

NEPAL ENGINEERING COUNCIL

LICENSE EXAMINATION PREPARATION COURSE

10.5 ENGINEERING PROFESSIONAL PRACTICE

Er. Amrit Tiwari

10.5 Engineering Professional Practice

- Environment and Society
- Professional ethics
- Regulatory environment
- Contemporary issues/problems in engineering
- Occupational health and safety
- Roles/ responsibilities of Nepal Engineers' Association (NEA)

Environment and Society

Environment :

Environment refers to the **natural world** and its **surrounding**, including the air, water, land, flora, and fauna. It encompasses all living and non-living things that exist on Earth, as well as the interactions between them.



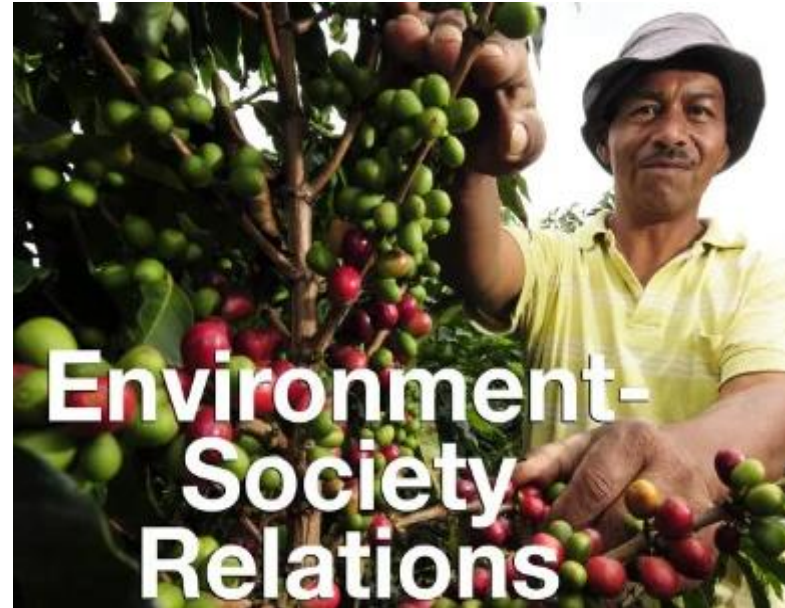
Society :

Society refers to a **group of people** living together in a community or organized group, sharing a common culture, values, and institutions.



Relation between environment and society

- Environment and society have interdependent relationship.
- Society relies on the environment for resources
- The environment is affected by human activities
- The environment also has a significant impact on society, particularly in the face of natural disasters or climate change.



Essential elements of society

- **Plurality:** Society is composed of population of all ages and of the both the sexes.
- **Stability:** A society is permanent in character. The social life is organized mainly on the basis of division of labor.
- **Likeness:** In earlier societies, the sense of likeness was focused on kinship i.e. blood relationships. In modern societies, the concept has been broadened by the principle of nationality. A society would not be possible without some mutual understanding and that understanding depends on the likeness which each apprehends (understand) in the others.
- **Differences:** Society also includes differences. All our social systems involve relationship in which differences complement one another. For example: In a family, apart from biological differences of gender, there are other differences of opinions, diversities of interests and etc. In social life, there is an indefinite interplay of likeness and differences of cooperation and conflict of agreement and dissent.
- **Interdependence:** It is also an essential element to constitute a society. Family is an example of interdependency. Today, even the countries depend on each other.
- **Cooperation:** Without cooperation no society can exists. The members of a family cooperate with each other to live happily.
- **Common territory:**
- **Culture :** is totality of learned socially transmitted behaviors
- **Conflict**
- **Mutual interaction : etc**

