motor being controlled directly by the servomechanism.

A common type of servo provides position control. Servos are commonly electrical or partially electronic in nature, using an electric motor as the primary means of creating mechanical force. Other types of servos use hydraulics, pneumatics, or magnetic principles. Usually, servos operate on the principle of negative feedback, where the control input is compared to the actual position of the mechanical system as measured by some sort of transducer at the output. Any difference between the actual and wanted values (an "error signal") is amplified and used to drive the system in the direction necessary to reduce or eliminate the error. This procedure is one widely used application of control theory.

Servomechanisms were first used in military fire-control and marine navigation equipment. Today servomechanisms are used in automatic machine tools, satellite-tracking antennas, remote control airplanes, automatic navigation systems on boats and planes, and anti-aircraft-gun control systems. Other examples are fly-by-wire systems in aircraft, which use servos to actuate the aircraft's control surfaces, and radio-controlled models which use RC servos for the same purpose. Many autofocus cameras also use a servomechanism to accurately move the lens, and thus adjust the focus. A modern hard disk drive has a magnetic servo system with sub-micrometre positioning accuracy.