Types of Society: from evolutionary aspect (technology use)

monetary platform

- **Tribal:** hunting and gathering society: hunts for meat, gathers natural products, do not produce food, bow and arrow
- **Pastoral:** domesticate animals, mostly sheep/goat for meat, nomadic animal husbandry, move for better pasture land
- **Horticultural:** domesticate plants, awareness of plant from seed, slash and burn, hand tools to raise crops
- **Agricultural:** cultivation of crops, animal energy, irrigation, saving of seed, feudal, social disparity, wheel, writing, numbers, beginning of town and cities, life relatively simple, choice of occupation limited
- **Industrial:** mechanized production, mass production, large cities and slums, emphasis on quantity, GDP, per capita income, livelihood diversified, specialization, lifestyle complex, relatively less sensitive to environmental justice, human rights, climate change, sustainable development, reduce/reuse/recycle, health impacts, industrial pollution
- **Post-industrial:** information based, knowledge based and service based industries, more use of ICT, generation and analysis of info & knowledge, more sensitive to environmental justice, human rights, climate change, sustainable development, reduce/reuse/recycle, health impacts, low pollution, renewable energy, high energy efficiency

Types of Society: from evolutionary aspect (technology use)

Tribal



Pastoral



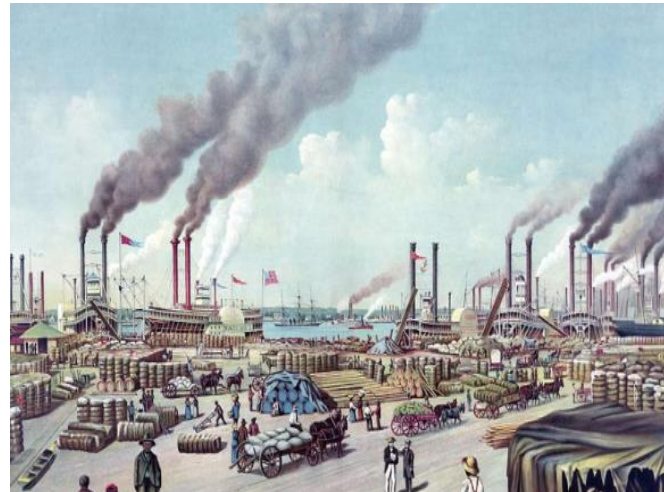
Horticultural



Agricultural



Industrial



Post-industrial



Types of Society detail explanation

Tribal societies: A few thousands years ago, human being relied on hunting and gathering for their survival. This was the subsistence strategy of these societies. Even today one can find this handful of isolated people living in the Australian deserts and in the deep interiors of India. Their needs are simple and easily satisfied spending less time working for their food than the average inhabitants of any other type of society. The family is the only defined institution in these societies. Tribal societies have common territory, a sense of unity, common language, blood relationship, endogamous (customs permitting a man to marry within the tribe), worship common god. A tribal is a primitive society which existed in the early period of human history. Each tribe knows the norms and standards of behavior and is watched that younger learn the proper way of behaving.

Pastoral societies: Some ten to twelve thousands years ago a few hunting and gathering tribal started domestication of herds of animals. This strategy of subsistence (existence) gave birth to pastoral societies. They usually believe in a god or gods who take an active interest in human affairs and look after the people who worship them. A few religions such as Judaism (the religion of the Jewish people), Christianity and Islam originated among pastoral people.

Horticultural societies : These societies specialize in the domestication of plants which they cultivate manually with hoes. Horticulture became necessarily alternative to pastoral people. Horticulture provided an assured supply of food and surplus that enabled some individuals wealthy and more powerful than others. Many horticultural societies are still in existence in Africa, Asia, South America and Australia.

Types of Society detail explanation

Agricultural societies: The agricultural wealth of the society was unevenly distributed with a small majority of people enjoying the surplus produce by the working society. Political institutions were more elaborated. Power was concentrated in the hands of a single individual and hereditary monarchy prevailed. The religions of agricultural societies often include a belief in a 'family' of gods. One of these is a high god regarded as more powerful god than other god. Trade is more elaborated in agricultural society. Money is used as medium of exchange. Agricultural societies tend to be at war constantly. These conditions create the need of military set up. The need for efficient communication and transportation was developed in these large societies.

Industrial societies: Application of scientific knowledge to the technology of production is the basis of industrial society. Industrial revolution gave birth to industrial societies. New technologies – such as steam engine, electrical power tend to bring about social change. This society produced bulk quantity to feed the majority. This society was found practicing a new system of production and distribution. Division of labor in factories and in management predominates in industrial society. Growth and development of trade unions is also an important characteristic of industrial society.

Social change is the change in the society. Change is a dynamic and on-going process. Change is a law of nature and social change is the progressive transformation of society. Man is a dynamic being. Therefore, society never remains static. Similarly, a society is subject to constant change.

Factors affecting social change

- Cultural innovation
- Physical environment
- Technology
- Population
- Human action

Theories of social change

- Evolution theory
- Functionalist theory
- Conflict theory
- Cyclical theory

Evolution theory: Evolutionary process implies that societies would necessarily reach new and higher level of civilization. Socio-cultural evolution theory is based on the assumption that societies gradually develop from simple beginnings into ever more complex forms. This assumption rests on both anthropological and historical evidence.

Many simple societies like tribal, pastoral, horticultural, and agricultural societies have grown steadily larger, and some of them have been transformed into the industrial and post industrial societies of the modern world.

Cyclical theory: This theory assumes that each civilization is like a biological organism and has a similar life-cycle: birth, maturity, old age and death. Each society faces challenges at first from environment, internal enemies, external enemies etc. The nature of response determines the fate of society. The achievements of the civilization consist of its successful responses to challenges, if it can not mount an effective response it dies.

Functionalist theory: Talcott Parsons argued that a society consists of interdependent parts each of which helps to maintain the stability of the entire social system which has a tendency to seek equilibrium and balance. Parsons viewed that social change occurs when internal or external strains such as unemployment or war through the system out of balance. This imbalance provokes adjustments that help bring the system back into equilibrium once more built the new equilibrium establishing different social arrangements and cultural components than the previous one.

Conflict theory : Conflict theory was developed by Karl Marx and has been modified and developed by later sociologists. Conflict theory of social change holds that many changes are caused by tensions between competing interests in the society. Conflict theorists regard conflict as inevitable and normal process. This theory assumes that the existing social conditions always contain the seeds of new social change. Based on the condition of economic production, the form of society is defined as: primitive socialist, slave, feudal, capitalist, socialist and finally communist society.

Environmental Challenges due to societal effect:

- Climate change
- Pollution
- Deforestation
- Loss of bio diversity

Social impacts of Environmental Degradation:

- Health impacts
- Economic Impacts
- Hindrance to sustainable development
- Impacts on Vulnerable Populations
 - Children
 - Pregnant women
 - The elderly
 - Low-income individuals,
 - People with disabilities
 - Communities of color or indigenous populations.



Morals and ethics

*Moral
Non-moral
Immoral*

- **Moral** measures the standard of good behaviour by which people are judged. Engineering moral measures the standard of good behaviour of engineers.
- Moral of a person is reflected by one's action when no one is watching, like anonymous donation and help without expectation.
- Non-moral actions: Actions that are beyond the scope of moral or immoral actions. **Non-moral actions are not immoral actions.** The types of non-moral actions are
 - i. events of nature, because they cannot be controlled.
 - ii. actions of animals (except human) because they lack rationality. They can neither justify nor accept the consequences of their actions.
 - iii. actions or behavior of children and insane persons because they cannot foresee the consequences of their actions.
 - iv. actions guided by the circumstances beyond control such as coercion (case of force majeure)



Morals and ethics

- Ethics is the study of standards of right and wrong; science and philosophy dealing with moral conduct, duty, and judgment. Ethics deals with voluntary actions specifically taken by an individual with sufficient knowledge of the options available.
- Ethics are well defined and in written form, generally. E.g. doctors and lawyers know what the ethics of their profession dictate. A doctor will never divulge patient's medical history to anyone other than the patient himself, unless authorized by the later, or required under law to do so. Similarly a lawyer will never compromise client's interest notwithstanding his own disposition towards his client.
- But morals are of a subliminal nature and deciding upon what constitutes them is not that easy. We know of moral dilemma, not an ethical one.
- Following ethics is therefore a relatively simple affair, after all it only involves a set of socially acceptable guidelines which benefit all.

Professional ethics

- Professional ethics refers to the principles and standards of behavior that guide individuals and organizations in their professional conduct.
- Encompasses the moral values and obligations that govern the relationships between professionals, clients, stakeholders, and society at large.
- Includes a code of conduct that outlines the ethical principles and standards expected of professionals in their respective fields.

Importance:

- The purpose of professional ethics is to ensure that professionals act in the best interests of their clients or stakeholders, maintain their professional integrity and reputation
- Uphold the trust and confidence of the public.

समयमै काम पूरा नगरेपछि पप्पु कन्स्ट्रक्सनलाई
एडिबीले तिरायो ५ करोड
साउन ६, २०७४ बाँके:

Regulatory environment

- Regulatory environment refers to the set of laws, rules, and regulations that govern the behavior and activities of individuals, organizations, and industries, and ensure compliance with standards for safety, fairness, and accountability.
- Examples of regulatory environment/ components of regulatory environment:
 - Nepal Engineering Council ✓✓
 - Nepal Telecommunication Authority
 - Building Codes
 - Environmental Impact Assessment (EIA)
 - Civil Aviation Authority of Nepal (CAAN)
 - Company Act
 - Intellectual Property Right



Intellectual Property right

- Intellectual property refers to creations of the mind, such as innovations, literary and artistic works; designs; images used in commerce
- Intellectual Property rights are the rights given to persons over the creation of the mind
- These allow the creators or owners of patents, trademarks, or copyrighted works to benefit from their own work or investment in a creation.

- World Intellectual property organization (WIPO, 1970) is working for these rights
- In Nepal, the protection and enforcement of IPR are primarily governed by Copyright Act, 2059 (2002) and the Patent, Design and Trademark Act, 2022 (1965).





Copyright Act 2059 (Section 14)

PANA ACADEMY

<https://lawcommission.gov.np/en/?cat=373>

Copyright includes;

1. Literary works;

- Novels, Stories and Poetical Works.
- Text books, Articles, Essays and Biographies.
- Encyclopedias and Dictionaries.
- Letters, Reports and Memorandum.
- Tables and Compilations.
- Thesis and pamphlets.

2. Artistic works;

- Paintings, Sculptures, Drawings, Engravings & Photographs.
- Work of Architecture, being either buildings or models of building,
- Work of Craftsmanship,

3 Musical works,

4 Dramatic and choreographic works,

5 Audio visual works/ Film and multimedia,

6 Computer program etc.



Copyright Act 2059 (Section 14)

<https://lawcommission.gov.np/en/?cat=373>

What are the terms of Protection on works offered by the Copyright Act, 2002? (Chapter 3 Section 14)

The Copyright Act, 2002 provides the following terms of protection to the authors/creators of the work:—

- Economic & Moral Rights of a creator/author shall be **protected throughout the life and the next fifty years after his death.**
- In case of a work of joint authorship, the term provided after the death of the author shall be calculated from the death of the last surviving author.
- The rights shall be protected for **50 years from the published date** in case of **institutional creations.**
- Photographic works and applied arts are protected **for 25 years** from the year of preparation of the work.
- The rights of sound recording shall be **protected for 50 years** from the publication of such a sound recording.
- The broadcasts of broadcasting organization shall be protected for 50 years from the year of commencement of such broadcast.

Copyright Act 2059 (Section 27)

<https://lawcommission.gov.np/en/?cat=373>

What shall be the Punishment for the violation of Protected Rights?

Any violation of Protected right is subjected to the following financial and physical punishments:

- The infringer of any protected right shall be punished with a fine of ten thousands rupees to one hundred thousand rupees or 6 months imprisonment or both as per the nature of the infringement. 1 L

The repetition of the violation will be subjected to the double the punishment with seizure of the unauthorized materials.

- Compensation for the ~~loss caused~~ to the copyright owner by infringer of the protected right shall also be realized & provided to the copyright owner.
- The case of violation of copyright shall be the state case. District Court is responsible for the initial treatment of case and at least the Police Inspector shall investigate and inquiry into the case.

Patent-design and trademark act 2022 (1965)

Definitions : Unless the subject or the context otherwise requires in this Act:

(a) "patent" means any useful invention relating to a new method of process or manufacture, operation or transmission of any material or a combination of materials, or that made on the basis of a new theory or formula.

Coa Copy

(b) "Design" means the form or shape of any material manufactured in any manner.

* (c) "Trade-mark" means word, symbol, or picture or a combination thereof to be used by any firm, company or individual in its products or services to distinguish them with the product or services of others.

www.lawcommission.gov.np
The Patent, Design and Trade Mark Act, 2022 (1965)
Date of Authentication and publication
14 Bhadra 2022, (august 30, 1965 A.D.)
Date of Amendment
Kartik 1, 2044 (October 18, 1987)
Amendment
1. First Amendment
2. Act Made to Amend Some Nepal Acts Relating to Export and Import and Intellectual Property, 2063 (2006)
2063 B.S. (November 24, 2006)
Preamble: Whereas it is necessary to update the legal arrangements in respect to patents, designs and trade-marks for the convenience and economic benefit of the general Public,
Be it enacted by His Majesty King Mahendra Bir Bikram Shah Dev on the aid and advice of the National Panchayat.
Chapter 1
Preliminary
1. Short Title, Extent and Commencement : (1) This Act may be called "Patent, Design and Trade Mark Act, 1965".
(2) It shall be applicable throughout the Kingdom of Nepal.
(3) It shall come into force immediately.
2. Definitions : Unless the subject or the context otherwise requires in this Act:
(a) "patent" means any useful invention relating to a new method of process or manufacture, operation or transmission of any material or a combination of materials, or that made on the basis of a new theory or formula.
(b) "Design" means the form or shape of any material manufactured in any manner.
(c) "Trade-mark" means word, symbol, or picture or a combination thereof to be used by any firm, company or individual in its
* Amendment by the first amendment
1

Patent-design and trademark act 2022 (1965)

Patent

*8. **TERM OF PATENT** : (1) The title of the patentee to the patent shall be valid only for a period of seven years from the date of registration thereof under Section 7, except when it is renewed under Section 23 B.

∇11. **Penalty for violation of Section 3** : A person, who commits any of the acts, shall be fined as per gravity of offense by the order of the Department and the goods or commodities related to the offense shall be confiscated :

- (a) A fine of upto Five Hundred Thousand Rupees for committing an offense mentioned in Sub-section 2 of Section 3 .
- (b) A fine of upto Two Hundred and Fifty Thousand (Two lac fifty thousand) Rupees for committing an attempt or abetment of an offense mentioned in Sub-section (2) of Section 3 .

Note : protection term of 7 years, renewable up to a total of 21 years. (that means patent can be renewed for 2 times)

www.lawcommission.gov.np
The Patent, Design and Trade Mark Act, 2022 (1965)
Date of Authentication and Publication
14 Bhadra 2022 (August 30, 1965 A.D.)
Date of Amendment
Kathmandu, 2044 (October 18, 1987)
Amendment
1. First Amendment
2. Act Made to Amend Some Nepali Acts Relating to Export and Import and Intellectual Property, 2061 (2006)
2061 B.S. (December 24, 2006)
Preamble: Whereas it is necessary to update the legal arrangements in respect to patents, designs and trade-marks for the convenience and economic benefits of the general public,
Be it enacted by His Majesty King Mahendra Bir Bikram Shah Dev on the aid and advice of the National Panchayat.
Chapter I
Preliminary
1. Short Title, Extent and Commencement : (1) This Act may be called "Patent, Design and Trade Mark Act, 1965".
(2) It shall be applicable throughout the Kingdom of Nepal.
(3) It shall come into force immediately.
2. Definitions : Unless the subject or the context otherwise requires in this Act:
(a) "patent" means any useful invention relating to a new method of process or manufacture, operation or transmission of any material or a combination of materials, or that made on the basis of a new theory or formula.
(b) "Design" means the form or shape of any material manufactured in any manner.
(c) "Trade-mark" means word, symbol, or picture or a combination thereof to be used by any firm, company or individual in its
* Amendment by the first amendment
1

Patent-design and trademark act 2022 (1965)

Design

Page No. _____

†**14A. Term of Design.** The title of the person in whose name a design has been registered under Section 14 shall remain valid for a period of five years from the date of registration thereof, except when it is renewed under Section 23B.

15. **PUNISHMENT FOR CONTRAVENTION OF SECTION 12** : In case a person, contravenes the provisions or Sub-Section (2) of Section 12, or operates a design invalidated the Department, may be* punished with a fine not exceeding [∇]Fifty thousand Rupees, and articles and goods connected with such offense shall be confiscated on the order of the Department, [™]as per the gravity of offense.

Note : Protection for designs lasts 5 years, renewable up to 15 years. (that means design can be renewed for 2 times)

Patent-design and trademark act 2022 (1965)

Trademark

www.wipo.int/patent/tm/

†18D. Term of Trade-Marks : The title of the person in whose name a trade-mark has been registered under Section 18 shall remain valid for a period of seven years from the date of registration thereof, except when it is renewed under Section 18.

* 19. PUNISHMENT FOR ILLEGAL USE OF TRADE-MARKS : In case any one who, violates Sub-Section (2) of Section 16, or brings into use a trade-mark which has been cancelled under Sub-section (3) of Section 18, or violates Section 18B, may be punished with a fine not exceeding is [∇]One Hundred Thousand Rupees and articles and goods connected with such offense confiscated on the orders of the Department TM as per the gravity of offense.

Note : The protection term of 7 years, renewable every 7 years.

→ Schedule-3

Application Registration and Renewal Fees In Respect to patents, Designs and Trade-marks

s.n.	Details of fees	Patant	Design	Trade-Mark
1.	Application of Registration fees for the patents, Designs and Trade-marks	Rs 2000/-	Rs 1000/-	Rs 2000/-
2.	Application Amendment fee	Rs 500/-	Rs 500/-	Rs 500/-
3.	Registration fee	Rs 10000.-	Rs 7000/-	Rs 5000/-
4.	Transfer fee	Rs 5000/-	Rs 3000/-	Rs 2000/-
5.	Endorsement fees for Amendment on record and Certification except transfer	Rs 2000/-	Rs 1000/-	Rs 1000/-
6.	Fees for the information of registration details	Rs 750	Rs 750	Rs 500/-
7.	Fees for complain and objection	Rs 1000/-	Rs 1000/-	Rs 1000/-
8.	Fees for the copy of the registration certificate	Rs 1000/-	Rs 1000/-	Rs 1000/-
9.	Renewal Fees			
(a)	Annual rate for the first time	Rs 5000/-	Rs 1000/-	—
(b)	Annual rate for the second time	-Rs 7500/-	Rs 2000/-	—
(c)	Annual rate for the Trademark each time	—	—	Rs 500/-

Company act

- In Nepal, company register office was established on Magh 2049, under the ministry of Factories
- Company Act 2063, (Authenticated- 2063/07/17) is a legal framework enacted by governments to regulate and govern the establishment, operation, and management of the companies.
- 21 chapters, 188 sections
- Company register office started online application and documentation from 25th Magh 2069 BS.
- Maximum number of share holders in private company- 50
- Public Company- minimum 7 and maximum any

Contemporary Issues/Problems in Engineering

Some of the issues in engineering sector, the modern world is facing are:

Climate Change:

- Climate change is the most frightening issue that has put the entire planet into the threat of destruction
- Engineers are working in developing renewable energy sources, sustainable building materials, and green infrastructure to cope with climate change



Cybersecurity:

- With the increasing reliance on technology, cybersecurity has become a critical issue.
- Engineers are working to ensure the security of information and protect against cyber attacks.



Contemporary Issues/Problems in Engineering

Aging Infrastructure:

- Many countries are facing challenges with aging infrastructure, including bridges, roads, and water systems.
- Engineers are working on developing innovative solutions to repair and replace these infrastructures.



Water Scarcity:

- Water scarcity is a significant issue in many regions of the world.
- Engineers are developing new technologies for water treatment to help alleviate this problem.
- Also various environmental revive programs are being run to ensure water security.



Contemporary Issues/Problems in Engineering

Energy Efficiency:

- With energy costs on the rise, engineers are working on developing more energy-efficient systems for buildings, transportation, and industry.



Sustainable Materials:

- The production and use of materials have a significant impact on the environment.
- Engineers are developing sustainable materials and finding ways to reduce waste and pollution



Contemporary Issues/Problems in Engineering

Urbanization:

- Rapid urbanization is putting a strain on infrastructure, transportation, and resources.
- Engineers are working on developing sustainable urban infrastructure and transportation systems.



Artificial Intelligence:

- The rapid development of artificial intelligence (AI) is creating new opportunities and challenges for engineers.
- They must find ways to integrate AI into existing systems while ensuring safety and security.



Contemporary Issues/Problems in Engineering

Biotechnology:

- Advances in biotechnology are changing the way we approach health, agriculture, and the environment.
- Engineers are working on developing new technologies and materials to support these innovations.



Disaster Response:

- Natural disasters such as earthquakes, hurricanes, and wildfires are becoming more frequent and severe.
- Engineers are working on developing technologies and systems to help mitigate and respond to these disasters.



Occupational Health and Safety

Occupational health and safety is the practice of ensuring the physical and mental well-being of employees in the workplace.

Some provisions on occupational health and safety in context of Nepal

- The Government of Nepal has established the Department of Labor and Occupational Safety to oversee and enforce occupational health and safety regulations in the country.
- The Labor Act, 2074 provides the legal framework for ensuring the safety and health of workers in Nepal.



PANA ACADEMY

Status of Occupational Health and Safety in Nepal

- Workers in Nepal are often exposed to hazardous chemicals, dust, and other harmful substances in the workplace.
- Occupational health and safety training is not widely available in Nepal, particularly in rural areas.
- Workplace accidents and illnesses are common in Nepal, particularly in the construction and manufacturing sectors.
- Many Nepali workers are not provided with appropriate personal protective equipment (PPE) or are not properly trained on how to use it.



Labor Act and provisions on health and safety

- Current Labor Act : Labor Act-2074 (Effective from Bhadra 19, 2074)
- Previous Act : Labor Act-2048



The-Labor-Act-2017-2074.pdf

Some provisions of Labor Act regarding health and safety :

- Employers are required to provide a safe and healthy working environment for employees.
- Employers must identify workplace hazards and take measures to prevent or minimize risks to employees.
- Make proper arrangement for the safe entry and exit from the workplace

- Employers must provide training and information to employees on occupational health and safety.
- Employers must conduct periodic health and safety inspections and maintain records of these inspections. (At least once in a year)
- Separate toilet for male and female.
- Adequate drinking and cleaning water, fire extinguisher
- Employers must provide personal protective equipment (PPE) to employees and ensure that it is properly used.
- Employers must provide medical care and compensation for work-related injuries and illnesses.
- The Department of Labor and Occupational Safety is responsible for enforcing occupational health and safety regulations and can inspect workplaces, issue fines, and take legal action against employers who violate the law.

Some important points of Labor Act

- Working hours should be 8 hours a day and 48 hours a week
- A worker is not allowed to work continuously for more than 5 hours
- 30 minutes of break is provided
- Duration of overtime = 24 hours a week (4 hours a day)
- Remuneration for overtime = 1.5 times the remuneration for regular pay
- Remuneration should be increased once a year
- Amount equivalent to the monthly remuneration is provided once a year as the festival expenses

Nepal Engineers' Association (NEA)

5

15
provision

- Nepal Engineers Association (NEA) is a professional organization of engineers in Nepal, established in 1962 (2019) registered under the Social Service Act .
- NEA aims to promote the professional development of engineers in Nepal, as well as to promote engineering education and research in the country.
- 40367 engineers, belonging to various engineering disciplines including architects, civil, electrical, mechanical, electronics etc. and coming from both the public and private sector economies.
- NEA is governed by an elected executive council of 25 members, led by the President of the association for a tenure of two years.
- In provinces a executive committee of 15 members is formed



25 members

$$18 + 7 = 25$$

<https://www.neanepal.org.np/>

Objectives of NEA

- To promote development of the engineering science and technology in Nepal.
- To promote fellowship goodwill and cooperation assistance among the Nepalese engineers and safeguard their rights and interests.
- By utilizing, to the highest extent possible, the participation of the national engineering manpower of the country in the national development activities of Nepal, make effort towards ending foreign dependency in this regard.
- To continuously enhance the highest professional ideals among the members and widen it.
- To develop relations, fellowship and goodwill with international engineering associations and institutions.

Roles/ Responsibilities of NEA

- Promote the professional development of engineers in Nepal.
- Advocate for the interests of engineers
- Promote engineering education and research
- Provide a platform for networking and knowledge-sharing
- Foster international collaboration



Membership of NEA

MEMBERSHIP ▾

GENERAL MEMBERSHIP

LIFE MEMBERSHIP

FELLOW MEMBERSHIP

MCQs

1. Society is the group of people having common

- a. Culture
- b. Values
- c. Institutions
- d. All of the above ✓✓

2. Workers are not allowed to work continuously more than

- a. 4 hrs .
- b. 5 hrs. ✓✓
- c. 6 hrs .
- d. 7 hrs .

3. The code of conduct should be followed to maintain high level of standard of good behavior in society. This applies to.....

- a. Lawyers
- b. Doctors
- c. Engineers
- d. All of the above ✓✓

MCQs

4. Which one of the following is the example of a regulatory body ?

- a. Nepal Engineering council
- b. Nepal Telecommunication Authority
- c. Civil Aviation Authority of Nepal (CAAN)
- d. All of the above ✓✓

5. Which is the current Labor Act of Nepal ?

- a. Labor Act 2048
- b. Labor Act 2066
- c. Labor Act 2074 ✓✓
- d. Labor Act 2078

6. Which organization is responsible to oversee and enforce occupational health and safety regulations in the country?

- a. Department of Labor and Occupational Safety ✓✓
- b. Department of Health and Population
- c. Department of Home Affairs
- d. Department of Civil Aviation and Tourism

7. Which is/are the characteristics of Society

- a. Geographic Territory
- b. Cooperation
- c. Conflict
- d. All of the above ✓✓

8. Ethics is

- a. Not imposed by society
- b. Objective ✓✓
- c. Internal
- d. All of the Above

9. NEA was established in B.S

- a. 2019 ✓✓
- b. 2020
- c. 2022
- d. 2024



MCQs

PANA ACADEMY

10. If the company develops a new technology that improves its main product. What type of IP can be used for its protection?

- ☒ a. Patent
- ☐ b. Copyright
- ☐ c. Trademark
- ☐ d. None

11. According to the Company Act 2063 of Nepal, which of the following is true regarding the maximum number of shareholders allowed to form a private company?

- ☐ a. 20
- ☒ b. 50
- ☐ c. 100
- ☐ d. 200



MCQs

PANA ACADEMY

12. Which government body in Nepal is primarily responsible for overseeing the regulatory environment for businesses?

- a) Ministry of Finance
- ☒ b) Ministry of Industry, Commerce, and Supplies
- c) Ministry of Law, Justice, and Parliamentary Affairs
- d) Ministry of Corporate Affairs

13. Which of the following is NOT a function of the Nepal Engineering Association (NEA)?

- ☒ a) Providing accreditation for engineering programs
- b) Organizing professional seminars and workshops
- c) Advocating for the interests of engineers
- d) Conducting research on engineering practices in Nepal



MCQs

PANA ACADEMY

13. Who is eligible for membership in the Nepal Engineering Association (NEA)?

- ☒ a) Only licensed engineers practicing in Nepal
- ☐ b) Only engineering students enrolled in accredited programs
- ☐ c) Any individual with an interest in engineering
- ☐ d) Only government-employed engineers

14. According to the Labour Act 2074 of Nepal, what is the maximum number of working hours per week for an adult worker in an establishment?

- a) 40 hours
- b) 44 hours
- ☒ c) ~~48~~ hours
- d) 52 hours

NEC